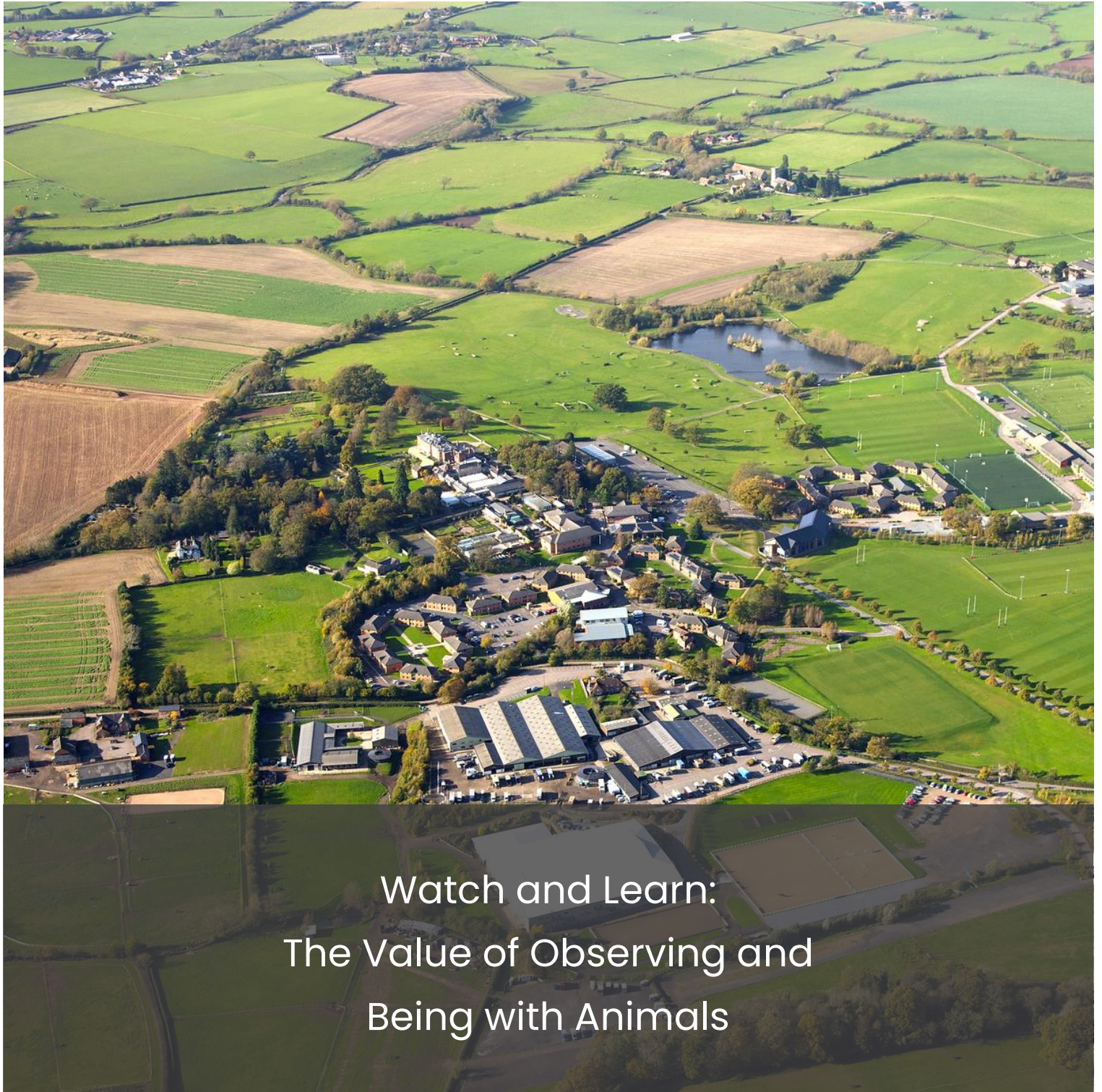


33RD INTERNATIONAL SOCIETY FOR ANTHROZOOLOGY CONFERENCE



Watch and Learn:
The Value of Observing and
Being with Animals



ISAZ
HARTPURY  2024
June 27-30, 2024



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ISAZ 2024 at Hartpury

[The International Society for Anthrozoology \(ISAZ\)](#) held the 2024 conference at Hartpury University in Gloucestershire, England on June 27 – 30, 2024.

Conference Theme

The theme is "Watch and Learn: The value of observing and being with animals". As public focus increases on human interactions with animals it is imperative for researchers and practitioners to consider the value of animals in human lives and potential for mutually beneficial interactions through observing animals. Historical topics such as animals in zoos but topics growing in recognition such as animals education, animal assisted services (AAS), pet behaviour such as dog bites, and moral and ethical scrutiny encapsulated in social licence to operate (SLO). The vision of the conference is to explore and bring greater awareness of the value of observation to both human and animal wellbeing.

Attendance

Each year, the ISAZ conference welcomes a range of researchers, practitioners, and students from a wide variety of disciplines and perspectives including psychology, anthropology, ethology, medicine, public policy, law, philosophy, arts, and humanities (and more). We aim to encourage a broad discussion of the research on the many ways our lives intersect with, and impact, other species.

ISAZ 2024 Local Conference Organizers

Dr. Clare Thomas Pino, Host Chair
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Ms. Caroline Elliot, Committee Member
Ms. Emma Collyer-Page, Conference Support Team
Mr. Gary Dennett, Conference Support Team

About the International Society for Anthrozoology

The International Society for Anthrozoology (ISAZ) was formed in 1991 as a supportive organization for the scientific and scholarly study of human-animal interactions. ISAZ is a non-profit, non-political organization with a worldwide, multi-disciplinary membership of students, scholars and interested professionals.

Our mission is to serve the growing community of scholars and scientists working in the field of Anthrozoology (the study of human-animal interactions and relationships) by supporting research, publishing and disseminating new insights and discoveries, and promoting the exchange of knowledge and expertise within the field.

To learn more, please explore our website: www.isaz.net

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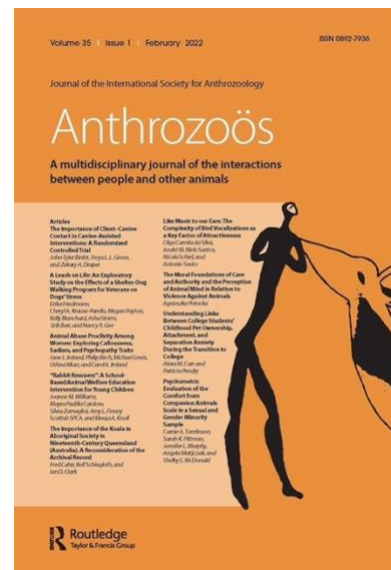
Our Journal

Anthrozoös: A Multidisciplinary Journal of the Interactions of People and Other Animals

Official Journal of the International Society for Anthrozoology (ISAZ)

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(ISSN: 0892-7936; e-ISSN: 1753-0377)

Anthrozoös is a bi-monthly, peer-reviewed publication whose focus is to report the results of studies, from a wide array of disciplines, on the interactions of people and animals. Academic disciplines represented include anthropology, archaeozoology, art and literature, education, ethology, history, human medicine, psychology, sociology and veterinary medicine.



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Keynote Speakers



Clara Mancini, PhD

*“Animal-Computer Interaction: Attending to Animals by Designing Technology *for* and *with* Them”*

Clara is Professor of Animal-Computer Interaction (ACI) in the School of Computing and Communications at The Open University, UK, and founding head of the University’s ACI Laboratory. Her work investigates the interaction between animals and technology; and the nexus between technology, animal wellbeing and justice, and human-animal relations. Her research spans the theory, methodology, practice and ethics of designing animal-centred interactive systems for and with animals, to help inform more equitable and inclusive multispecies ecosystems.



Lucy Rees

“Observations on Observation”

Lucy was raised among horses and fascinated by animal behaviour from an early age, she studied zoology at University College London, specializing in ethology and neuroscience, before doing postgraduate research in Sussex University. Returning to her native Wales, she became known for her success with “problem” horses and her insight led to the publication of *The Horse’s Mind* (1984), with influence for its combination of an ethological approach from experience gained working in Britain, Ireland, the USA and Portugal.

Other Featured Speakers

Hal Herzog, PhD – Distinguished Anthrozoologist Award Winner

Kerri Rodriguez, PhD – Early Career Scholar Award Winner

Aubrey Fine, PhD – Early Career Research Round Table Chair

Stephanie Eardley, MSc, BHS Level 4 Coach – Conference Dinner Demonstrator

Keynote: Lucy Rees – Observations on Observation

9:00-10:00 AM Friday, 28 June, 2024

Observation, or noting, covers a wide spectrum of activity from unfocused, passive awareness involving all senses (including some that are poorly analyzed), to highly selective data collection. It may be qualitative or quantitative, involve the observer as participant or not, and based on empathetic emotion recognition or cognitive/technological objectivity. The fallibility of human senses, observer effects, and confirmation biases have led to the idealization of software use in data collection, though its programming does not exclude bias. In human-horse interaction, recognition of specific expressions may aid, but does not substitute for, overall awareness gained from experience although interpretation and poor definition of terms often affect human action, horse welfare and the safety of both.

Examination of the interpretation of social dynamics, both in feral and domestic groups and in human-horse interaction, an area that is currently undergoing considerable revision, illustrates these considerations. Observations on synchrony in horse groups, a new area of research, leads to a new focus on human-horse interactions with psychological benefits for both partners.

Keynote: Dr. Clara Mancini – Animal-Computer Interaction: Attending to Animals by Designing Technology for and with Them

9:50-10:50 AM Saturday, 29 June, 2024

Throughout its history, our species has developed technology to advance human-centred interests over those of other animals, who have largely been dealt with as resources to be exploited or competitors to be eliminated. Thus, technology has increasingly separated us from other animals, and from nature more generally, with consequences that now threaten the future of all life on earth.

In contrast, the growing field of Animal-Computer Interaction (ACI) is dedicated to the animal-centred study and design of technology, aiming to improve animal wellbeing and human-animal relations, thus bridging the gap that human-centred technology has created. Interpreting this year's conference theme as 'the value of attending to animals' and drawing examples from work conducted at The Open University's ACI Lab, I will talk about the process of developing technology for and with animals. I will discuss the design, methodological, ethical and political implications of animal-centred research and design; and how such a shift in perspective is needed if we are to achieve a sustainable development.



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Thursday, 27th Jun 2024

	Room 1	Room 2	Room 3	Room 4	Other
8:30	Registration Opens (ongoing)				
9:30-12:00	Early Career Researcher (ECR) Round Table: Passing on the Torch: Where Will the Future of AAI Take Us? A Fine	Workshop: Transforming Observations Into Measures: Optimising Validity and Reliability of Behavioural Definitions Within Ethograms M Pierard	Workshop: Zoos in Society: Their Evolving Role and Relevance V Melfi		Outgoing Board Meeting - ISAZ Board Only (Location: Board Room)
12:00-13:00	Early Career Researcher - Working Lunch (lunch available for purchase onsite) (Location: Sharing Space)	Lunch on Your Own (lunch available for purchase onsite)			
13:00-15:30	Workshop: But What is Anthrozoology? A Collaborative Workshop on the Practices and Future of the Field M Szydlowski , S Oxley Heaney , K Hill , J Hooper	Workshop: Exploring the Impact of Early Experiences on Canine and Feline Behavior M Andersson , E Hirsch	Workshop: How to Get Your Work Published E Newton		
15:30-17:30	Meet the Leaders Social Mixer (Location: Legends Bar) Sponsored by:  Your Pet, Our Passion.®				

Friday, 28th Jun 2024

	Room 1	Room 2	Room 3	Room 4	Other
8:00	Registration Opens (ongoing)				
8:45-9:00	Conference Opening (Location: MDC)				
9:00-10:00	Keynote: Lucy Rees - Observations on Observation (Location: MDC)				
10:00-10:40	Location Change & Refreshment Break	Mentor/Mentee Meet & Greet (Location: Sharing Space)			

Friday	Room 1	Room 2	Room 3	Room 4	Other			
10:40-11:00	<p>Thematic Oral Presentation Session: Canine AAS Chair: E Diamantakos</p> <p>Reducing Loneliness in the Post-Secondary Context: A Canine-Assisted Intervention Pilot Study0\ <u>J Binfet</u>, F Green, R Godard</p> <p>Assessing Therapy Dog-Handler Teams: A Content Analysis of 10-Years of Positive and Negative Evaluation Comments <u>F Green</u>, A Willcox, J Binfet</p> <p>Dogs' Behavioural Responses to Dog Assisted Interventions: A Field Study <u>S Haven-Pross</u>, K Maarleveld, L Jens, K Visser</p> <p>Dog-Assisted Interventions With Younger and Older Adults: A Randomised Controlled Trial Measuring Effects of In-Person, Online, Robotic, Virtual Reality, and Video Interventions <u>L Argyle</u>, K Meints</p>	<p>Thematic Oral Presentation Session: Pet-Owner Bond Chair: D Bornemann</p>  <p>"It Takes Two to Tango": Both Pet and Owner Personality and Mental Wellbeing Associate With Attachment Insecurity to Cats and Dogs <u>A Ståhl</u>, M Salonen, E Hakanen, S Mikkola, S Sulkama, J Lahti, H Lohi</p> <p>Understanding Human-Animal Interaction Dynamics and Patterns During Work and Non-Work Time <u>J Delanoei</u>, M Engels, M Janssens</p> <p>The Burden of Unwanted Behaviour: Risk Factors for the Dog Owner Bond in the UK <u>B Merritt</u>, D O'Neill, C Brand, Z Belshaw, F Dale, C Pegram, R Packer</p> <p>Relationships With Pet Dogs as a Source of Family Influence on Child Socioemotional Development <u>K Jacobson</u>, L Hurwitz</p>	<p>Thematic Oral Presentation Session: Genetics and Breeding Chair: G Penhorwood</p> <p>[CANCELLED] How Much for That Civet in the Window? the Welfare and Morphological Implications of "Home-Breeding" Civets in Indonesia's Emergent Civet Lover Clubs <u>J Hooper</u></p> <p>Do Bulldog Owners Support Efforts to Limit Breed Specific Health Problems? – A Questionnaire-Based Study Aimed at Danish Owners of French Bulldogs <u>P Sandøe</u>, S Lotze, F Rafn, Z Sandahl, C Bruun, M Fredholm, T Lund, H Proschowsky, S Springer</p> <p>Designed to Be Healthy? Exploring Health Differences Between 'Designer' Crossbreeds and Their Purebred Progenitors in a UK Dog Population <u>G Bryson</u>, R Packer, D O'Neill, C Brand, Z Belshaw</p> <p>Understanding the Role of Genetic Testing in Veterinary Medicine: Insights from Veterinary Care Providers <u>N Bennett</u>, P Gray</p>					
11:00-12:10						<p>Poster Session A: In the Pursuit of Caring for People in Need</p> <p>Poster presentations listed after the program</p>		
12:10-12:30				<p>Lunch and Posters (Location: Graze)</p>				
12:30-13:00								
13:00-13:10			<p>Poster Session B continued next page</p>					

Friday	Room 1	Room 2	Room 3	Room 4	Other
13:10-14:30	<p>Thematic Oral Presentation Session: Mental Health (Pets and AAI) Chair: W McCormick</p>  <p>The Association Between Attachment to Pets and Anxiety and Depression Among Mid-Life and Older Women <u>M Zebrowska</u>, S Strohmaier, C Huttenhower, B Rosner, C Westgarth, C Huttenhower, F Laden, H Eliassen, I Kawachi, J Hart, J Chavarro, O Zeleznik, O Okereke, T Huang, E Schernhammer</p> <p>Effects of Dog-Assisted and Relaxation Interventions on Self-Esteem and Anxiety in Children With and Without Special Educational Needs: A Longitudinal, Randomised Controlled Trial <u>K Meints</u>, <u>M Dimolareva</u>, V Brelford, N Gee</p> <p>Effectiveness of Animal-Assisted Interventions for Children and Adults with Depressive Symptoms: A Systematic Review and Meta-Analysis <u>E Pauli</u>, K Hediger, H Gerger</p> <p>Did Living With a Puppy Acquired During 2019, 2020 or 2021 Positively or Negatively Impact the Mental Health of UK Families During the COVID-19 Pandemic? <u>Z Belshaw</u>, C Brand, D O'Neill, R Packer</p>	<p>Thematic Oral Presentation Session: Horse and Rider/Owner Chair: G Penhorwood</p> <p>Understanding Anthelmintic Use and Other Endoparasite Management Practices in Horse Owners <u>Z Nugent</u>, T Furtado, R Smith, GPinchbeck</p> <p>Mapping Educational Practices at Swedish Riding Schools From Teachers' and Pupils' Perspectives: A Descriptive Study <u>Z Blokhuis</u>, L Nyberg, E Hartmann</p> <p>Talking the Talk: An Analysis of Terms Used by Equestrians to Describe Their Own Horse Training Approach <u>E Bartlett</u>, E Blackwell, L Cameron, K Dashper, J Hockenull</p> <p>Horse & Rider Suitability in Terms of Weight: Where Are We Now? <u>D Pollard</u>, I Burrows, L Cameron, R MacKechnie-Guire, D Marlin, B Mayes, A Mead, J Perkins, J Rishworth, J Rogers, A Stoddart-West, T Tyler, B Williams, J Williams, T Furtado</p>	<p>Thematic Oral Presentation Session: Zoo and Wild Animals Chair: V Melfi</p> <p>People and Zoos: The Role and Implementation of Direct Human-Animal Interactions in Zoological Establishments <u>S Higgs</u>, M Huck, D Fido, D Sheffield</p> <p>Zoo Professionals and Volunteers in the U.S: Experiences and Prevalence of Burnout, Mental Health, and Animal Loss S McDonald, L Kogan, <u>N Nageotte</u>, J Currin-McCulloch, R Dickler-Mann</p> <p>How Do You Feel About Owls? An International Survey <u>M Theubet</u>, M Vowels, M Fernandes, L Müller, A Roulin, C Mohr</p> <p>So Happy Together? How Nepalese Mahouts Identify and Understand Elephant Affective States <u>M Szydlowski</u></p>	Starting at 13:00	
14:30-14:40				<p>Poster Session B: Health, Physiology, and Behaviour</p> <p>Poster presentations listed after the program</p>	
14:40-14:45	5-min Comfort Break				

Friday	Room 1	Room 2	Room 3	Room 4	Other
14:45-16:15	<p>Thematic Oral Presentation Session: Service Dogs and Veterans Chair: W McCormick</p> <p>Service Dogs for Military-Related Posttraumatic Stress Disorder: A Nonrandomized Clinical Trial <u>S Leighton</u>, K Rodriguez, C Jensen, E MacLean, L Davis, E Ashbeck, E Bedrick, M O'Haire</p> <p>Evaluating the Efficacy of an 8-week Service Dog Training Program in Veterans With PTSD <u>E Friedmann</u>, C Krause-Parello, R Yount, D Taber</p> <p>Recognizing the Impact of Having a Service Dog on the Romantic Relationship Between Veterans with Post Traumatic Stress Disorder (PTSD) and their Romantic Partners <u>G Rath</u>, L Williamson</p> <p>The Positive Impacts of Integrating a Service Dog Into the Family Home of Military Veterans with PTSD: Perspectives from Veterans' Romantic Partners <u>L Williamson</u>, G Rath</p>	<p>Thematic Oral Presentation Session: Multi-Species Family and Community Chair: B Klinkenberg</p> <p>The Continuity and Discontinuity in Intergenerational and Cross-Species Transmission of Parenting Styles <u>C Hsin Kuo</u>, S Kessler</p> <p>Exploring Homeless Children's Experiences With Companion Animals <u>C Tardif-Williams</u>, R Raby, E Alegria, L Jobim da Costa</p> <p>Family and Community Cohesion: The Role of the Companion Animal <u>E King</u>, M Mueller</p> <p>Daily life Animal Behavior and Human Affect: Insights from Experience Sampling <u>M Janssens</u>, J Eshuis, K Hediger, N Jacobs, S Peeters</p>	<p>Thematic Oral Presentation Session: Young People, Emotions and Skill Development Chair: V Melfi</p> <p>The Effects of the Presence of an Assistance Dog for School Success (ADSS) on Emotion Recognition in Adolescents at School: A Pilot Study <u>M Toutain</u>, N Dollion, E Pignard, L Henry, M Grandgeorge</p> <p>Exploring the Influence of an Animal-Assisted Intervention Program on Gratitude Development in Chilean Adolescents <u>F Cuevas</u>, J Muñoz, J Varela, R Miranda, P Polo</p> <p>When Darwin Meets Piaget: Influence of Phylogenetical Proximity on Children's Empathy Toward Animals <u>N Dollion</u>, A Miralles, M Grandgeorge, C Declercq, M Raymond</p> <p>Executive Function Skill Development in Response to Animal Assisted Intervention (AAI) for Children With ADHD <u>C Zeiler</u>, E Monteiro, A Stehli, R Stokes, M Sober, L Steinhoff, S Schuck</p>	<p>Symposium: Technology in Animal-Assisted Interventions: Opportunities and Drawbacks for Practice and Research Chair: S Van Der Steen</p> <p>Telehealth in Nature and Animal-Assisted Intervention Strategies: Defining the Potentials and Limitations in Practice <u>I Declercq</u>, R Leontjevas, S Keizers M Janssens, P Reniers, D Gerritsen, K Hediger</p> <p>Cultivating Calm: Exploring the Efficacy of Virtual Animal Assisted Interventions in Alleviating Stress Perception in Students <u>R Griffioen</u>, S Haven-Pross, K Poel</p> <p>Comparing the Effects of Dog-Assisted and Robot Dog-Assisted Therapy for Children with Autism Spectrum Disorder or Down Syndrome <u>S Van Der Steen</u></p>	
16:15-16:45	Location Change & Refreshment Break				
16:45-17:30	Distinguished Anthrozoologist Award Winner Talk: Dr. Hal Herzog - "Rethinking the 'Pet Effect'" (Location: MDC)				
18:30-21:30	Conference Dinner & Demonstration (Location: Arena) (COMPLETE registration package delegates only)				

Saturday, 29th Jun 2024

	Room 1	Room 2	Room 3	Room 4	Other
8:00	Registration Opens (ongoing)				
9:00-9:50	ISAZ Annual General Meeting (Location: MDC)				
9:50-10:50	Keynote: Dr. Clara Mancini - Animal-Computer Interaction: Attending to		Animals by Designing Technology for and with Them (Location: MDC)		
10:50-11:15	Location Change & Refreshment Break	Mentor/Mentee Meet & Greet Follow-Up (Location: Sharing Space)			
11:15-12:10	<p>Emerging Topic Oral Presentations: Application of Animals for Mental Health and Wellbeing Chair: D Bornemann</p> <p>Human-Pet Attachment and Mental Health in Young Adulthood <u>A Le</u>, R Hawkins, S Loughnan</p> <p>Could Our Emotional Bond With Our Pets Impact Their Health? <u>M Ouellette</u></p> <p>Paws for Professional Development: Crafting a Post-Master's Certificate Program in Animal-Assisted Interventions for Mental Health Professionals <u>K Compitus</u></p> <p>Can Foster Caregiving Promote Human Mental Health? <u>L Powell</u>, R Ackerman, J Serpell, C Reinhard, B Watson</p> <p>Prevalence and Characteristics of Fetching Behavior in Owned Domestic Cats (Felis Catus) <u>J Serpell</u>, M Delgado, J Stella</p>	<p>Emerging Topic Oral Presentations: Animal Communication and Human Experience Chair: B Klinkenberg</p> <p>The Utilisation of Police Officers as Court Facility Dog Handlers <u>P Mayhew</u></p> <p>Do Horses Involved in Equine-Assisted Interventions Show Cognitive Judgment Biases? <u>C Rochais</u>, M Grandgeorge, S Henry</p> <p>"My Horse Has a Voice; Now, I'm Trying to Figure Out What to Do With it" Communication Between Canadian Dressage Coaches, Riders, and Horses <u>M Ross</u>, C Lundgren, K Proudfoot, K Merkies, C Ritter</p> <p>Pathways to Understanding the Variety of Zoosexuality: Sexual Self-Concept and Zoosexual Classes <u>B Stetina</u>, A Klaps, A Bunina, L Emmett</p>	<p>Emerging Topic Oral Presentations: Domestic Behaviour, Training and Education Chair: L Greening</p> <p>You Passed! The Development of a Counseling-Focused Canine Team Evaluation <u>E Hartwig</u></p> <p>Bells, Bibs, and Beyond: Investigating Factors that Influence UK Cat Owners' Willingness to Mitigate Wildlife Predation <u>M Barker</u>, J Merrifield, E Bartlett</p> <p>The Dog Mentor: School Dogs Improving Educational, Social, Emotional and Therapeutic Outcomes Through Targeted Interventions <u>J Duckworth</u></p> <p>The Development of Dog Safety Education using DAVE (Dog Assisted Virtual Environment) in Virtual Reality <u>M Pagano</u>, J Oxley, M Butcher, G Meyer, J Flatman, H Sevenoaks, C Westgarth</p> <p>Therapy Dog Training: "Crucial Basic Foundations" L Meers, <u>E Walsh</u>, L Jorissen, C Duarte-Gan, L Contalbrigo, W Samuels, V Stevens, D Berckmans, S Normando</p>	<p>Poster Session C: Human-Animal Culture</p> <p>Poster presentations listed after the program</p>	

Saturday	Room 1	Room 2	Room 3	Room 4	Other
12:10-12:30	Lunch and Posters (Location: Graze)			Starting at 11:15 Poster Session D continued from previous page	Incoming Board Meeting - ISAZ Board Only (Location: Board Room)
12:30-13:00					
13:00-13:10					Poster Session D: Animals in Work, Humans at Work Poster presentations listed after the program
13:10-14:30	Thematic Oral Presentation Session: Development of New Tools Chair: I Schork [CANCELLED] Validation of the Companion Animals Self-Expansion Scale and Its Short Form <u>A Ellis</u> , S Stanton, R Hawkins, S Loughnan For the Love of Acronyms: Identifying the Range of Terminology Used in Animal-Assisted Interventions F Green, <u>M Dahlman</u> , J Binfet [CANCELLED] Human DNA Transfer and Persistence After Interaction Between Dogs and Human Intruders Informed by Video Analyses <u>H Monkman</u> , R van Oorschot, M Goray Exploring the Validity, Reliability, and Underlying Structure of the Human-Animal Interaction Scale (HAIS) for Use With Companion Rabbit Owners Using a Mixed Methods Survey <u>C Tinga</u> , P Turner, J Coe, L Niel	Thematic Oral Presentation Session: Shelters, Relinquishment and Adoption Chair: E Diamantakos The Effect of Extra Space and Gentling on Urine Output in Shelter Cats <u>A Andrukonis</u> , N Hall A Qualitative Exploration of Owner Experiences Following Dog Adoption <u>B Moyer</u> , H Zulch, B Ventura, O Burman Insights and Implications From 28,424 Housing-Related Shelter Intake Records From 21 Animal Shelters in the U.S. <u>L Loney</u> , J Applebaum, K Horeka, T Graham "I Never Thought This Would Happen to Me": Using Interviews to Understand How Companion Dog Owners Make Sense of Relinquishment <u>K Holland</u> , S Weidman, B Cooper, R Casey, R Christley	Thematic Oral Presentation Session: Equids Chair: G Penhorwood Holistic Healing: The Therapeutic Interactions of Horses With Humans <u>A Barnfield</u> , J Mitchell Using Forum Theatre as a Tool to Promote Positive Donkey Welfare on Lamu Island, Kenya <u>E Haddy</u> , L Proops, C Bowyer, T Bradley, O Sing'Oei Exploring Equine Anticipation of Human Interventions <u>E Hartmann</u> , T Rehn, C Wyss, P Henrique Esteves Trindade, N Waran, L Keeling Affiliative Behavioral Expressions of Horses with Conspecifics and Humans: An Exploratory Study <u>Dr. Emily Kieson</u> , Katie Stanley, Linda Gibertini, Dr. Helen Sabolek-Consiglio, Lucy Rees		
14:30-14:40					
14:40-14:45	5-min Comfort Break				

Saturday	Room 1	Room 2	Room 3	Room 4	Other
14:45-16:15	<p>Thematic Oral Presentation Session: Welfare and Wellbeing Chair: H Tedds</p> <p>Pawsome Travel Partners: The Social Behavior of Travelling With Companion Dogs <u>L Hoy</u>, B Stangl, N Morgan</p> <p>Veterinary Student Perceptions of the Relationship Between Their Well-Being and the Welfare of Animals Used for Teaching <u>S Khoddami</u>, C Ritter, M Brunt, B Ventura, D Renaud, K Proudfoot</p> <p>Effect of "Resident Cats" on the Health and Social Network of Older Adults With Alzheimer's or Disabilities in Nursing Homes <u>H Vesque-Annear</u>, C Sueur, M Grandgeorge, A Stachowiak, M Pelé</p> <p>Impact of the 'Cost-of Living Crisis' on Canine Welfare in a UK Cohort of Dogs Aged 36 Months C Brand, D O'Neill, Z Belshaw, F Dale, C Pegram, <u>R Packer</u></p>	<p>Unthemed Oral Presentation Session: Education Focus Chair: L Greening</p> <p>Sheep Fatigue During Transport: Lost in Translation? <u>K Colitti</u>, <u>F Langford</u></p> <p>The Value of Teaching With Animals: A Qualitative Study on Teacher's Perspective on Their Dog-Assisted Educational Work <u>M Mombeck</u>, C Caruso</p> <p>Co-Creating an Animal Welfare Education (AWE) Program for UK Primary Schools, to Ensure Its Suitability Within the PSHE Curriculum <u>M Dimolareva</u>, V Brelsford, P Wegrzynek, J Ravalier</p> <p>Impact of The Interaction Between Test-Person, Dog and Support Person on Salivary Cortisol and Systolic Blood Pressure During Pain Trials in Healthy Individuals <u>L Fuglsang-Damgaard</u>, S Lunde, J Christensen, L Vase, P Videbech, N Gee, K Thodberg</p>	<p>Thematic Oral Presentation Session: Veterinary Chair: G Penhorwood</p> <p>Chronic Pain Management: An Ethnographic Study of Veterinary Practice Exploring Horse Owners' and Veterinarians' Experiences <u>R Smith</u>, J Ireland, G Pinchbeck, L Perkins</p> <p>Uncovering the Complex Tapestry of Meaningful Work in Early-Career Veterinarians Across Canada <u>E Morabito</u>, A Jones, T Kittisiam, A Stacey, J VanLeeuwen, H Gunn McQuillan, C Ritter</p> <p>Veterinary Mental Health: How Can We Build Resilience and Improve the Well-being of Staff <u>M Rauktis</u>, A Vincent, L Maxwell, E Kudsen</p> <p>Social and Ecological Predictors of Access to Multispecies Healthcare Across the United States <u>J Applebaum</u>, C Dunn, K Escobar, E King, S McDonald, R Corona, M Mueller</p>	<p>Thematic Oral Presentation Session: Canine Ownership Culture Chair: I Schork</p> <p>Unleashing Perspectives: How Laymen and Dog Professionals Define Canine Sociability to People J Monteny, <u>C Moons</u>, E Wydooghe</p> <p>Using a Systems Approach to Compare Veterinary and Dog Owner Perceptions of Bacterial Risk Associated With Raw Meat Diets T Furtado, <u>G Morgan</u>, G Pinchbeck, N Williams</p> <p>[CANCELLED] Exploring the Sociodemographic Characteristics of Dog-Owners Involved in Dog-Bite Complaints Within a 'Model City' of Dog-Bite Prevention <u>J Hooper</u>, M Rock, S Checkley, N Caffrey</p> <p>Looking for a Reaction: Do Children Enjoy Certain Aggressive Behavioural Responses From Domestic Dogs? <u>A Baatz</u>, R Young, G Taylor</p>	
16:15-16:45	Location Change & Refreshment Break				

Saturday	Room 1	Room 2	Room 3	Room 4	Other
16:45-17:30	Early Career Award Winner Talk: Dr. Kerri Rodriguez – “Exploring the Benefits of Human-Dog Interactions: Challenges, Considerations, and the Road Ahead” (Location: MDC)				
17:30-18:30	Award Ceremony (Location: MDC) Sponsored by: 				
18:30-23:00	Closing Disco, Fish & Chips, & Pub Quiz (Location: Legends Bar)				

Sunday, 30th Jun 2024

	Room 1	Room 2	Room 3	Room 4	Other
9:30-10:00					Sudeley Castle Day Trip Pre-ordered ticket required
10:00-12:30	Workshop: A Very Brief Introduction to Qualitative Research Methods in Human-Animal Interaction Research <u>C Westgarth, T Furtado, R Smith</u>	Workshop: SCAS Code of Practice: Moving Towards a UK Consensus for Minimum Standards in Animal Assisted Interventions <u>E Ormerod, E Diamantakos</u>	Workshop: Relationships and Resilience at the Zoo: Building an Animal-Assisted Services Program <u>L Stewart, S Tjaden, K Sacco, C Vrba</u>		
12:30-16:00					

Poster Session A: In the Pursuit of Caring for People in Need

[Session A - ID #: 1] Physical and Mental Well-Being Impacts of Care Farming Activities on Adults With Learning Disabilities and Autism Spectrum Disorder: Perceptions of Care Farm Employees

J Howse

[Session A - ID #: 2] Relationship of Pet Attachment to Deterioration of Cognitive Function in Community Residing Older Adult Pet Owners: Evidence From the Baltimore Longitudinal Study of Aging (BLSA)

E Friedmann, N Gee, E Simonsick, M Kitner-Triolo, B Resnick, M Gurlu, S Shim, I Adesanya

[Session A - ID #: 3] Pet Dog Versus Pet Cat Interactions With Children With Typical Development or Autism Spectrum Disorder: Same or Different Visual Attention Patterns?

M Grandgeorge, Y Gautier, H Mossu, M Hausberger

[Session A - ID #: 4] How Can Browsing at Photos and Videos of Their Pets Help Young People Aged 18-30 Alleviate the Effects of Human-Pets Separation?

H Fan, R Hawkins

[Session A - ID #: 5] Pups Uplifting Public Speaking: Developing Key Components of a Pilot Canine-Assisted Intervention for Children with Public Speaking Anxiety

C Rousseau, A Willcox, J Binfet

[Session A - ID #: 6] After-School Care Programs Created in Japan for Children with Developmental Disabilities or Special Needs: Occasionally Featuring Cats

C Takise, M Tani, L Hart

[Session A - ID #: 7] "Resident Cats" in Nursing Home: Pilot Study of Acceptability and Attachment as Perceived by Residents and Caregivers in Alzheimer's and Disability Units

M Pelé, H Vesque-Annear, C Sueur, M Grandgeorge, A Stachowiak, A Piermattéo

[Session A - ID #: 8] Recruitment Feasibility for a Randomized Controlled Pilot Study of Animal-Assisted Intervention for Hospitalized Older Adults

L Townsend, N Gee, E Friedmann, M Mueller, S Barker

[Session A - ID #: 9] Exploring and Responding to the Value of Human-Animal Relations on Human Communication Disorders

J Young, L Hartman, E Burns, C Mitchard, C Nottle, M Kambanaros

[Session A - ID #: 10] Developing a Research Agenda on Nature-Based and Animal-Assisted Intervention Strategies (NATAIS) in People With Neurodegenerative Diseases With a Specific Focus on Social Isolation and Loneliness

I Declercq, R Leontjevas, M Enders-Slegers, M Molog, P Reniers, D Gerritsen, K Hediger

[Session A - ID #: 11] 'Oh Yeah, I Am Very Much a Non-Person When I Don't Have the Dog': Visibility, and Identity Through Interspecies Partnerships in Human-Animal Interactions in Disability

G O'Connor

[Session A - ID #: 12] Humans and Animals Learning Together (HALT)

D Morgan, E Diamantakos

[Session A - ID #: 13] The Contribution of Bonding with Animals to Experiencing Secure Attachment in Children on Autism Spectrum Condition

R Koşar

[Session A - ID #: 14] Healing Power of the Herd: An Experiential Group with Horses at Duke University

P Lee

[Session A - ID #: 15] ADHD Symptom Severity in Response to a Manualized Animal Assisted Intervention (AAI): Results of a Replication Study

E Monteiro, C Zeiler, A Stehli, A Fine, L Steinhoff, S Schuck

[Session A - ID #: 16] Acute Salivary Cortisol Response in Children With ADHD During Animal Assisted Intervention With Therapy Dogs

L Stehli, C Zeiler, S Jeffrey, D Granger, A Stehli, R Stokes, S Schuck

[Session A - ID #: 17] Polyvagal Principles and the Power of Observation with Equines: A New Lens on Trauma

J Forstrom D'Agostino, R Bailey

Poster Session B: Health, Physiology, and Behaviour

[Session B - ID #: 1] Horses as Part of the Health and Wellbeing Sector – Service User Perspectives

R Seery, D Wells

[Session B - ID #: 2] Exploring the Neuromechanisms of Human-Animal Interaction Through EEG Measures

F Carbone, J Hattendorf, E Gerber, C Rerat, K Hediger

[Session B - ID #: 3] All in the Family: Is Man's Best Friend at Risk of Acquiring Pathogens From Their Humans?

P Pritchard, S Weese, K Chalmers, J Coe, L Van Patter, K Spence

[Session B - ID #: 4] Psychological Viewpoints on Quality of Life in Pets – Benchmarks for Assessment

C Krouzecky, F Rhein, S Krämer, R Klee, B Albrecht, A Haslinger, J Aden, D Seistock, B Stetina

[Session B - ID #: 5] Unveiling Joint Attention Dynamics in Autism: Analyzing First Fixation Latency and Transition Patterns to Human and Animal Social Cues.

C Duarte-Gan, L Meers, E Walsh, L Contalbrigo, W Samuels, S Normando, R Martos-Montes

[Session B - ID #: 6] Behavioral Coding of Adolescent and Therapy Dog Interactions During a Social Stress Task

S Dowling-Guyer, K Dabney, E Robertson, M Mueller

[Session B - ID #: 7] Von Economo Neurons (VENs) and Mirror Neurons: Brain Features Humans Share with Elephants or Dogs Provide a Neural Basis for Empathy and a Special Attachment to These Animals

B Hart, L Hart

[Session B - ID #: 8] When Play Gets Too 'Ruff': A Study of Paediatric Dog Bites at a Children's Hospital in the UK

C Westgarth, J Tulloch, V Pimblett, C Duncan, M Rotheram, S Minford, V Gray

[Session B - ID #: 9] The Impact of Service Dog Partnerships on Veteran Sleep Quality

Stephanie M. Bristol, Sarah C. Leighton, A.J. Schwichtenberg, Rebecca L. Campbell, Erin L. Ashbeck, Daniel J. Taylor, Edward J. Bedrick, Marguerite E. O'Haire

[Session B - ID #: 10] The Combined Use of Physiological, Endocrine, and Behavioural Parameters for the Evaluation of Dog Welfare During Animal Assisted Interventions With Elderly People: Preliminary Results

C Borrelli, G Granai, F Di Iacovo, A Gazzano, C Mariti

[Session B - ID #: 11] Piecing Together the Puzzle: Horse Owner Sense-Making Around Unwanted Horse Behaviour Using Online Forums

T Furtado, E Perkins, G Pearson, C McGowan, C Westgarth, G Pinchbeck

[Session B - ID #: 12] Horses' Behavioural Responses During Therapeutic Riding: A Field Study

K Visser, L Jens, L Nieuwe Weme, P Tromp, K Maarleveld, S Haven-Pross

[Session B - ID #: 13] Free-Ranging Dogs Are Capable of Individual Human Recognition

S Nandi, M Chakraborty, A Lahiri, H Gope, S Bhaduri, A Bhadra

[Session B - ID #: 14] Tendency of Approach in Pups and Juveniles of Indian Free-Ranging Dogs

A Bhattacharyya, J Abishek, M Mitra, A Bhadra

Poster Session C: Human-Animal Culture

[Session C - ID #: 1] "Know Your Horse" Ethnographic Insights on Epistemological Ethics and British Equestrianism

R Jones McVey

[Session C - ID #: 2] Understanding Kitten Fostering and Socialization Practices Using a Mixed-Method Survey

C Graham, K Koralesky, D Pearl, L Niel

[Session C - ID #: 3] The Role of Perception of Animal Mind in Explaining Violence Against Animals: Moral Status Versus Anthropomorphization

A Potocka, M Bielecki

[Session C - ID #: 4] Sun, Sea, and Cats: Humano-Cat Cultures of the Costa Del Sol, Spain

K Hill

[Session C - ID #: 5] Visitor Perceptions of Temple Elephant Welfare Intervention

R Subramanian, T McKinney

[Session C - ID #: 6] A Closer Look at Relinquishment: Unpacking the Reasons for Giving Up Companion Dogs

S Weidman, K Holland, B Cooper, R Casey, R Christley

[Session C - ID #: 7] Great Expectations Meet the Sobering Reality of Adopting a Dog! The Adopters' Stories

E Thumpkin, M Paterson, N Pachana

[Session C - ID #: 8] The Pet Education Partnership: Advancing Animal Welfare Education Through Collaboration

K Taylor, T Genever, A Baggott, R Ashman, S Brown, M Kyle, L Doran, A Griffiths, D Allen, C Francoli, A Cowling, C Bennett, S McHaffie, L Agnew, J Noon, E Smith

[Session C - ID #: 9] A Burden on Four Paws? – Systematic Overview of the Role of Responsibility in the Relationship with Pets

C Krouzecky, B Stetina

[Session C - ID #: 10] A Study to Assess the Human Pet/domestic Animal Interaction

J Rajaganapathy, K T N, P Sridhara

[Session C - ID #: 11] Dimensions of Dog Acquisition: Understanding How to Better Capture a Complex Process

R Mead, K Holland, M Upjohn, R Casey, R Christley

[Session C - ID #: 12] Bright Minds & Bushy Tails: Ethnographic Insights from Two Animal-Focused Summer School Courses at Hokkaido University

K Bemister

[Session C - ID #: 13] Social Kittens: A Quantitative Survey of U.S. Cat Caregiver Attitudes Towards Kitten Socialization Programs

J Link, C Moody

[Session C - ID #: 14] The PET@home Toolkit: (Preliminary) Results of a Process-Evaluation Study

P Reniers, K Hediger, I Declercq, M Enders-Slegers, D Gerritsen, R Leontjevas

[Session C - ID #: 15] Moral Disengagement in Animal Abuse: Validation of a New Measure for Adolescents

S Almeida, E Chaux

[Session C - ID #: 17] Are Cat Owners Failing Their Pets? Provision of Resources in Multi-Cat Households

R Malkani, E Tipton, L James, R Ashman, A Collinson, S Wensley, A Baggott

[Session C - ID #: 18] Dog Adoption Process in Italian Shelters: A Survey-Based Pilot Study

E Bassan, L Bellissimo, L Contalbrigo, F Manti, B De Mori

[Session C - ID #: 19] The Power of Human Stories in Shaping Horse Worlds and Welfare

C Winkelman

[Session C - ID #: 20] Political Orientation Is Associated With Animal Product Consumption Style in Backyard Chicken Keepers

A McFalls, I Osadchyi, J Hartsock, R Casella

[CANCELLED] [Session C - ID #: 21] Social Provisioning by Companion Animals: Validation of a Questionnaire

J Eshuis, M Janssens

[Session C - ID #: 22] When Dogs Are More Than Just Pets: Exploring the Relationship Between the Social Functions of the Dog, Behaviour, and Management Practices

L Gillet, B Simon, E Kubinyi

Poster Session D: Animals in Work, Humans at Work

[Session D - ID #: 1] Between Heart and Expertise: Caring and Providing in Veterinary Medicine and Animal Welfare

A Schneider, M Bubeck

[Session D - ID #: 2] Anthropomorphism – A Double Edged Sword: Influences on Acceptance of Livestock Keeping

A Knörr, X Zhou, A Bearth, M Siegrist

[Session D - ID #: 3] The Human-Horse Relationship: Human Direct and Meta Perceptions of Its Importance for Performance and Welfare in Equestrian Sport

L Tufton, N Kentzer, B Kingsley

[Session D - ID #: 4] Two Thousand Years of Life Centered Around Rice Cultivation With Horses and Cattle in Japan - the Roles Played by Horses and Cattle
A Tsuchid, [M Kakinuma](#)

[Session D - ID #: 5] 'What's in a Name?' the Soldier and His Horse as Co-Participants in the Great War
[J Flynn](#)

[Session D - ID #: 6] Shared Work? Entanglements, Agency and Equids at Work
[T Watson](#), C Clancy, F Cooke

[Session D - ID #: 7] School Dogs: Recommendations for Best Practice
[H Lewis](#), [J Oostendorp-Godfrey](#)

[Session D - ID #: 8] Agency: The New Frontier in Promoting and Assuring Sport Horse Welfare?
K Luke, [J Hockenhull](#), A Rawluk

[Session D - ID #: 9] Melampous Dog Assisted Interventions Multidisciplinary Team (Greece) and Animal Assisted Interventions Code of Practice Issued by the Society for Companion Animal Studies (UK)
I Chaniotakis, [E Diamantakos](#), S McCune

[Session D - ID #: 10] Welfare of Horses Used in Horse Assisted Interventions
[J Johansson](#), A Lundberg, P Boelhouters, J Yngvesson

[Session D - ID #: 11] A Content Analysis of Animal-Assisted Services with Indigenous Populations
[J Lee](#), [S Heindel](#), [C Syndergaard](#), [W Reece](#)

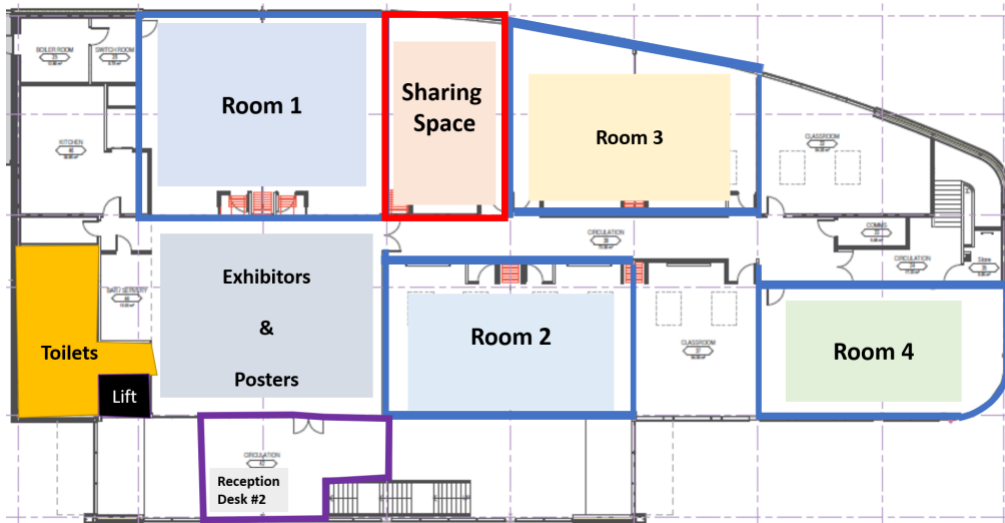
[Session D - ID #: 14] Using Behavioural Indicators to Predict Hazardous Situations During Cattle Handling
[K Thodberg](#), M Norup, K Nielsen, J Christensen

[Session D - ID #: 15] Solution-Focused Animal-Assisted School Counseling
[E Hartwig](#), [N Lozo](#), [A Blasingame](#)

Hartpury University Campus Map



Graze Floorplan



Events

Outgoing Board Meeting

9:30–12:00 PM Thursday, 27 June, 2024

ISAZ Board only

Early Career Researcher – Working Lunch

12:00 – 1:00pm Thursday, 27th June, 2024

Meet the Leaders Social Mixer

3:30–5:30 PM Thursday, 27 June, 2024

Come join us at an informal social mixer to meet and chat with some of the leaders in the field!

Sponsored by Purina

Mentor/Mentee Meet & Greet

10:00–10:40 AM Friday, 28 June, 2024

Distinguished Anthrozoologist Award Winner Talk: Dr. Hal Herzog – "Rethinking the 'Pet Effect'"

4:45 – 5:30pm Friday, 28th June, 2024

Congratulations to our ISAZ 2023 Distinguished Anthrozoologist Award Winner!

Hal Herzog, PhD

Emeritus Professor of Psychology, Western Carolina University, US

Conference Dinner & Demonstration

6:30–9:30 PM Friday, 28 June, 2024

COMPLETE registration package delegates only

ISAZ Annual General Meeting

9:00–9:50 AM Saturday, 29 June, 2024

Mentor/Mentee Meet & Greet Follow-Up

10:50–11:15 AM Saturday, 29 June, 2024

Incoming Board Meeting

12:10–1:10pm Saturday, 29th June, 2024

ISAZ Board only

Early Career Award Winner Talk: Dr. Kerri Rodriguez – "Exploring the Benefits of Human-Dog Interactions: Challenges, Considerations, and the Road Ahead"

4:45–5:30pm Saturday, 29th June, 2024

Congratulations to our ISAZ 2024 Early Career Scholar Award Winner!

Kerri Rodriguez, PhD

Assistant Professor, College of Veterinary Medicine, The University of Arizona, US

Award Ceremony

5:30–6:30pm Saturday, 29th June, 2024

Come join us as we announce our Student Travel Award, DEIB Award, *Anthrozoös* Most Popular Award, and Student Conference Presentation Award winners!

Sponsored by Waltham Petcare Science Institute

Closing Disco, Fish & Chips, & Pub Quiz

6:30–11:00 PM Saturday, 29 June, 2024

Catered

Sudeley Castle Day Trip

9:30 AM–4:00 PM Sunday, 30 June, 2024

Pre-ordered ticket required

Sudeley Castle is nestled next to Winchcombe (Cotswold village) and has a long history of royal connections. The property is still in private ownership and home to Lady Ashcombe and her family. The castle and grounds are opened to the public and the family is dedicated to the preservation of the castle and regeneration of the gardens.

<https://sudeleycastle.co.uk/>

Winchcombe is a relatively short walk from the castle grounds and is a beautiful example of an idyllic Cotswold village (Cotswolds is an area of Outstanding Natural Beauty (AONB)). With a range of independent shops you can also alight on the historic steam engine at the local station.

Workshops

Early Career Researcher (ECR) Round Table: Passing on the Torch: Where will the Future of AAI Take Us?

9:30-12:00 PM Thursday, 27 June, 2024

Organiser: Aubrey Fine, Professor Emeritus, CA Poly State University, USA

"Oh, the places I've seen, and we will go." Who would have imagined the words of Dr. Seuss becoming the inspiration for this lecture on the evolution and the possible future trajectory of animal-assisted interventions (AAIs)/human-animal interactions (HAI)? The future of our field, brimming with potential, rests in the hands of a new generation of scholars and practitioners. They, with their unique perspectives and knowledge, will be responsible for leading us into uncharted territories. Thanks to a growing body of scientific evidence, I have witnessed the field transform from a misunderstood therapy to a respected complementary approach. This transformation is further fueled by a new wave of excitement sparked by the contributions of these multidisciplinary professionals.

Within the session/workshop, we will discuss some of the changes witnessed and today's need to pass the torch to our new generation of professionals. Some of the topics that will be integrated are as follows:

- A discussion of some of the accomplishments and most significant roadblocks that have infused and stagnated the field's growth.
- An interactive conversation about suggestions for future researchers and clinicians passionate about AAI/HAI and what they can do to support its growth (topics will include research directions, funding, public policy, and prospects for careers).
- Finally, what do I envision the state of AAI/HAI in the remote future (10-20 years)? What would be the roadmap for all of us to get there?

As a field, we must never forget and honor the contributions of our pioneers. Their work forms the foundation upon which we stand today. However, to continue growing collectively, the new generation of scholars and practitioners must bring innovation, scrutiny, and a willingness to think beyond the conventional. This is how we can challenge and enrich our current understanding of AAI/HAI, while maintaining a deep respect for our past.

According to Leonard Sweet, a Professor Emeritus at Drew University, we do not simply step into the future. The future is something we actively create. Each one of us, scholars, practitioners, and students, has a role to play in shaping the future of AAI/HAI. Our collective efforts to advance the field with more credible science and evidence-based approaches will be the driving force. This progress must also prioritize animal welfare and

professionalism, while still acknowledging and cherishing the significance of our connections to non-human animals.

Transforming Observations Into Measures: Optimising Validity and Reliability of Behavioural Definitions Within Ethograms

9:30-12:00 PM Thursday, 27 June, 2024

Organiser: Dr Marc Pierard, Independent Researcher, Belgium

PURPOSE

Ethograms and the behavioural definitions they contain, are the fundamental measuring units of any research project or practical application that relies on observing and measuring animal behaviour. Clear guidelines on the most suitable methods to write valid and reliable ethograms are lacking in the scientific literature. Robust ethograms and behavioural definitions improve the quality of research and its applications. They enhance transparency and reproducibility of research and allow reviewers and readers to better understand the value of each study or application. The aim of this workshop is to discuss points of interest to consider when writing or interpreting ethograms and behavioural definitions.

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

The learning outcomes and associated activities for this workshop are:

- Discuss the definition of behaviour: exploring elements of an overall definition of behaviour and the implications on the definition of individual behaviours
- Explain both types of ethograms: introduce the main points of difference between species ethograms and study ethograms
- Discuss the different ways to define and categorise equine behaviours: discussing different types of ethograms and behavioural definitions (structural, functional and causal) and how this impacts the requirements for valid and reliable definitions
- Explore criteria for valid and reliable behavioural definitions: discuss which criteria could be useful for people developing new ethograms and for evaluation of published ethograms

Participants do not need specific knowledge or experience to profit from this workshop. The only requirement is an interest in observing and measuring animal behaviour.

ENGAGEMENT

The workshop will be a combination of presentation of basic information, discussions of potential criteria for behavioural definitions and practical exercises based on videos. Participants will practice evaluating existing behavioural definitions and writing new ones.

Zoos in Society: Their Evolving Role and Relevance

9:30-12:00 PM Thursday, 27 June, 2024

Organisers:

Prof Vicky A Melfi, Hartpury University, UK

Polly Doodson, Hartpury University, UK
Alice Doyle, Hartpury University, UK

PURPOSE

The purpose of this workshop is to gain insight from the attending delegates, about what they see as the relevance and role of zoos in society. Adopting an overall method of divergent and convergent idea propagation, with large and smaller focus groups, the workshop will provide space for the active engagement of delegates, as well as provide them with information about the current role of zoos and the diverse human-animal interactions which take place.

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

We would like to gain insight into the attendees' perspective of zoos, their past experiences and events which have shaped their views.

We will provide attendees with an overview of the diverse roles zoos can provide in society and the human-animal interactions which take place.

We will invite attendees to help troubleshoot ideas about how zoos can communicate complex issues with their audiences; by first identifying their audiences and then considering different methods of communication which might help convey complex messages.

We hope the information gained will provide an interesting learning experience for attendees; being heard, and hearing other people's thoughts and ideas about zoos.

By seeking research ethical approval before the event, and inviting the participants to 'anonymously' share their views, it is hoped the findings from this workshop can be published.

The information gained will also be of huge benefit in taking forward the research being undertaken by the workshop leader, her team and zoo researchers more widely.

ENGAGEMENT

We will adopt the CBSG (Captive Breeding Specialist Group, of the IUCN - the workshop leader has experience with this technique and had training to implement it) approach of divergent and convergent group participatory discussion. This method aims to capture as many ideas about the topic from the group as possible. These ideas are then refined into 'common' groups, which are discussed by smaller groups who themselves take a divergent approach to them. The smaller teams present back to the larger and actions or 'take-home' statements are agreed upon. This method will be undertaken twice - first to explore the attendees' thoughts and ideas about zoos, and then after some brief presentations, a second round will focus on how zoos can communicate complex ideas to audiences.

This method is highly successful, as it offers attendees different ways to participate that best fit their skill set and character. At all times, the workshop leader and supporters will be thoughtful to facilitate engagement in different ways which might suit the diverse needs of the attendees.

But What is Anthrozoology? A Collaborative Workshop on the Practices and Future of the Field

1:00–3:30 PM Thursday, 27 June, 2024

Organisers:

Dr Michelle Szydlowski, Miami University, USA

Dr Kris Hill, University of Exeter, United Kingdom

Ms Jes Hooper, University of Exeter, United Kingdom

PURPOSE

What is Anthrozoology? As students and early career anthrozoologists residing in diverse countries, we thought we knew! We soon discovered, however, there are many different definitions of anthrozoology and descriptions of what anthrozoological practice looks like. We want to explore what delegates from a range of career stages, and different national, cultural and academic backgrounds think distinguishes and defines the field. We also want participants to weigh in on what the future may hold and see if we can identify a common language of anthrozoology!

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

1. Examine the varying (individual, facility, and organizational) approaches towards and definitions of animal-studies, anthrozoology, and research participants
2. Discuss the national/institutional/personal anthrozoological 'ethos' of workshop participants, and how these inform individual practice
3. Acknowledge and embrace the knowledge that there is not a single way to 'do' anthrozoology (rather it lies across several spectra)
4. Identify ways to connect diverse definitions and ethos to create international collaborative relationships
5. Create a communication and collaboration list for interested participants (which can then be used by the ISAZ membership committee as it develops several planned regional meet ups)
6. Create a working document

ENGAGEMENT

The organizers are purposely giving a very brief introduction to the workshop topics (so as not to 'lead' the participants into conclusions, but rather to allow them to formulate their own ideas), which will be followed by free writing to focus participant thoughts on the day's questions. These thoughts will then be shared in small groups, who will 'report back' to the full workshop. This (ideally) allows participants to interact with a variety of people at different career stages, from different parts of the world, and from different institutions.

Each individual and small group interaction will lead back to a full discussion on how individual and institutional views on animal studies, human-animal interactions, and anthrozoology inform our interactions with other species. Our hope is to highlight how animal studies and anthrozoology (and other related fields) can be highly interrelated but also extremely uniquely practiced. This, in our view, is one of the great things about our emerging field.

The optional collaboration list will offer opportunities for connection and engagement lasting beyond the confines of the conference (the organizers have benefited from lasting connections with others they met through previous ISAZ workshops, which is one reason they are excited to host their own).

Exploring the Impact of Early Experiences on Canine and Feline Behavior

1:00–3:30 PM Thursday, 27 June, 2024

Organisers:

Ass professor Maria Andersson, Swedish University of Agricultural Sciences, Sweden

PhD Elin N Hirsch, Swedish University of Agricultural Sciences, Sweden

PURPOSE

Welcome to our interactive workshop, where we delve into the fascinating subject of early experiences and their effects on the behaviour of puppies and kittens. The primary goal of this workshop is to facilitate a thoughtful discussion and reflection on how the initial weeks and months of a puppy or kitten's life shape their temperament, social skills, and overall interaction with humans. By gaining insights into these experiences, we aim to equip pet owners, trainers, and enthusiasts with a deeper understanding of how to foster positive development in their furry friends.

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

Introduction:

1. Overview of the critical developmental stages, and discussion on the importance of early socialisation, in relation to what we know today.
2. Reflection on real-life examples showing the impact of early experiences on behaviour.
3. Practical exercises demonstrating methods for positive early experiences.
4. Guided discussion on the participants own experiences.
5. Discussion on best practice and a guided tool-kit.
6. Summary

ENGAGEMENT

- Discussion in smaller groups from real-life examples.
- Discussion in smaller groups on best practice and guidance for breeders.
- Group presentations

How to Get Your Work Published

1:00–3:30 PM Thursday, 27 June, 2024

Organiser: Dr Erika Newton, CABI, United Kingdom

PURPOSE

Publishing is a fundamental of the research process. In order to succeed, researchers need to understand how to select the right outlet for their work, be able to clearly communicate their message in order to reach the right audience, and understand how the peer-review process works. This workshop is designed to provide early career researchers and practitioners with the knowledge and skills to start publishing their work.

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

By the end of the workshop, attendees will learn:

- How to prepare and write a journal article
- How to choose a journal (including how to avoid predatory journals or unethical publishing practices)
- The general workflows used by journals, the different roles involved, and different types of peer-review process
- How to respond to reviewer and Editor feedback
- How to maximise the impact of your work once it is published
- When to consider publishing a Book or a Case Study, and tips for success

The workshop will be targeted for researchers who are familiar with academic publishing as a reader or reviewer, or who have published a small number of articles in peer-reviewed publications. The workshop will also start with a poll for attendees to share their level of experience in publishing and this will be used to guide the presentation and level of detail covered in the workshop.

ENGAGEMENT

Interactive questions and polls for audience will be facilitated through Slido (a simple online polling platform). Example activities will include matching journal articles to suitable journals to provoke discussion, and a poll on the anticipated time involved for different steps in the publishing process. There will also be regular breaks for question and answer sessions after each section.

A Very Brief Introduction to Qualitative Research Methods in Human-Animal Interaction Research

10:00–12:30 PM Sunday, 30 June, 2024

Organisers:

Prof Carri Westgarth, University of Liverpool, United Kingdom

Dr Tamzin Furtado, University of Liverpool, United Kingdom

PURPOSE

The purpose of this workshop is to provide a brief introduction to the role of qualitative research within the study of animal health and welfare related issues and of the impact of animals in societies. Qualitative methods are specifically designed to explore the intricacies of everyday behaviour and social relationships, including with animals, and the reasons why people act in the way they do. They are particularly suited for understanding how people interpret and respond to messaging related to health and welfare (their own or that of their animal). These methods are therefore key to understanding human behaviour, which can subsequently facilitate behaviour change to improve animal wellbeing. As a result, qualitative methods have been successfully used in pragmatic research across the animal sciences, including in exploring the experiences of laboratory animal-handlers; livestock farmers; equestrians; animal tourists; pet owners; veterinarians; dog-handlers, and more.

Despite its usefulness, qualitative research is often misunderstood, and considered a “nice to have” add-on to quantitative studies. Unlike quantitative methods, research staff are often expected to conduct and analyse qualitative research data from interviews and focus groups, with no experience or training. Moreover, peer reviewers of qualitative research are often unfamiliar with key concepts, such as sample sizes and reporting standards. As a result, it is important that introductory information is made available to researchers to enable them to better understand, utilise, and review qualitative research within HAI.

This introductory workshop covers key concepts, research methods and ethical issues related to application of social sciences to the study of human-animal interactions. The specific objectives are to:

Introduce a sociological perspective on the interactions between humans and animals

Explain where qualitative methods can be useful instead of or in addition to more traditional positivistic and quantitative research methods

Identify the key types of data collection methods commonly used in qualitative research and their ethical considerations.

Introduce the concept of ‘coding’ qualitative data during analysis

Introduce key concepts in relation to critically appraising qualitative research (for example, when peer reviewing a paper)

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

The workshop will be split into four components:

- The whys and wherefores: when are qualitative research methods useful?
- The nuts and bolts: what sorts of methods are involved in qualitative research methods?

- The how: an introduction to coding a research study
- The myths and mysteries: discussing common concerns about qualitative research methods, and addressing specific questions participants may have.

By the end of the course, participants will be able to:

- Give examples where qualitative research methods are useful in anthrozoological research
- Understand how qualitative research is different to quantitative research and in what context is each most appropriate
- Formulate research questions appropriate for addressing through qualitative research
- Outline the main types of data collection methods which are used in qualitative research
- Appreciate key ethical issues to be considered when conducting qualitative research
- Understand how qualitative data is analysed through 'coding' and have practiced this
- Seek out resources to facilitate critical review of qualitative research studies and understand common pitfalls in review

No prior knowledge is required to attend the workshop, as it aims to give an introduction to those unfamiliar with qualitative research methods. It is also suitable for those with some knowledge already.

ENGAGEMENT

We bring together an experienced, diverse team with expertise in qualitative research methods in anthrozoological research. The team have taught research skills to a range of audiences, from undergraduate students to research field officers and veterinarians. The workshop will be a mixture of lecture format, group discussion and integrated breakout activities.

We delivered a similar workshop online during the 2022 conference. Feedback included:

"Thank you for a great workshop. The context was fabulous. The breakout room exercises were very helpful as well as the discussions."

"Great workshop, what a pleasure! Thank you"

"You truly inspired me"

"Learned lots to reflect on"

SCAS Code of Practice: Moving Towards a UK Consensus for Minimum Standards in Animal Assisted Interventions

10:00–12:30 PM Sunday, 30 June, 2024

Organisers:

Dr Elizabeth J. Ormerod, Society for Companion Animal Studies, United Kingdom

Evangelos Diamantakos, Hartpury University, United Kingdom

Dr Elizabeth Anne McBride, University of Southampton, United Kingdom

Tim Stafford, Guide Dogs, United Kingdom

Selina Gibsone, Dogs for Good, United Kingdom

PURPOSE

Animal Assisted Intervention (AAI) programmes have operated for more than four decades in the UK. With growing awareness that many potential benefits can accrue from the presence of animals in health and social care facilities, as well as educational establishments we are experiencing an exponential growth of programmes involving visiting and/or resident animals. Additionally, companies and professionals are increasingly offering AAI services to clients at their own locations or in private practices. However, those implementing such programmes may not always fully understand the need for these to be meticulously planned utilising a transdisciplinary approach to ensure the safety of everyone involved and to safeguard animal welfare.

The SCAS Code of Practice in AAI was initially published in 2013 and revised in 2019. It serves as a guide for professionals, patients, and the public, outlining crucial steps to achieve best practices. The Code encourages interdisciplinary collaboration within the caring professions - including veterinary medicine and ethology - for planning, developing, and maintaining programmes, as well as fostering collaboration between practitioners and researchers to document outcomes. This collaborative approach enhances the effectiveness and sustainability of AAI programmes.

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

The panel of speakers will:

- a. Discuss the SCAS Code of Practice with emphasis on the key elements.
- b. Emphasise the necessity for recognition, qualification, and registration in AAI's
- c. Educate delegates on the pivotal role of establishing standards for animal selection/suitability and welfare in AAI's.
- d. Delve into the significance of adhering to specific procedures in both human and animal training and assessment.
- e. Define the psychological and safeguarding needs of human participants (both professionals and beneficiaries) in AAI's.

ENGAGEMENT

The speakers will deliver Power Point Presentations.

Delegates will have the opportunity to raise any areas of their concerns about AAls during the Q&A session.

As part of this workshop, delegates will engage in an activity designed to assist SCAS in collecting valuable information and filtering ideas from experts, professionals, and the public. This input will inform the future update of the Code as it is a living document.

Participants will be split into groups. Each group will review certain topics in the SCAS Code of practice and suggest further additions, changes or explanations. The groups will be supported by the speakers. Each group will present their suggestions via SLIDO/PADLET. At the end, each delegate will complete a postcard detailing their new insights acquired during the workshop and how this might change their practice.

Relationships and Resilience at the Zoo: Building an Animal-Assisted Services Program

10:00-12:30 PM Sunday, 30 June, 2024

Organisers:

Dr Leslie Stewart, Idaho State University, USA

Shantelle Tjaden, Idaho State University, USA

Dr Katie Sacco, Idaho State University, USA

PURPOSE

Through this workshop, the presenters aim to inform attendees about an innovative humane-education model currently being implemented to enhance the training of graduate-level healthcare students at a university in the United States. To deliver this curriculum, the university's counseling department established a collaboration with an AZA-accredited local zoo that serves as a sanctuary for injured, non-releasable wildlife species and displaced barnyard animals. The model, Relationships & Resilience at the Zoo (RRATZ), includes an eight week, OneWelfare based small group curriculum in which students engage a domesticated species of animal partner in positive-reinforcement training with the mutually-beneficial goal of increasing animal welfare through enrichment and cooperative care. Students worked with the same individual animal partner for the duration of each 8-week period. Students learned humane, relationship-focused training techniques and basic OneWelfare principles prior to meeting their animal partner. Teams worked together throughout the eight-week curriculum to accomplish mutually-beneficial, relationship-enhancing training goals and activities to promote the ultimate goal of animal welfare and wellbeing. Students worked with their animal partners at liberty for the entirety of the program, meaning that no halters, tethers, or lead ropes were used at any time. Animal partners had access to their entire paddock and housing spaces, and could choose to leave the paddock and access retreat spaces at any time. This helped to ensure that all animal partner participation was strictly voluntary on behalf of the animal. This safeguarding of animal choice encouraged participants to focus early training sessions on relationship building with their animal partner. At the conclusion of each session, students participated in a group process wherein faculty facilitators encouraged them to assess

their progress with their animal partners and to draw parallels to their own professional and personal growth and learning. Student self report and faculty observation revealed significant personal and professional growth following participation in the program. For example, students who participated in the program showed noticeable improvements in their clinical skill specific courses as compared to peers who did not participate. Participating students also showed noticeably advanced skills in accurately self-assessing their own clinical skills and interpersonal presence towards clients/patients, and were more easily able to integrate nuanced clinical conceptualization skills beyond developmental expectations.

The positive student and faculty feedback regarding the program prompted the presenters to initiate an Interpretive Phenomenological Analysis (IPA), and a subsequent Grounded Theory (GT). In addition to sharing the process of the RRATZ program, the presenters will discuss the results and implications of both qualitative investigations. Further, there are relatively few empirical studies on the topic of animal assisted services (AAS) in higher education, and even fewer addressing AAS's role in the unique nuances of training future healthcare providers. Additionally, few studies discuss partnerships with species such as donkeys, sheep, goats, and cows. The presenters aim to discuss the broad potential applications of humane training and OneWelfare concepts within an AAS program and to demonstrate how attendees may create a model that may be applied to their own settings and populations served.

LEARNING OUTCOMES & ASSOCIATED ACTIVITIES

Learning objectives of the workshop include:

- Understand the RRATZ Model of animal-assisted services.
- Through didactic learning and engagement with media from the RRATZ program, participants will understand the rationale and structure underpinning the model, including ideas for implementation in higher education and across other educational, community, and clinical settings.
- Understand how humane training techniques could be applied in animal-assisted services. Participants are invited to experience activities included in the orientation to the program. Participants will apply foundational humane training methods and practice with partners in dyads. Participants will reflect on their experiences and draw parallels to their own work settings, similarly to the end-of-session group process utilized in RRATZ program curriculum.
- Understand the empirically-grounded potential benefits of the RRATZ Model.
- Participants will be oriented to the results and implications of two studies conducted with participants of the RRATZ program to understand the experiences of students as well as the process students engaged with throughout the program.
- Discuss how to form mutually-beneficial community partnerships. Participants will be provided with a description of the partnership between Idaho State University and Zoo Idaho and will reflect in groups on what possible partnerships are available within their communities. Groups will be encouraged to think of partnerships that will

be mutually beneficial for both their program and to the community partner and animals involved.

- Apply the OneWelfare model to animal-assisted services.

Participants will receive an overview of the OneWelfare Model and learn how they can apply these concepts within an animal-assisted services program.

Create a plan for how to implement the RRATZ program within participants' communities.

In groups, participants will be provided with a template of the steps to implementing the RRATZ model and will create a plan for adapting the program to fit their community's needs. Presenters will help troubleshoot potential issues and logistical challenges that arise in program planning.

ENGAGEMENT

Presenters will engage attendees through a blend of didactic content, experiential activities, and applied exercises. Participants will be invited to engage RRATZ orientation activities and to explore the steps of implementing similar constructs to meet the needs of their own communities and populations served. Throughout the workshop, participants will be invited to ask questions and engage in discussion with the large group and within smaller groups.

Abstracts

Thematic Oral Presentation Session: Canine AAS

10:40am-12:10pm Friday, 28th June, 2024

Chair: Evangelos Diamantakos

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

37 Reducing Loneliness in the Post-Secondary Context: A Canine-Assisted Intervention Pilot Study

Dr John-Tyler Binfet, Miss Freya L. L. Green, Miss Rebecca J. P. Godard
University of British Columbia, Kelowna, BC, Canada

Introduction: University students are known to experience elevated levels of loneliness which places them at risk for compromised mental health. Canine-assisted interventions (CAIs) have been shown to reduce varied dimensions of ill-being and bolster well-being however there remains a paucity of research examining their effect on loneliness. This study sought to examine the efficacy of an on-campus CAI on reducing loneliness.

Methodology: University students ($N = 598$) participated in an on-campus CAI at a western Canadian university and completed pre- and post-session visual analogue scales for stress and loneliness. Participants interacted freely with dog-handler teams and self-determined their visit duration.

Findings: Participants experienced significant decreases in stress from pre-CAI ($M = 3.32, SD = 0.99$) to post-CAI ($M = 1.87, SD = 0.87$), $t(597) = -37.84, p < .001, dz = -1.55$. Loneliness also decreased significantly and substantially from pre-CAI ($M = 2.76, SD = 1.01$) to post-CAI ($M = 1.77, SD = 0.83$), $t(597) = -25.28, p < .001, dz = -1.03$. Greater stress was associated with significantly greater loneliness at both pre-CAI ($r = .41, p < .001$) and post-CAI ($r = .60, p < .001$). International students experienced significantly larger decreases in loneliness compared to domestic students ($\beta = -0.15, p = .049$). Specifically, international students ($M = 2.93, SD = 1.01$) had higher levels of baseline loneliness compared to domestic students ($M = 2.68, SD = 0.99$), $t(460) = 2.90, p = .004, d = 0.25$. After the CAI, international students' loneliness ($M = 1.75, SD = 0.80$) was reduced to a similar level as domestic students' loneliness ($M = 1.82, SD = 0.85$), $t(488) = -1.02, p = .31, d = -0.09$.

Conclusion and Implications: Results indicate that interaction with therapy dogs reduces students' sense of loneliness, especially for international students.

38 Assessing Therapy Dog-Handler Teams: A Content Analysis of 10-Years of Positive and Negative Evaluation Comments

Miss Freya L. L. Green, Miss Amelia A. Willcox, Dr. John-Tyler Binfet

University of British Columbia, Kelowna, BC, Canada

Introduction: Canine-assisted interventions (CAIs) have proven effective in supporting the well-being of a variety of clients, including, but not limited to, children (Connell et al., 2019); university students (Pendry & Vandagriff, 2019); seniors (Thodberg et al., 2016); and law-enforcement personnel (Blinded). As comprehensive assessments of therapy dogs are imperative to ensuring the safety and well-being of the varied stakeholders (Blinded), it is vital to understand the characteristics and attributes that lead to successful acceptance into CAI programming. The aim of this paper was to examine the assessment comments describing dogs and handlers applying to participate in and established on-campus CAI.

Methodology: All comments from assessment team members were collated from the evaluation paperwork from a large CAI based in Western Canada. Comments collected between 2013 and 2023 ($N = 542$) were categorized based on the focus of the comment (i.e., handler or dog) and valence (i.e., negative or positive attributes). These comments were subsequently coded using qualitative content analysis (Hsieh & Shannon, 2005) by two independent researchers.

Findings: Analysis of assessment comments yielded 2,138 codes. Dogs were praised for their friendly temperament (14.1%), good behavior (11.5%), calm nature (9.7%), and their enjoyment of the activities (8.8%) or in having physical contact (8.4%). Handlers were praised for their friendly personality (14.5%), management of their dog (13.2%), and conversation (8.8%). Negative comments included handlers' lack of confidence (20.2%), conversational skills (14.2%), or control of their dog (11.5%). Dogs were noted for signs of stress/anxiety (14.4%), being disinterested (10.4%), too excitable (10.2%), or lacking in inter-dog compatibility (8.2%) or obedience skills (8.2%).

Conclusion and Implications: Findings provide insight into the strengths and weaknesses of prospective handler-therapy dog teams. This stands to inform CAI programmers and researchers in their development and implementation of therapy dog-handler assessments and prospective handlers preparing for evaluation.

107 Dogs' Behavioural Responses to Dog Assisted Interventions: A Field Study

DVM Sandra C Haven-Pross, DVM Kyra Maarleveld, MSc Lianne Jens, Dr Kathalijne EK Visser
Aeres University of Applied Science, Dronten, Netherlands

Introduction: While there is a growing body of evidence on the human benefits of animal-assisted interventions, relatively little research has been conducted on how dogs perceive these interventions. In this study, the interventions include Animal Assisted Therapy, Animal Assisted Education, Animal Assisted Coaching and Animal Assisted Activity. This study aimed to examine the relationship between noticeable behaviours of dogs during dog-assisted interventions indicative of their affective state.

Methodology: Dogs were monitored for two months, and the behaviour of each session was scored. Nineteen behaviours were selected; scoring was simplified using three categories: the behaviour was not seen at all, occasionally or regularly. Dog-assisted professionals underwent training in scoring utilizing this approach. Descriptive statistics was used to analyse the duration and frequency of sessions and behaviours. Moreover, Principal Component Analysis will be used to extract underlying factors of behavioural responses of dogs during dog-assisted interventions.

Main results: The study included 24 dogs (10 male and 14 female) that were monitored for two months resulting in data of 626 sessions. The dogs were on average 4 (± 2.8) years old. Dogs worked 3 (± 1.6) times a week. The majority of the sessions lasted between 15 and 30 minutes. In 77% of the sessions, dogs showed slow and broad tail wagging and in 42% of the sessions fast and high tail wagging. In 48% of the sessions, dogs showed nose licking at least once and in 38% of the sessions, dogs yawned at least once.

Principal Conclusions and Implications for Field: The preliminary results show that on average dogs worked 3 times a week with a session duration between 15 and 30 minutes. Results give new insights into how dogs cope with animal-assisted interventions. Awareness of the dogs' affective state may positively influence dogs' welfare in dog-assisted interventions.

166 Dog-Assisted Interventions With Younger and Older Adults: A Randomised Controlled Trial Measuring Effects of In-Person, Online, Robotic, Virtual Reality, and Video Interventions
Mr Luke T Argyle, Professor Kerstin Meints
University of Lincoln, Lincoln, Lincolnshire, United Kingdom

Introduction: Animal-assisted interventions (AAs) can provide beneficial effects to human wellbeing, and positive effects have also been shown for participants watching dog videos. Further intervention technologies have remained mostly unexplored. This study presents results from a longitudinal randomised-controlled trial with younger and older adults employing dog-assisted interventions with real-life dogs (in-person and online) and technology-based alternatives including robotic-dogs, virtual reality (VR) dogs, and dog videos using a range of psychological measures.

Methodology: Younger (Mage=25) and older adults (Mage=69, N=128) were tested across 6 experimental interventions: 1) in-person dog, 2) online dog, 3) robotic dog, 4) VR dog, 5) dog video, 6) no-treatment control (newspaper). Standardised measures of State and Trait Anxiety, Wellbeing, Stress and Loneliness were obtained before and after interventions, and 1-month later. Dog welfare and human safety was safeguarded throughout. Analyses of variance with planned comparisons were calculated.

Main Results: ANOVAs of Condition (5 dog-assisted interventions and control) by Time (before/after/1-month later) showed significant beneficial effects in younger adults for: State and Trait Anxiety ($(F(1,73)=54.634, p<0.001, \eta^2=0.428)$, $(F(1,73)=70.556, p<0.001, \eta^2=0.491)$), with benefits most prevalent in online, robotic, VR, and video conditions ($p<0.001$; $p<0.05$); Mental Wellbeing improvements ($F(1,73)=26.74, p<0.001, \eta^2=0.268$) in real dog, robotic, and video conditions, ($p<0.05$); Stress improvements ($F(1,73)=14.901, p<0.001, \eta^2=0.170$) in robotic and video conditions, ($p<0.05$; $p<0.001$); improved Loneliness ($F(1,73)=18.901, p<0.001, \eta^2=.206$) in robotic and VR conditions, ($p<0.001$; $p<0.05$).

The older adult cohort showed significant beneficial effects for: Trait Anxiety ($F(1,42)=10.214, p=0.003, \eta^2=0.196$) in robotic and video conditions ($p<0.05$; $p<0.001$); and Mental Wellbeing improvements ($F(1,42)=6.823, p<0.012, \eta^2=.14$) in the video condition ($p<0.05$). Overall, improvements were not maintained after 1-month.

Conclusions and Implications: Our study highlights the benefits of alternative interventions on human wellbeing in both cohorts. Such interventions broaden accessibility of services and offer alternative support for individuals who cannot benefit from dog exposure due to allergies, location, setting, or other restrictions.

Thematic Oral Presentation Session: Pet-Owner Bond

10:40am-12:10pm Friday, 28th June, 2024

Chair: Darcy Bornemann

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

Sponsored by Waltham Petcare Science Institute

24 "It Takes Two to Tango": Both Pet and Owner Personality and Mental Wellbeing Associate With Attachment Insecurity to Cats and Dogs

Aada Ståhl^{1,2,3,4}, Milla Salonen^{5,2,3,4}, Emma Hakanen^{2,3,4}, Salla Mikkola^{2,3,4}, Sini Sulkama^{2,3,4}, Jari Lahti¹, Hannes Lohi^{2,3,4}

¹Department of Psychology and Logopedics, University of Helsinki, Helsinki, Finland.

²Department of Veterinary Biosciences, University of Helsinki, Helsinki, Finland. ³Department of Medical and Clinical Genetics, University of Helsinki, Helsinki, Finland. ⁴Folkhälsan Research Center, Helsinki, Finland. ⁵University of Turku, Turku, Finland

1. Introduction: Research on the link between pet ownership and well-being is conflicting. One suggested mediating factor is the owner-pet attachment quality. Insecurely attached owners may pose a risk for a dysfunctional dyad. With data from 2,724 owners, 2,545 dogs, and 788 cats, we aimed to grasp the personality and well-being traits associated with anxious and avoidant attachment to pets.

2. Methodology: Survey data on owner and pet personality, owner-pet attachment, owner mental well-being, and unwanted pet behaviour was used to examine the associations with structural equation modelling.
3. Main findings: Owner neuroticism was associated with anxious attachment ($\beta=.251^{***}$ for dog owners, $\beta=.380^{***}$ for cat owners). Owners of more active cats and more conscientious cat owners were more anxiously attached ($\beta=.088^*$, $\beta=.091^*$ respectively). Among dog owners, higher neuroticism, agreeableness, and extroversion were linked to lower avoidant attachment ($\beta=-.085^*$, $\beta=-.085^{**}$, $\beta=-.062^*$ respectively). Human sociability of both dogs and cats was negatively associated with avoidant attachment ($\beta=-.112^{***}$, $\beta=-.096^*$ respectively). Owners with lower mental well-being scores were more anxiously attached to dogs and cats ($\beta=-.182^{***}$, $\beta=-.287^{***}$ respectively) and more avoidantly attached to dogs ($\beta=-.122^{**}$). Unwanted dog behavior was associated with both attachment styles: aggression and ADHD-like behavior with avoidant ($\beta=.158^*$ and $\beta=.203^{***}$ respectively), and fear-related behavior with anxious attachment ($\beta=.068^*$).
*** $p<.001$, ** $p<.01$, * $p<.05$.
4. Principal conclusions and implications for the field: Both owner and pet characteristics may influence the risk for insecure pet attachment. These results reveal previously unexplored associations between pet personality and insecure attachment. Human sociability of pets appeared to be a favorable trait, while owner neuroticism may pose a risk regarding anxious attachment. Insecure attachment may contribute to the dog's unwanted behavior, though causations are unclear in this correlational study. Combinations, such as similarity, of personality traits may enhance the dyadic functioning, making it an exciting avenue for future research.

136 Understanding Human-Animal Interaction Dynamics and Patterns During Work and Non-Work Time

Dr. Joni Delanoëijel^{1,2,3}, Dr. Miriam Engels⁴, Dr. Mayke Janssens^{4,5}

¹Work and Organisation Studies, Faculty of Economics and Business, KU Leuven, Leuven, Belgium. ²Research Foundation Flanders (FWO Vlaanderen), Brussels, Belgium.

³International Association of Human-Animal Interaction Organizations (IAHAIO), global, United Kingdom. ⁴Faculty of Psychology, Open University, Heerlen, Netherlands.

⁵Department of Psychiatry and Psychology, School for Mental Health and Neuroscience, Maastricht University Medical Centre, Maastricht, Netherlands

Introduction. The relationship between companion animal interactions and caregiver well-being is recognized as complex and contingent on context. However, the examination of human-animal interaction (HAI) is typically confined to specific contexts, like the demarcation between work and non-work contexts. This study aims to investigate HAI across diverse contexts using Experience Sampling Methodology (ESM), exploring animal-work states in daily life and their associations with momentary positive (PA) and negative

(NA) affect. Additionally, we explore the potential of grouping individual trajectories of animal-work states into discernible patterns.

Methodology. Using ESM, 435 dog/cat caregivers reported their experiences for five consecutive days at ten semi-random time-points each day (Ndatapoints: 10,650). Participants indicated their momentary work context and their animal's presence, resulting in six animal-work states (working at work with/without animal, teleworking with/without animal, non-work with/without animal). Participants also reported momentary PA and NA, using eleven mood-related adjectives from the PANAS. We performed multilevel regression modeling for momentary analyses—assessing the moderating effect of work-state on the relationship between animal presence and PA/NA—and applied sequence analysis to identify individual animal-work state trajectories.

Results. Momentary analyses show that the association between animal presence and PA/NA is moderated by momentary work-state. Specifically, we only identified a significant association between animal presence and affect in the non-work context (PA: $B=0.074$, $P<0.05$, $95\%CI=0.013;0.134$; NA: $B=-0.048$, $P<0.001$, $95\%CI=-0.074;-0.022$). We were able to group similar trajectories into clusters thereby identifying recognizable patterns of animal-work states among caregivers across groups.

Conclusions/Implications. This study emphasizes the need to examine HAI across diverse contexts. We identified context-dependent associations, with companion animals being beneficially associated with human affect primarily in non-work situations. Acknowledging the influence of distinct HAI states and the patterns these states form over time, enhances our understanding of these interactions and offers valuable insights for HAI researchers and practitioners.

174 The Burden of Unwanted Behaviour: Risk Factors for the Dog Owner Bond in the UK
Dr Bree L Merritt¹, Dr Dan G O'Neill¹, Dr Claire L Brand¹, Dr Zoe Belshaw², Dr Fiona C Dale¹, Dr Camilla L Pegram¹, Dr Rowena MA Packer¹

¹Royal Veterinary College, London, United Kingdom. ²Evivet Evidence-based Veterinary Consultancy, Nottingham, United Kingdom

Introduction

Owners of 'Pandemic Puppies' acquired in the UK during 2020 have experienced a double challenge to building and maintaining relationships with their dogs: first due to public health regulations for COVID-19 (2020-2021), rapidly followed by the current cost-of-living crisis (2022 onwards). High pet care burdens can lead to reduced welfare for dogs and owners, even relinquishment or euthanasia of dogs in some cases. Learning how the unprecedented early life of this cohort has affected these dog-owner bonds may allow identification of more general risk factors for a high burden from dog ownership.

Methods

The Royal Veterinary College's Pandemic Puppies project collected questionnaire data from owners of puppies purchased aged <16 weeks in 2020 and again when these dogs reached 21 months old. The original questionnaire explored puppy characteristics, acquisition practices, early management, health, and owner demographics. The 21-month questionnaire gathered follow-up data on current management, health and behaviour, and captured the dog-owner relationship using the Monash Dog Owner Relationship Scale (MDORS). Using both questionnaires, linear mixed modelling evaluated risk factors contributing to the MDORS Perceived Costs subscale.

Results

The main contributors to increased Perceived Cost scores were dog factors: undesirable behaviours – aggression ($\beta+5.58$ (95%CI: 2.57 – 8.59)), control behaviours ($\beta+2.57$ (95%CI: 1.25 – 3.89)), fear behaviours ($\beta+2.18$ (95%CI: 0.23 – 4.12)) and separation related behaviours ($\beta+1.78$ (95%CI: 0.94 – 2.63)), and also whether the COVID-19 pandemic had influenced the acquisition of their dog ($\beta+1.50$ (95%CI: 0.67 – 2.32)). Perceived cost was decreased when owners could change who contributed to care for their dog ($\beta-1.00$ (95%CI: -1.87 – -0.80)) or take their dog to work ($\beta-3.33$ (95%CI: -5.59 – -1.06)).

Conclusion

Resources targeted at effective behavioural management of dogs and easing the delivery of their dog's care could improve bonds and quality of life on both sides of dog-human relationships.

94 Relationships With Pet Dogs as a Source of Family Influence on Child Socioemotional Development

Dr. Kristen C Jacobson, Leah W Hurwitz
University of Chicago, Chicago, IL, USA

Introduction. More than 60% of US households with children own pets. Studies have supported associations between emotional bonds with pets and positive youth socioemotional development. However, prior research has not considered the role of other family relationships, particularly children's emotional bonds with mothers, as a potential confound. Thus, the goal of this study is to compare the effects of child emotional bonds with pet dogs and child emotional bonds with mothers on youth empathy, prosocial behavior, and depressed mood.

Methods. Cross-sectional survey data were collected from 122 dog-owning youth aged 10 to 18 (47.5% male, 50.8% Non-Hispanic Caucasian, $M_{age}=13.9$, $sd=1.8$), including 41 sibling pairs. Child-mother emotional bond was measured with the care and involvement

subscale from the Parental Bonding Inventory ($\alpha=0.85$). Child-dog emotional bond was measured with the CENSHARE Pet Attachment Scale ($\alpha=0.91$). Child outcomes included depressed mood (CES-D, $\alpha=0.85$), empathy (Social Attitudes Scale, $\alpha=0.92$), and prosocial behavior (Child Social Behavior Scale, $\alpha=0.90$). Separate multivariable regression models were run for each outcome. All models included both measures of emotional bonds simultaneously and controlled for child age, gender, race/ethnicity, and family socioeconomic status. Mixed-effects models adjusted for correlated observations within families.

Results. Child reports of emotional bonds with mothers and emotional bonds with dogs correlated $r=0.23$ ($p=.01$). Child-dog bond was associated with empathy ($\beta=0.25$, $se=0.09$, $t(37)=2.95$, $p=.006$) and prosocial behavior ($\beta=0.19$, $se=0.09$, $t(37)=2.13$, $p=.04$), but not depressed mood ($\beta=0.04$, $se=0.09$, $t(37)=0.44$, $p=.66$). Child-mother bond was associated with empathy ($\beta=0.19$, $se=0.09$, $t(37)=2.21$, $p=.03$) and inversely associated with depressed mood ($\beta=-0.41$, $se=0.09$, $t(37)=-4.62$, $p<.001$), but was unrelated to prosocial behavior ($\beta=0.01$, $se=0.09$, $t(37)=-0.15$, $p=.88$).

Conclusions. This study provides evidence that emotional bonds with pets are linked to certain aspects of positive youth socioemotional development and that effects are independent of both demographic characteristics and children's emotional bonds with mothers.

Thematic Oral Presentation Session: Genetics and Breeding

10:40am-12:10pm Friday, 28th June, 2024

Chair: Gemma Penhorwood

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

132 Do Bulldog Owners Support Efforts to Limit Breed Specific Health Problems? – A Questionnaire-Based Study Aimed at Danish Owners of French Bulldogs
Professor Peter Sandøel^{1,2}, DVM Sisse Lotze¹, DVM Frederikke Rafn¹, DVM Zenia Sandahl¹, Associate Professor Camilla S. Bruun¹, Professor Merete Fredholm¹, Associate Professor Thomas B. Lund², Associate Professor Helle F. Proschowsky², Post.doc. Svenja Springer³
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Despite a documented high level of breed-specific health related problems, brachycephalic dogs, notably the French Bulldog (FB), remain very popular. It is therefore relevant to investigate owners' perception of their dogs' health status and the extent to which they support efforts to limit breed specific health problems.

Therefore, a questionnaire was developed and distributed via Danish Facebook groups for people interested in FBs. In the questionnaire owners were asked about the health status of their dog, and their familiarity with and perspective on employing a specific test to screen potential breeding dogs for the level of Brachycephalic Obstructive Airway Syndrome (BOAS). The study included 452 owners of FB, covering an estimated 5% of the total Danish population of FBs.

The most common health problems reported were allergy (37%) and breathing problems (30%). Reporting that a dog is snoring when awake ($p < 0.001$), has heat intolerance ($p < 0.001$), is wheezing ($p = 0.005$), is grunting ($p = 0.010$) and has sleep problems ($p = 0.029$) were correlated to perceived breathing problems. The higher the level of experienced health problems the less likely the owners were to re-acquire ($p < 0.001$) or recommend others to acquire ($p < 0.001$) a FB. Furthermore, 56% of the owners thought that FBs are less healthy than other breeds, while 64% considered their own FB to be healthier ($p < 0.001$) than other FBs while only 8% perceived their own FB to be less healthy. Two thirds of the owners had heard about the test and more than 80% of the owners liked the test and thought that it should be applied to all breeding animals.

Although the study confirms the well-known tendency of owners of FBs to normalize the health problems of their dogs it also shows that owners of severely affected dogs react negatively and that there is wide support for initiatives to limit breed specific health problems.

164 Designed to Be Healthy? Exploring Health Differences Between 'Designer' Crossbreeds and Their Purebred Progenitors in a UK Dog Population

Miss Georgina T Bryson, Dr Rowena MA Packer, Dr Dan G O'Neill, Dr Claire L Brand, Dr Zoe Belshaw

RVC, Hertfordshire, United Kingdom

Growing UK ownership of designer-crossbreeds (intentional crosses between distinct purebred breeds) is often motivated by their perceived good health despite limited evidence of such a 'hybrid vigour' effect (crossbred offspring exhibit superior average performance for specific traits compared to purebred parents). Instead, owners are forced to rely on anecdote and claims from sellers about enhanced health in crossbred dogs to support belief systems about designer-crossbreed healthiness, that may be unfounded. A more robust evidence base would assist owners to make better acquisition decisions, to protect the future wellbeing of these dyads (e.g., reduce relinquishment risk).

This study applied a large public questionnaire to UK owners of three common designer-crossbreeds (Cavapoo, Cockapoo and Labradoodle) and their progenitor breeds (Cavalier King Charles Spaniel, Cocker Spaniel, Labrador Retriever and Poodle) to elicit owner-

reported disorder information. The study hypothesised that designer-crossbreeds have lower risk for common disorders than their progenitor breeds.

The analysis included valid responses for 9,402 dogs. Using multivariable analysis to account for confounding between the breeds (age, sex, neuter status, owner age and gender), the odds across the 57 most common disorders overall were compared between the three designer-crossbreeds with each of their two progenitor breeds (342 comparisons). No statistical difference was identified for 87.1% (n=298) health-comparisons, with designer-crossbreeds showing higher odds for 6.7% (n=23) of disorders and lower odds for 6.1% (n=21) disorders.

The results show minimal differences in health status between these three designer-crossbreeds and their purebred progenitors, challenging the common belief of positive hybrid vigour effects for health in this emerging demographic. It is possible that these results may be specific to the three current designer-crossbreeds and may not generalise to all designer-crossbreeds (e.g., designer-crosses that include one progenitor breed with an extreme conformation may show improved health compared to their extreme progenitor breed). However, the current results suggest that beliefs about improved health are not a safe justification for the breeds studied.

71 Understanding the Role of Genetic Testing in Veterinary Medicine: Insights from Veterinary Care Providers

Nikki E. Bennett, Dr. Peter B. Gray

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Introduction: This study explored veterinary professionals' experiences, preparedness, and perceptions regarding direct-to-consumer (D2C) genetic testing for companion animals. D2C genetic services provide commercial genetic tests directly to pet guardians, offering breed composition and health metrics of the tested animal. The use of D2C genetic services for pets is rising, with the industry extending into veterinary care settings due to scientific advancements, increased animal care expenditures, and higher pet adoption rates.

Methods: Veterinary care providers (VCPs) attending a US veterinary conference were invited to complete an online survey. Single-choice, Likert Scale items, and open-ended text boxes asked participants about their experiences with clients using genetic services, preparedness to answer questions about test results, and perspectives on the clinical value of genetic testing. Data analysis was conducted using SPSS and participant responses are described with frequencies and percentages.

Results: Participants included 60% practicing veterinarians ($N=131$), 21% registered veterinary technicians ($N=46$), and the remainder a mix of students ($N=14$) and other support staff ($N=26$). Most participants had encountered clients who used or planned to use a D2C

genetic test for a pet ($N=186$, 81%) and perceived genetic services as clinically useful (70%, $N=158$). When asked about their preparedness to assist clients, 78% ($N=170$) reported being “somewhat confident” in helping clients understand breed reports, while 68% ($N=148$) were “somewhat confident” in interpreting health information from D2C genetic tests.

Conclusions: Veterinary professionals demonstrate awareness of D2C genetic services as they regularly encounter clients using these tests. Furthermore, VCPs perceive genetic testing as relevant to animal health care. These trends are likely to increase as companies enter veterinary care markets so VCPs may assist clients with understand their pet’s results. To enhance VCP-guardian-animal interactions regarding genetic testing, interventions will need to address barriers to VCP confidence, such as the lack of guidelines for the industry.

Thematic Oral Presentation Session: Mental Health (Pets and AAI)

1:10–2:40pm Friday, 28th June, 2024

Chair: Wanda McCormick

Session to feature oral presentations each 15–minutes in length followed by 5–minutes of Q&As.

Sponsored by Purina

44 The Association Between Attachment to Pets and Anxiety and Depression Among Mid-Life and Older Women

Dr Magdalena Zebrowska^{1,2}, Dr Susanne Strohmaier³, Prof Curtis Huttenhower⁴, prof Bernard Rosner^{5,4}, Dr Carri Westgarth⁶, Dr Curtis Huttenhower⁴, Prof Francine Laden^{7,8}, Prof Heather Eliassen^{5,7}, Prof Ichiro Kawachi⁹, Dr Jaime Hart^{5,8}, Dr Jorge Chavarro^{2,7,10}, Dr Oana Zeleznik⁵, Prof Olivia O Okereke^{5,11}, Dr Tianyi Huang², Prof Eva S Schernhammer^{1,5}

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Objective: To determine whether a strong emotional bond with a pet can reduce risk of depression and anxiety in vulnerable groups such as those who experienced childhood abuse (CA).

Participants: N=214 female participants of the Nurses' Health Study II (NHSII) enrolled in the Mind Body Study, where women with a history of CA were oversampled (N=156; 72.6%).

Exposure: Pet-attachment measured by Lexington Attachment to Pets Scale (LAPS).

Main Outcome(s): Levels of depression and anxiety (10-item Centre for Epidemiologic Studies Depression Scale (CESD-10); Kessler Psychological Distress Scale (K6); 7-item Generalized Anxiety Disorder scale (GAD-7); Crown Crisp Experiential Index phobic anxiety subscale (CCI)); considered individually and combined into an overall z-score measure of anxiety and depression symptoms.

Results: 65.4% (N=140) of the women provided LAPS scale answers; 55.7% (N=78) referring to a dog, and 32.9% (N=46) referring to a cat. Overall higher pet-attachment on the LAPS score was significantly associated with lower GAD-7 score ($\beta(\text{LAPS,GAD7})=-0.17$; $p=0.0041$), but not phobic anxiety or depression. There were no statistically significant associations between cat-attachment and depression or anxiety. Higher dog-attachment, however, was associated with statistically significantly lower scores in depression ($\beta(\text{LAPS,CESD-10})=-0.47$, $\beta(\text{LAPS,K6})=-0.42$) and generalized anxiety ($\beta(\text{LAPS,GAD7})=-0.47$) and the overall measure of anxiety and depression ($\beta(\text{LAPS,Zscore})=-0.11$; all p-values $<.0001$), but there was no association between dog-attachment and phobic anxiety ($p=0.3641$). The above associations were all stronger when analyses were sub-set among women with a history of CA.

Conclusions and Relevance: Strong attachment to pets, especially dogs, was associated with lower anxiety and depression symptoms in our study. The favourable association between higher pet-attachment and lower anxiety and depression symptoms was particularly apparent in the vulnerable group of women with a history of childhood abuse.

47 Effects of Dog-Assisted and Relaxation Interventions on Self-Esteem and Anxiety in Children With and Without Special Educational Needs: A Longitudinal, Randomised Controlled Trial

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Introduction. Applications of dog-assisted (DAI) and relaxation interventions (RI) to support child wellbeing are increasingly popular, however, evidence on effects is limited. Little is known about differences in cohorts with and without special educational needs (SEN) and

longitudinal research is sparse. It is also unclear if group or individual interventions work best. The current study investigated effects of DAI and RI on children's self-esteem and anxiety with two cohorts longitudinally, individually and in small groups, using randomised controlled trials (RCT).

Methodology. Children in mainstream (N=105, Mage=8.9 years; N=54 male) and SEN schools (N=42, Mage=10.2 years; N=35 male) participated in either DAI or RI, or no treatment control. Interventions ran twice/week, 20 minutes over 4 weeks, as individual or small group interventions. Standardised measures of self-esteem and anxiety were obtained before and after interventions, at 6 weeks, 6 months and 1 year. Dog welfare and human safety was safeguarded throughout. Analyses of variance with planned comparisons were employed.

Main Results. Mainstream school children showed some beneficial effects of DAI and RI on self-esteem and anxiety after intervention end to 6 weeks later ($(t(38)=-2.40, p=.021; d=.038)$; $(t(37)=-2.47, p=.018; d=.40)$) - self-esteem increased and anxiety decreased. The control group showed no changes. Girls had initially lower self-esteem and higher anxiety than boys and showed higher gains compared to boys over time ($t(46)=-4.848, p<.001; d=.70$).

Children with SEN in DAI and RI showed stability in anxiety and self-esteem, while the control group showed more fluctuation and declining self-esteem. There were no clear benefits for individual or group interventions.

Conclusions and implications. Both cohorts showed intervention effects with children in mainstream schools showing improvements and children with SEN stabilising while the respective control groups showed no change or worsened. Future research should investigate dosage and refresher session timing to optimise benefits.

151 Effectiveness of Animal-Assisted Interventions for Children and Adults With Depressive Symptoms: A Systematic Review and Meta-Analysis

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Introduction: Depressive Disorders have been increasing in the past decades. Animal-assisted interventions (AAI) are known to be effective in reducing distress associated with depressive symptoms. This systematic review and meta-analysis aims to investigate AAI's effectiveness in reducing depressive symptoms. Furthermore, it aims at updating the current literature on the effects of animal-assisted interventions on depression.

Methods: We searched 15 major online databases for quantitative studies on AAI's impact on depressive symptom severity in children and adults. Out of 20'129 identified studies, 120

underwent data extraction. Two researchers independently assessed study quality. Depression symptom severity was the primary outcome, measured using standardized assessments at pre- and post-intervention. We conducted a random-effects meta-analysis on all controlled studies based on standardized mean differences (SMD).

Main Findings: Out of the 120 studies identified, 31 studies were considered for data analyses including studies published between 1994 and 2001. Studies were published in North America, South America, Europe, Africa and Asia. A total of 5'281 participants (female = 51.43%, male = 27.38%, unknown = 21.19%) were analyzed with ages ranging from 3 to 101 years ($M = 43.46$, $SD = 26.44$). Dogs were primarily included in the analysed studies (58.24%), followed by horses (27.47%), farm animals (13.19%), and cats (1.10%). Based on the meta-analysis of the included studies, the standardized mean difference for the effect of Animal-Assisted Therapy on reducing depressive symptom severity was estimated to be moderate ($SMD = -0.43$, 95% $CI: -0.53$ to -0.34 , $p < .001$).

Conclusion: This systematic review and meta-analysis underscores the potential effectiveness of Animal-Assisted Therapy in reducing depressive symptoms. However, to optimize its application, future research should delve into the nuanced factors that influence its efficacy such as intervention duration, intensity, setting, age, gender, species of animals involved, and other contextual variables.

177 Did Living With a Puppy Acquired During 2019, 2020 or 2021 Positively or Negatively Impact the Mental Health of UK Families During the COVID-19 Pandemic?

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Introduction

The COVID-19 pandemic precipitated a tsunami of puppy acquisition, often motivated by beliefs about improved family mental health. We surveyed UK families with children aged 8-17 years who had acquired a puppy during 2019-2021 to explore positive and negative mental health impacts of living with their dog during the pandemic.

Methodology

UK-resident parents/carers (with ≥ 1 child aged 8-17 years) and their children were surveyed during February-May 2023. Eligible families had purchased a puppy aged < 16 weeks between 23 March and 31 December 2020 or 2021 ('Pandemic Puppy') or the same dates in 2019 ('2019 puppy'). The three-part questionnaire included validated measures of dog-human closeness (e.g. CCAS), mental health/wellbeing (e.g. KIDSCREEN-10), and free-text

questions exploring puppy acquisition motivations and subsequent impacts within families. Quantitative responses were statistically compared within and between acquisition year groups. Qualitative data were thematically analysed.

Results

Valid responses were collected from 324 adult and 182 child 'Pandemic Puppy' owners, and 58 adult and 34 child '2019 puppy' owners. Adult 'Pandemic Puppy' owners' scores of their mental health during lockdowns were significantly higher than those of adult '2019 puppy' owners at that timepoint ($t=-1.77, df=333, p=0.039$), but mental health scores of children between the two groups did not differ ($t=0.32, df=205, p=0.375$). In both groups, stronger attachment to their dogs during lockdowns amongst adults correlated with lower mental health scores ($r=-0.28, p<0.001$); the converse was true for children ($r=0.14, p=0.046$). Over one-third (37.3%, $n=139/373$) of adults found one or more aspects of puppy care harder than expected. Four qualitative themes illustrated diverse ramifications of the COVID-19 pandemic on families, and how dogs differentially impacted the mental health of individuals, and whole families.

Conclusions

Owning a young dog during the COVID-19 pandemic had wide-ranging, and highly variable mental health impacts within and between families. When that dog was acquired appeared relatively unimportant.

Thematic Oral Presentation Session: Horse and Rider/Owner

1:10-2:40pm Friday, 28th June, 2024

Chair: Gemma Penhorwood

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

48 Understanding Anthelmintic Use and Other Endoparasite Management Practices in Horse Owners

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Introduction: Endoparasites can have severe health and welfare implications for horses. Inappropriate use of available drugs contributes to resistance and this is becoming an increasing problem. This study aimed to understand horse owner's decision making with regards to how and why anthelmintics are administered and to explore other parasite management practices adopted by horse owners.

Methodology: Data were collected using fourteen short interviews with nineteen horse owners at an equestrian event and four focus groups with twenty-two owners. The focus

groups involved semi-structured discussion and participatory group systems mapping. These data were then coded and analysed using thematic analysis.

Results: Three main themes were produced in relation to owners' parasite management practices: 1) managing horse's surroundings: for example, how owners kept their horses, "poo picking", co-grazing and managing fields; 2) influences on practices: for example, livery yard owners, vets, online diagnostic testing and beliefs about resistance and use of "unnecessary chemicals"; 3) conflicting information: for example, vet advice and drug choice, which in turn leads to owners having different parasite management practices. Barriers and facilitators were discussed in relation to the three main practices owners may adopt: testing, worming and pasture management. For example, having a large number of horses could act as a barrier to testing and regular pasture management, while an avoidance to use chemicals facilitated faecal testing to guide anthelmintic use. Livery yards reportedly act as both a barrier and a facilitator to practices as it is dependent on what individual yard managers adopt.

Principle conclusions and implications for the field: It was clear there is great variation in owners' practices and what influences them. This research provides clearer insight into what drives owners' behaviour to carry out anthelmintic practices and in knowing this, how their behaviour may be altered to protect the future of anthelmintics.

95 Mapping Educational Practices at Swedish Riding Schools From Teachers' and Pupils' Perspectives: A Descriptive Study

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Research has highlighted that there is a gap between scientific evidence and its application in riding school practice, leading to shortcomings in horse welfare and human safety. Therefore, this study aimed to survey current pedagogical practices in Swedish riding schools with emphasis on knowledge transfer of horse behaviour and welfare (BW), and applied learning theory and human-horse communication (LC). Data collection was based on two online surveys created in the survey tool Netigate to gather information on current teaching strategies and how they are perceived by riding school teachers and pupils. The link to the survey was distributed via newsletters of the Swedish Equestrian Federation and via social- and equestrian media. The survey generated data from 199 teachers and 368 pupils. Results showed that most teachers (95 %) incorporate teaching about BW/LC during regular riding lessons. Fifty-nine percent of the teachers specified to provide education in BW/LC during separate non-riding lessons which was matched with pupils' perception (75 %). Overall, 65 % of the teachers and 43 % of the pupils were satisfied with the teaching of BW and LC. Most pupils (71 %) were interested in attending non-riding lessons in BW/LC, however, only 24 % of the teachers believed that pupils were interested to

attend. Most teachers (97 %) perceived that spreading evidence-based knowledge in the teaching of BW/LC is important for riding schools to increase the theoretical and practical knowledge of riders. This is the first study to map pedagogical practices and the perspectives of both riding teachers and pupils and, thus, is a step-stone to further review the riding school education and enhance the implementation of evidence-based equestrian knowledge at riding schools.

140 Talking the Talk: An Analysis of Terms Used by Equestrians to Describe Their Own Horse Training Approach

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A multitude of different horse training approaches, views and belief systems exist within the equestrian sector. As yet, there has been little investigation into how horse owners describe their own training methods. Their word choices may provide insight into their motivations, priorities, and interpretations of the term ‘training’ itself, understanding of which would be beneficial to further engage this community in training-related discussion.

Within a larger online survey, horse-owners were asked whether they felt they followed a specific approach, style or belief system when training their horse(s). Those who did were subsequently asked to describe this in their own words. Of the 1,593 questionnaire respondents, 961 (60.33%) reported following a specific training approach.

Despite the fact that ‘pressure-and-release’ is considered to form the basis of equestrian training, the majority of respondents utilised language reflective of more positive and reward-centred training. Many emphasised giving their horse ‘agency’ during training and described their approach as ‘force-free’ or involving ‘no aversives’, despite this being potentially challenging to action in practice. ‘Negative reinforcement’ and ‘pressure-and-release’ were mentioned, although were frequently accompanied by terms such as ‘non-escalating’, ‘ethical’ or ‘mild’ to further qualify their use, which may suggest unease in admitting to the use of this approach.

Given that participants’ descriptions appear to conflict with scientific understanding of common horse training practices, further work is required to understand why this may be and elucidate the extent to which equestrians’ perceived and actual training practices align. It is possible that social desirability bias resulted in participants (consciously or unconsciously) incorporating ‘desirable buzzwords’ that make their training appear more positive. Alternatively, horse-owners may hold an idealised view of their own practices.

Whilst this may enhance their feelings of wellbeing when interacting with their horse, it could result in horse welfare being overlooked or unintentionally compromised.

161 Horse & Rider Suitability in Terms of Weight: Where Are We Now?

Dr Danica Pollard¹, Ms Imogen Burrows², Dr Lorna Cameron³, Dr Russell MacKechnie-Guire³, Dr David Marlin⁴, Dr Ben Mayes⁵, Mrs Ali Mead⁶, Mrs Jill Perkins⁷, Mr Julian Rishworth⁸, Ms Jan Rogers⁹, Mrs Amanda Stoddart-West¹⁰, Mr Tony Tyler¹¹, Ms Bronwen Williams¹², Dr Jane Williams³, Dr Tamzin Furtado¹³

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Introduction: While there is agreement that carrying excess loads can result in poor equine welfare, researchers and equestrians disagree on what constitutes a safe upper limit for horse:rider bodyweight (BW) ratios, and which other factors (e.g. horse breed, age and fitness, rider skill) might impact weight-carrying capacity. This working group has reviewed the literature and collated rider weight guidelines from different organisations to identify and share current best practice.

Methods: A literature review was performed during June 2023 using Medline/PubMed to identify literature around (BW) ratios and associated factors. Policy documents from different equestrian organisations, riding schools, and clubs in UK were compiled and analysed using a content analysis approach.

Analysis: Research methodologies varied widely: most studies were small scale, used different horse-related welfare assessments (including biological parameters, physiological responses, gait analysis and behavioural indicators), and utilised different exercise tests and horse breeds. In most studies BW ratios >20% induced negative physiological, gait and behavioural changes, with some finding these changes at BW ratios >15%. In relation to the policy review, many organisations provided a suggested percentage of rider weight (usually 20%) but further guidance on assessing BW ratios or enforcing upper limits was lacking. Examples of good practice were identified, including dynamic assessment of horses over time, noting behavioural and physiological health; a particularly supportive and sensitive approach to discussing the issue; and an approach for assessing riders in a show environment.

Conclusion: While it is difficult to compare studies with varying methodologies, current research supports a BW ratio of between 15 to 20% as an upper limit. Although it is rare for

organisations to have clear guidelines on managing this issue in a sensitive manner in practice, there are examples of good practice which can be shared with organisations who wish to update their policies and practice.

Thematic Oral Presentation Session: Zoo and Wild Animals

1:10–2:40pm Friday, 28th June, 2024

Chair: Vicky Melfi

Session to feature oral presentations each 15–minutes in length followed by 5–minutes of Q&As.

1 People and Zoos: The Role and Implementation of Direct Human–Animal Interactions in Zoological Establishments

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Zoological establishments have five main roles: education, conservation, recreation, research and providing positive welfare to their housed animals. This review highlights the effect that direct human–animal interactions can have on the non–human animals’ physical and psychological wellbeing, and the true impact directly interacting with an animal has on a human participant in terms of short– and long–term education and conservation engagement and action. Literature has been reviewed from worldwide sources, utilising articles focusing on welfare in captive animals, direct animal interactions and alternative provisions that are in place. Currently, the main focal area is recreation due to the monetary gains associated with this role, with 75% of those surveyed ($N = 1,241$) worldwide found to offer direct human–animal interactions.

With over 700 million visits made to zoological establishments annually, and the average first world entry at \$20, only \$350million was reported to be put back into conservation efforts worldwide, with the true outcome and impact of this effort unknown. This review analyses an holistic approach human–animal interactions and highlight key opportunities that are missed in the delivery method of these. Direct human–animal interactions have no to limited regulations throughout the world, with only 13 zoological establishments accredited under PAAZA in Africa, compared to over 1,000 establishments accredited under BIAZA in the United Kingdom. Monetary income is vital for zoological establishments to operate, but it is possible that there are alternative provisions that can be provided. Instances that could be provided are training during the interactions, providing a clear purpose and adding value to the direct interactions, feeding time demonstrations, Computer Generated Imagery (CGI) models, film rooms and puzzle interactive games to replicate natural innate and learnt behaviours of animals and engage members of the public.

Keywords: Direct human–animal interactions, Education, Conservation, Zoological establishments, Human–animal interactions

26 Zoo Professionals and Volunteers in the U.S: Experiences and Prevalence of Burnout, Mental Health, and Animal Loss

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Introduction: Burnout and mental health among animal care and health professionals (ACHPs) has received increasing attention in recent years. Despite rapid growth of research in this area, the wellbeing of individuals who work and/or volunteer in zoo settings has received minimal attention.

Method: An anonymous online survey was created to evaluate zoo staff and volunteers' experiences of animal-related loss, rates of professional fulfillment and burnout, mental health, perceived organizational support, and resilience. Participants included 1695 zoo professionals (72% ACHPs, 20% other staff) and volunteers (7%) who were recruited through relevant professional listservs and online platforms, and flyers on zoo grounds.

Results: ACHPs reported higher levels of anxiety, depression, and burnout and lower levels of professional fulfillment than other zoo staff and volunteers. The most common animal-related losses experienced by ACHPs in the past year were unexpected death (80%) and anticipated loss (74%), with more than half of these losses occurring within the past 3 months. Multiple linear regression analysis indicated that ACHPs' reported bond with animals under their care was positively associated with depression and anxiety ($p < .05$). We also found that having a formal ritual or process following the death of an animal was positively associated with job fulfillment and perceived organizational support and negatively associated with depression and burnout—yet only 17% of participants in our sample indicated that their zoo had such a process or ritual. Demographic characteristics (i.e., age, LGBTQ+, time in field) emerged as important factors related to ACHP wellbeing.

Discussion: Our findings suggest that many ACHPs are struggling with burnout, anxiety, depression, and low rates of professional fulfillment and perceived organizational support. We recommend that zoos develop organizational plans that foster a culture which normalizes and validates grief/loss experiences and is proactive in responding to animal loss, related trauma, and other occupational stressors.

133 How Do You Feel About Owls? An International Survey

Maël Theubet¹, Dr Matthew M. Vowels¹, Mélanie Fernandes¹, Lauriane Müller¹, Pr Alexandre Roulin², Pr Christine Mohr¹

¹Institute of Psychology, University of Lausanne, Lausanne, Switzerland. ²Department of Ecology and Evolution, University of Lausanne, Lausanne, Switzerland

Introduction

Human behaviour is one of the primary factors influencing the loss of biodiversity, and calls for increased conservation efforts are growing. Therefore, people's adherence to conservation measures is essential. However, affective reactions may hinder motivation to do the 'right thing'. For example, owls are beneficial to sustainable agriculture because they feed on crop-destroying rodents. Yet, in many parts of the world, owls are associated with misfortune or witchcraft, leading to negative perceptions that also impede conservation efforts. This study aimed to identify populations with such negative perceptions.

Methodology

We used data from our ongoing worldwide survey on owls assessing individuals' feelings and beliefs regarding owls as well as psychological and demographic variables such as time spent in nature or knowledge about owls. At the time of data extraction, 20554 participants in 124 countries had completed the survey. We used a random forest algorithm to predict positive, negative, neutral, and mixed feelings toward owls. Then, we used Shapley values, an explainable machine learning technique, to identify important predictors and to estimate their relevance with regards to feelings towards owls.

Main Results/Findings

Negative feelings were predicted by i) symbolic representations of owls, such as being bearers of death or misfortune, ii) younger age, and iii) religious beliefs. On the other hand, reduced negative feelings were predicted when recognizing the barn owl in a picture and having an affinity for nature.

Principal Conclusions and Implications for the Field

The results suggest that knowledge about owls, both biological and cultural, can influence negative attitudes towards these species. This information can be used to target specific populations that are more likely to hold such attitudes. Tailored messages can then be designed to enhance the likelihood that conservation measures are accepted and implemented among potentially reluctant groups.

181 So Happy Together? How Nepalese Mahouts Identify and Understand Elephant Affective States

Dr. Michelle Szydlowski

Miami University, Oxford, Ohio, USA

The health and welfare of working elephants is directly related to that of their mahout and to the strength and duration of elephant-human bonds. Such bonds are influenced by the ways in which mahouts understand, describe, and respond to elephant communication and dynamic elephant affective states. This study examines how mahout interpretation of elephant communication and affective states influences mahout behavior during

interactions, and thus influences the development and maintenance of elephant-human working relationships.

Using in-person, semi-structured interviews with owners and mahouts, we collected biographical and employment data on mahouts and elephants. These interviews were followed by multispecies ethnographic data collection and participant observations among 41 mahouts and 29 elephants. Narrative analysis of interviews, coupled with observations of mahouts and elephants, resulted in the identification of themes which strongly impact the elephant-human working relationship, all of which appear tied to the development and nurturing of long-term bonds. The first set of themes to emerge is discussed in this presentation, which includes 'measures of elephant happiness' and 'methods of communication.'

96% of mahouts interviewed felt that their elephant co-worker was "happy" or "very happy," and cited their ability to communicate with their elephant as key to elephant "happiness." This ability to communicate effectively relied heavily upon several key factors: length of time spent in the working relationship, a strong interspecies bond, and an understanding of elephant body language, affective states, and vocalizations.

Identifying these themes is crucial to understanding how humans and elephants build and maintain long-term bonds, as well as determining how these bonds (or their breakage) affects working relationships. Supporting interspecies communication and bond-building may be key to improving the health, welfare, and working conditions for marginalized groups employed in tourism practice.

Lambek, M. (2010) *Ordinary Ethics: Anthropology, Language, and Action*. M. Lambek (ed). New York. Fordham University Press.

Thematic Oral Presentation Session: Service Dogs and Veterans

2:45-4:15pm Friday, 28th June, 2024

Chair: Wanda McCormick

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

4 Service Dogs for Military-Related Posttraumatic Stress Disorder: A Nonrandomized Clinical Trial

Sarah C. Leighton¹, Dr. Kerri E. Rodriguez¹, Dr. Clare L. Jensen¹, Dr. Evan L. MacLean¹, Dr.

Louanne W. Davis^{2,3}, Erin L. Ashbeck¹, Dr. Edward J. Bedrick¹, Dr. Marguerite E. O'Haire¹

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Introduction: Veterans with posttraumatic stress disorder (PTSD) are increasingly seeking service dogs as a complementary intervention, yet their effectiveness is understudied. We conducted an NIH-funded clinical trial (R21HD091896) to compare the effectiveness of usual care alone versus usual care plus a service dog for military-related PTSD.

Methodology: A pre-registered, nonrandomized 2-arm clinical trial (NCT03245814) was carried out using standardized participant-report and blinded clinician assessments. Veterans on the waitlist for a service dog were allocated to study arm based on the order in which they applied to a national, non-profit dog provider. The objectives were to estimate the effect of service dog partnerships on PTSD symptoms, depression, and anxiety (primary outcomes) and psychosocial functioning (quality of life, social health, and work participation). Outcomes were assessed at baseline and 3-months follow-up.

Main results/findings: Participants included 170 post-9/11 veterans with an independent, clinician-verified PTSD diagnosis; 91 participants received service dogs while 79 participants on the waitlist served as controls. Both groups had unrestricted access to usual care. Mean (SD) age was 37.8 (8.3) years; 25% self-reported as female and 75% as white. Compared to the control group, participants in the service dog group had significantly lower PTSD symptom severity based on self-report (PTSD Checklist for DSM-5 [PCL-5]; OR=0.26 [95% CI: 0.14, 0.49], $p < .001$) and blinded clinician assessment (Clinician-Administered PTSD Scale for DSM-5 [CAPS-5]; OR=0.25 [95% CI: 0.13, 0.48], $p < .001$) after 3 months. There were also significant differences favoring the service dog group in most areas of psychosocial functioning, including anxiety, social isolation, and life satisfaction.

Principal conclusions and implications for the field: Compared to usual care alone, the provision of trained psychiatric service dogs was associated with lower PTSD symptom severity and higher psychosocial functioning for military veterans. Therefore, psychiatric service dogs may represent an effective complementary intervention for military-related PTSD.

57 Evaluating the Efficacy of an 8-Week Service Dog Training Program in Veterans With PTSD
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Introduction: Posttraumatic stress disorder (PTSD), a serious public health epidemic, affects approximately 20% of the 18.5 million U.S. veterans. often accompanied by comorbidities including: depression, mania, panic attacks, social phobia, isolation and alcohol/drug dependence. Greater PTSD symptom severity (PTSDSS) is related to an inability to regulate emotions, control impulsive behaviors, and function within family and society, often leading to homelessness, divorce, spousal/child abuse and suicidality. Veteran PTSD rates and the insidious effects of this condition demand empirically validated treatment programs. VA

PTSD programs reach only 1% of the veterans and typically lead to modest symptom improvement. As a result, many veterans self-medicate their PTSD and these efforts to suppress their emotions can worsen their symptoms. Emerging quantitative and qualitative evidence suggests that training service dogs (SDs) may be rehabilitative for veterans with PTSD, but additional evidence of efficacy is needed.

Methodology: A randomized controlled trial examined the efficacy of weekly service dog training (8 sessions) compared to an 8-session dog training video control intervention for improving PTSDSS in veterans (N=60) with PTSD.

Main results/findings: Linear mixed models with random intercepts and slopes revealed that PTSDSS decreased significantly over the course of the 8 week study [$F(1,53.850)=17.210$, $p<0.001$, $ES=0.45$], in the veterans; decreases did not differ between the intervention groups [$F(1,53.850)=0.319$, $p=0.575$]. Decreases were greater for women than men [$F(1,53.895)=5.216$, $p=0.026$, $ES=0.47$].

Principal conclusions and implications for the field: Results of improvements in both groups over 8 weeks suggest that the supportive nature of the SDTPs and/or a potential placebo effect due to veterans' expectations that they may benefit from both interventions constitute important aspects of improvement in PTSDSS. Future studies with larger sample sizes in multiple sites are needed to extend the current results.

104 Recognizing the Impact of Having a Service Dog on the Romantic Relationship Between Veterans with Post Traumatic Stress Disorder (PTSD) and their Romantic Partners
M.A Grace S Rath, Dr. Linzi Williamson
University of Saskatchewan, Saskatoon, SK, Canada

Romantic partners, or spouses, of Veterans working with service dogs (SDs) are integral to the lives of the veteran- SD teams yet are rarely recognized within SD research. Given that spouses are key supports in Veterans' lives and offer a unique perspective on the SD's overall impact their perspectives must be highlighted. The current research surveyed 27 spouses of Veterans working with SDs on their perceptions of the SD and follow-up interviews were conducted with 7 spouses. Spouses completed partnership and caregiving scales and were asked about how the SD and their caregiving impacted their romantic relationship. Scale data was analyzed through repeated measures ANOVA. Interview data was thematically analyzed. The mean score for survey results for the Partnership questionnaire was $M = 30.93$ ($SD = 9.84$), Tenderness/Intimacy sub scale ($M = 23.18$), and Togetherness/Communication sub scale ($M = 24.15$, $SD = 8.17$). There were no statistically significant differences across the Partnership sub-scales ($F(2, 30) = 2.83$, $p = .075$). The Caregiving Burden Inventory score was 66.71 ($SD = 15.70$) with a range from 40-98 which indicated that the partners were at risk for burnout. Most spouses indicated having the SD in the home lessened their caregiving burden in some areas and improved their relationship

with their partner. Most spouses bonded with and helped care for the SD. Spouses recognized that after working with the SD, the Veterans were more emotionally available and less hypervigilant compared to how they were before having their SD. The SDs also allowed the Veterans to be more present within their romantic relationship. The introduction of the SD allowed the Veteran to live more independently and decrease care giving responsibilities for their spouse. Further research should examine how PTSD severity, attitudes towards animals, and length of time working with a SD may differentiate experiences.

105 The Positive Impacts of Integrating a Service Dog Into the Family Home of Military Veterans with PTSD: Perspectives from Veterans' Romantic Partners

Dr. Linzi Williamson, M.A Grace S Rath

University of Saskatchewan, Saskatoon, SK, Canada

Service dogs (SDs) play a vital role in their handler's life while also impacting life in the family home. It has been widely suggested that SDs in family homes should only interact with their handler. Given that the handlers family is a key support system within their life, it is often the case that the family also interacts with the SD daily. The current study surveyed 27 romantic partners of Veterans with PTSD on their family's quality of life with the SD in the home using a Family Quality of Life (QoL) scale and analyzed with repeated measures of ANOVA. Follow-up interviews were completed with 7 romantic partners and analyzed using thematic analysis. The Family QoL mean score was $M = 21.68$, 17 points below the max score of 105 (with significant differences across family QoL subscales, $F(3,60) = 65.03$, $p < 0.001$). Most interviewed participants reported their family had a high QoL with the SD in the home. The families bonded with the SD and the SD was described as part of the family unit. The SDs brought a sense of normalcy and calm into the home which was thought to greatly improve the family's QoL. It was also indicated that the SDs had therapy dog qualities. In bonding with the SD, the families felt the comforting effects that interacting with a therapy dog can initiate. Allowing the family to interact with the SD not only improved the family's life, but also gave SD handlers a greater support system without compromising the SD's attention to their handler. These findings promote the importance of recognizing the role of families in the SD training process and contributes to SD research and programming examining the process of integrating a SD into the family home.

Thematic Oral Presentation Session: Multi-Species Family and Community

2:45-4:15pm Friday, 28th June, 2024

Chair: Ben Klinkenberg

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

8 The Continuity and Discontinuity in Intergenerational and Cross-Species Transmission of Parenting Styles

Chih Hsin Kuo¹, Sharon Kessler²

¹University of Glasgow, Glasgow, United Kingdom. ²University of Stirling, Stirling, United Kingdom

Introduction: Parenting style and intergenerational transmission have been extensively studied in parent-child relationships. As dogs are increasingly recognized as integral members of the family system, there is a growing interest in understanding how parenting behaviours can also influence a dog's behaviours. However, the reasons why people adopt certain parenting behaviours toward dogs remain relatively unknown. This study delved into the intergenerational transmission of parenting styles learned from one's parents to when one parents a dog and the intricacies of human-dog interactions.

Methodology: The study used a mixed-methods approach that included surveys of 391 dog care-givers and 10 qualitative semi-structured interviews. Multivariate linear regression analyses were employed to examine intergenerational transmission effects, while orientations toward animals were explored as potential mediators. The semi-structured interviews were analysed using thematic analysis.

Main Results: Permissive parenting style exhibited an intergenerational transmission effect in that those who experienced permissive parenting were more likely to replicate it with their dogs. Moreover, orientation toward animals emerged as a crucial mediating factor in shaping dog-directed parenting styles. Protectionistic attitudes reduced the likelihood of participants who experienced authoritarian parenting replicating that with their dogs and both humanistic and protectionistic attitude increased the likelihood that they would compensate for an authoritarian upbringing by being permissive with their dogs. These processes were also supported by the comments that participants made during interviews by emphasizing the role of perceived childhood experiences and emotions in influencing people's awareness of adopting specific parenting behaviors.

Principal Conclusions and Implications of Field: This study shows that, by leveraging insights from our understanding of child-parent relationships, we can better understand the role of the dog within the family system, opening opportunities for benefitting human and canine welfare.

9 Exploring Homeless Children's Experiences With Companion Animals

Dr. Christine Yvette Tardif-Williams, Dr. Rebecca Raby, PhD Candidate Erika Alegria, MA Candidate Luiza Mattos Jobim da Costa
Brock University, St. Catharines, Ontario, Canada

Introduction: Rates of homelessness among families and children are rising in Canada (Gulliver-Garcia, 2016). Many of these families also have or had companion or support animals (Kerman et al., 2019). While some research highlights the hardships (e.g., limited access to housing) and benefits (e.g., social support) of experiencing homelessness with companion animals among youth and adults, there is little research focusing on children’s perspectives. Our paper addresses this gap and talks directly to children about their experiences with companion animals as they navigate housing precarity.

Methodology: Eleven children (aged 7–12 years) living in transitional housing engaged in weekly arts-based research activities beginning in October of 2022. These activities were designed to generate conversations about children’s experiences, including those with companion animals. Activities involved discussions about “rainbows” (joys) and “clouds” (hardships), outdoor play, therapy dog visitations, and drawing.

Main Results/Findings: Our findings reveal the complexity of children’s engagements with companion animals while living in transitional housing. Salient themes in children’s responses were identified using qualitative content analysis (Hsieh & Shannon, 2005). The children expressed affinity for companion animals and shared stories about feeling loved and supported by them. Notably, the children often navigated these feelings of emotional intimacy alongside feelings of loss and grief, as they shared stories about missing or losing companion animals either through separation or death. We also noted how interacting with therapy dogs was valuable for this group of children.

Principal Conclusions and Implications for the Field: Our findings suggest that the importance of companion animals to homeless youth and adults extends to children (Irvine, 2024). In attending to children’s experiences, our findings contribute uniquely to research highlighting the value of companion animals for homeless children and their families. We discuss the policy and practice implications of our findings for supporting human-animal interactions among families experiencing homelessness.

93 Family and Community Cohesion: The Role of the Companion Animal

Erin K King, Megan K Mueller

Tufts University, North Grafton, MA, USA

Introduction: Social cohesion, or the strength of social relationships, is associated with mental health outcomes such as depression and anxiety. A potential source of social cohesion is relationships with companion animals. Given that 94% of people consider their companion animal to be a member of their family, and that companion animals often function as a source of social support, this research aims to understand how companion animals may foster social cohesion at the family and community level.

Methodology: This research used a subset of parent reported data ($n=4,745$) from the Adolescent Brain Cognitive Development (ABCD) Study. Demographics, family cohesion, and community cohesion were explored using descriptive statistics. Additionally, a multi-level regression model nested by school district was used to understand how companion animals may predict social cohesion at the family and community level.

Main Results: Companion animals were present in 80% of households in this sample ($n=3,790$). About 60% of participants had a dog ($n=2,850$) and 33% ($n=1,578$) had a cat in the home. Family cohesion scores ranged from 0 to 9 (higher scores = higher cohesion), with an average score of 7.16 ($SD=1.73$) and community cohesion scores ranged from 1 to 5, with an average score of 3.74 ($SD=.69$). Preliminary analyses showed participants with companion animals had significantly higher community cohesion ($t(4,639)=6.025, p<.001$) than those without animals, however family cohesion was not statistically different between homes with or without companion animals ($t(4,673)=-.19, p=.46$).

Implications for Field: Strengthening relationships among community members could improve public health, therefore if pets are a catalyst for social cohesion at the community level, supporting companion animal care-taking could be a viable way to facilitate healthier communities. More pet friendly policies, including housing equity and access to veterinary care, could be viable interventions to support both pets and community members.

156 Daily life Animal Behavior and Human Affect: Insights from Experience Sampling
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²Department of Psychiatry and Psychology, School for Mental Health and Neuroscience, Maastricht University Medical Centre, Maastricht, Netherlands. ³Faculty of Psychology, University of Basel, Basel, Switzerland

Introduction: Growing scientific interest in the impact of companion animals on human well-being drives research, yet findings on this relationship remain heterogeneous. This may be attributed to variations in the characteristics of the animals and diverse ways in which humans perceive them. This study aims to address these complexities by investigating the daily-life behavior of companion animals and its association with human affect.

Method: Participants completed a short questionnaire on their smartphones ten times a day for five consecutive days. They reported their animal's behavior, including playfulness, anxiety, relaxation, aggression, enthusiasm, and disobedience (rated 1-7). Participants also reported their current positive (PA) and negative affect (NA) on a scale from 1-7. Animal behavior was examined for frequency and intensity, and exploratory factor analysis was

conducted to identify underlying categories. Multilevel regression modeling tested associations between animal behavior and PA/NA.

Results: Relaxed behavior scored the highest, showing a left skewed distribution (M=6,SD=1.39). Playful (M=3.23,SD=2.11), enthusiastic (M=4.05,SD=2.13) and affectionate (M=4.46,SD=2.11) behavior were also prevalent but displayed a more even distribution across response categories. Aggressive, anxious and disobedient were right skewed, with aggression being the least prevalent (M=1.06,SD=0.36). Dogs and cats displayed different factor structures. For dogs, positive affiliation/behavior comprised enthusiasm, playfulness, and affection, while negative behavior included anxiety, relaxation, disobedience, and aggression. For cats, the latter factor split into anxiety and disobedience. Positive affiliation/behavior in dogs correlated with increased PA (B=0.112, P<0.001, 95%CI=0.068;0.156) and decreased NA (-0.022, P<0.05, 95%CI=-0.043;-0.001), and negative behavior was associated with increased NA (0.076, P<0.005, 95%CI=0.030;0.121). No associations were found between cat behavior and NA/PA.

Conclusion and implications: These nuanced insights into animal behavior contribute to a comprehensive understanding of human-animal interactions. The differential associations for dogs and cats offer valuable implications for future research and potential therapeutic applications.

Thematic Oral Presentation Session: Young People, Emotions and Skill Development

2:45-4:15pm Friday, 28th June, 2024

Chair: Vicky Melfi

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

23 The Effects of the Presence of an Assistance Dog for School Success (ADSS) on Emotion Recognition in Adolescents at School: A Pilot Study

Ms Manon Toutain¹, Mr Nicolas Dollion², Ms Emilie Pignard³, Ms Laurence Henry¹, Ms Marine Grandgeorge¹

¹EthoS Laboratory - University of Rennes, Rennes, France. ²C2S Laboratory - University of Reims, Reims, France. ³No laboratory affiliation, Rennes, France

Introduction. Presence of animals in children's daily lives has been demonstrated as having numerous benefits (e.g. emotional, social). Recently, animals have also joined the school environment, and notably assistance dogs. However, only a few studies have been conducted on this topic. Therefore, we conducted a pilot study on the effects of a one-year exposure to an *Assistance Dog for School Success* (ADSS) on the emotional well-being and emotion recognition of adolescents enrolled in a Localized Units for School Inclusion (LUSI) program.

Methodology. Twenty-three adolescents (13M/10F; M=12.8±1.1yo) were included: 10 subjects (with cognitive function disorders) in a special teaching program (i.e. LUSI program) in France and exposed to an ADSS (*LUSIgroup*), and 13 neurotypical subjects without LUSI program or ADSS (*Controlgroup*). Subjects were asked to assign an emotion label, among 5 possible choices (sadness, joy, fear, neutral or anger), on series of emotional human, dog, and cat faces. Each subject completed the task at three measurement times: before the integration of the ADSS in the LUSI group; 5-8 months and 11-14 months after the integration of the ADSS (same period for the *Controlgroup*). A GLMER model was used. In addition, the *LUSIgroup* feedbacks were collected.

Findings. The *Controlgroup* did not exhibit any change over the course of session (all $p > 0.05$). However, *LUSIgroup* exposed to ADSS improved in their emotion recognition both for dog ($p = 0.001$) and human ($p = 0.01$) faces across sessions, but not for cats ($p > 0.05$). *LUSIgroup* performance was higher if they lived with animals (number of different species present in the home). Feedbacks from the *LUSIgroup* indicated that ADSS helped them emotionally, e.g. 80% reported that they were more motivated to come to school and 90% felt calmer.

Conclusion. After one school year with ADSS, *LUSIgroup* seems to show an improved well-being and better emotion recognition, especially dogs' and humans' emotions.

51 Exploring the Influence of an Animal-Assisted Intervention Program on Gratitude Development in Chilean Adolescents

M.Sc. Francisca Cuevas¹, Ph.D. José Antonio Muñoz², Ph.D. Jorge J. Varela², Ph.D. Rafael Miranda¹, Ph.D. Pablo Polo²

¹Universitat de Girona, Girona, Spain. ²Universidad del Desarrollo, Santiago, Chile

Introduction. Social-emotional competencies are pivotal during adolescence, a vulnerable stage where gratitude plays a crucial role in well-being. *Gratitude* acknowledges others' benevolence and enhances life quality and prosocial behaviors (McCullough et al., 2002;). This study investigates the impact of a month-long dog-based program on gratitude development in Chilean adolescents.

Methodology. The sample included eight classes (5th to 8th grades, ages 10-14) from a Santiago private school in Chile. We employ differences-in-differences regression; the program facilitated weekly interactions between adolescents and trained dogs for a month. Gratitude was measured through pre- and post-program surveys.

Main Results. Results from differences-in-differences regression ($\beta = 0.25$, $p = 0.043$) indicate a significant increase in gratitude levels. Bootstrap standard error (0.12) and a 95% coefficient interval (0.01 to 0.49) enhance result reliability. Additionally, paired-sample t-tests were conducted to assess mean change scores. For the intervention-exposed group,

the mean change score was -0.26 ($SD = 0.65$, $SE = 0.06$), 95% CI $[-0.377, -0.133]$, with a significant t -value of -4.149 ($p = 0.000$). In contrast, the untreated group had a non-significant mean change score of -0.120 ($SD = 0.66$, $SE = 0.06$), 95% CI $[-0.25, -0.123]$, with a t -value of -1.79 ($p = 0.75$). Adolescents demonstrated heightened appreciation and a positive shift in their perspective, with interactions with dogs fostering gratitude.

Principal Conclusions and Implications for Field. This research highlights the potential of structured animal-assisted activities for emotional development in adolescents. Cultivating gratitude emerged as crucial, contributing to enhanced well-being and prosocial behaviors. The findings have implications for the design of psychosocial support programs, emphasizing the role of gratitude in promoting positive outcomes.

References:

McCullough, M. E. (2002). Savoring life, past and present: Explaining what hope and gratitude share in common. *Psychological Inquiry*, 13(4), 302–304.

53 When Darwin Meets Piaget: Influence of Phylogenetical Proximity on Children's Empathy Toward Animals

Dr Nicolas Dollion¹, Dr Aurélien Miralles², Dr Marine Grandgeorge³, Dr Christelle Declercq¹, Dr Michel Raymond⁴

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Empathy towards animals can vary according to various parameters, such as previous experiences and animals' physical characteristics. Recent studies have shown that human interspecific empathy is also influenced by phylogenetic proximity, with greater empathy towards phylogenetically close species. However, while demonstrated in adults (Miralles et al., 2022), we do not have any knowledge concerning the development of this phenomenon during childhood.

One hundred and fifty-one neurotypical children aged between 6 and 11 years-old participated in this study. First, they performed an on-screen task: they had to choose among pairs of photographs of various species which one they felt better able to understand the feelings and emotion. Then, they completed the Basic Empathy Scale for a measurement of their intraspecific empathy (i.e., empathy toward peers).

Generalized linear mixed models were used to analyze for factors influencing children's choice for each pair of species. Results highlighted that children's probability to choose a specie increased with its relative phylogenetical proximity to humans ($p < .001$). This

relationship varied according to variables such as the children's age ($p=0.05$), living environment ($p<0.01$) or participation to extracurricular activity including animals ($p=0.05$). Interestingly, integration of intraspecific empathy scores in the model revealed that the more children were empathic toward their peers, the more phylogenetic proximity had an influence on their choice ($p=0.05$). Finally, comparisons with previous data collected on an adult sample revealed that while the influence of phylogenetical closeness was weaker in children than in neurotypical adult ($p<.01$), they did not differ from adults with autism ($p>.05$).

In line with previous studies in adults, children also perceive greater empathy towards phylogenetically close species. However, different factors seems to affect the development of this tendency in children. This study shed new lights on the development of interspecific empathy, as well as on the potential specificities in autism.

191 Executive Function Skill Development in Response to Animal Assisted Intervention (AAI) for Children With ADHD

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Introduction. Research indicates that individuals with Attention Deficit/Hyperactivity Disorder (ADHD) are impaired in skills requiring executive functioning (EF), with specific impairment in attention, working memory, and inhibition. Animal-assisted intervention (AAI) with dogs has been found to improve EF, social skills, prosocial behaviors, and reduce the severity of ADHD symptoms. The efficacy of these interventions for improving skills of EF, however, is mixed. This study examines the potential impact AAI with therapy dogs has on improving EF skills in children with ADHD.

Methodology. Thirty-nine children (aged 7–9 years, 79% male) with ADHD participated in 6 cohorts of a randomized clinical trial pilot project comparing an 8-week intervention with therapy dogs (AAI) to psychosocial treatment as usual (TAU). At 3 time points (before, after, and at 8 weeks following intervention) participants completed 3 computerized assessments designed to measure skills of EF during a laboratory mock-school day; the Flanker, Dimensional Change, and List Sorting tasks. Mixed-effects multi-level modeling with random coefficients was utilized to test outcome differences in these tasks of EF between the AAI and TAU groups across time points.

Results. All 3 outcome measures on the Flanker task yielded significance for a time effect (p 's = .037, .040, and .047) for participants in both intervention groups (AAI & TAU), demonstrating an improvement in this skill ($p<.05$). There were no time or group effects for Dimensional Change or List Sorting tasks.

Discussion. Results indicated that an 8-week psychosocial skills therapy with and without the presence of dogs improves skills of inhibition at the end of treatment and at 8-weeks post intervention. No significant improvements in working memory or cognitive flexibility were revealed. Null results for group differences in light of our previous and related findings in this pilot trial suggest further investigation into the role of individual differences in response to AAI.

Thematic Oral Presentation Session: Development of New Tools

1:10-2:40pm Saturday, 29th June, 2024

Chair: Ivana Schork

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

39 For the Love of Acronyms: Identifying the Range of Terminology Used in Animal-Assisted Interventions

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University of British Columbia, Kelowna, BC, Canada

Introduction: Animal-assisted interventions (AAIs) are growing in popularity and have demonstrated efficacy in a wide range of contexts supporting a wide range of clients. This diversification has seen researchers adopt a variety of terms and acronyms to describe their interventions. This plethora of terminology has created inconsistency and confusion both within, and surrounding, the field. The aim of this paper was twofold: 1) to provide a review of terminology and acronyms used in AAIs; and 2) to discuss the benefits and challenges to the current abundance of terminologies.

Methodology: A search of peer-reviewed articles related to human-animal interactions (HAIs) and published in English from 2013-2023 was conducted across four databases: Scopus, PsycInfo, Education Source, and ERIC. Following PRISMA best practices, all records were de-duplicated in Covidence, resulting in 8,659 records. These were screened at a title/abstract level by two independent reviewers for relevance to the AAI field. After screening, articles ($N = 1,934$) were then coded to track their terminology.

Main Findings: A total of 1,416 distinct terms were identified across 1,934 articles. The most prevalent terms identified were "animal-assisted therapy" (8.70%), "animal-assisted interventions" (7.45%), and "therapy dog" (5.06%). Analysis also revealed that 1,100 terms (77.7%) were used once between 2013 and 2023, and only 50 terms were used in literature more than ten times. Trends across 10 years of publications reveal that the average number of terms used per article remains stable but that specific terms have increased (e.g. "animal-assisted intervention") or decreased (e.g. "hippotherapy") in popularity.

Conclusion and Implications: Despite calls to improve the consistency of the language utilized by HAI researchers, there remains a surplus of terminologies. This holds implications for AAI researchers and individuals new to the field.

171 Exploring the Validity, Reliability, and Underlying Structure of the Human-Animal Interaction Scale (HAIS) for Use With Companion Rabbit Owners Using a Mixed Methods Survey

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Introduction: Little research exists characterizing owner-companion rabbit relationships and in a previous survey study, many rabbit owners failed to answer related questions. The HAIS was developed to study human-animal interactions with dogs, cats, horses, and small caged animals as a group. We explored use of the HAIS for accurately measuring owner-companion rabbit relationships.

Methodology: An online Qualtrics survey included questions about owner demographics and perceptions; rabbit demographics, husbandry, problem behaviour, veterinary care; time spent together; the 24-item HAIS; two other relationship scales (not presented here); and text boxes for rabbit owners' views on not applicable and potential additional scale items. Quantitative and qualitative data were analyzed using SAS Studio and NVivo, respectively.

Results: Participants (n=2093) were mostly female (82.5%); age 34.9 years with 5.0 years of rabbit experience (median), lived in Canada (35.9%) or the USA (41.6%), and had one rabbit (50.4%). Rabbits were mostly male (58.4%), desexed (77.5%), lived indoors (87.2%), and had out-of-enclosure time (93.9%). The HAIS (n=2025) had 3.2% missing data (0.2-0.6%/item). Cronbach's alpha was 0.86. The mean animal behaviour subscale score (12.6) mirrored previous results for dogs and cats (12.3) and not small, caged animals (5.9). In the PCA, all scale items loaded and 6 components had eigenvalues >1 (rabbit-accepted owner behaviours, "undesirable" interactions, rabbit-resisted owner behaviours, owner-pleasing rabbit behaviours, tricks/training, food). Popular not applicable items were attempting (8.2%)/ obeying (1.6%) tricks/training and aggression-by-owner (5.6%)/ aggression-by-rabbit (5.0%). Popular missing items were rabbit-specific behaviours (5.9%; e.g., nose nudges, flopping).

Principal conclusions and implications: The HAIS performed well with rabbits with little missing data, a high Cronbach's alpha, and clear identification of scale components. Thus,

the HAIS scale appears to be a reasonable tool for quantifying owner-companion rabbit interactions for rabbits with free-roam time possibly because interactions are more similar to dogs and cats than for caged rabbits.

Thematic Oral Presentation Session: Shelters, Relinquishment and Adoption

1:10-2:40pm Saturday, 29th June, 2024

Chair: Evangelos Diamantakos

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

10 The Effect of Extra Space and Gentling on Urine Output in Shelter Cats

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¹Virginia Tech, Blacksburg, VA, USA. ²Texas Tech University, Lubbock, TX, USA

Introduction. Monitoring and decreasing stress in shelter cats is essential for maintaining adequate welfare. Urine output, measured by litter clump weight, is a potential low-cost and objective indicator of shelter cat stress. Additionally, extra kennel space and daily gentling have been suggested as methods for decreasing stress (DeTar, Doyle, & O'Quin, 2022). The present study aimed to evaluate the impact of extra kennel space and gentling on urine output in shelter cats.

Methodology. The cats ($n = 59$), housed at two animal shelters in the United States, were randomly assigned to one of four conditions: Control, Portal, Gentling, and Portal and Gentling. Cats in the conditions with portals received additional kennel space via a portal connecting two kennels. Cats in the conditions with gentling received eight minutes of daily gentling. All cats were given a Cat Stress Score and had their litter clumps weighed daily for the duration of the five day study.

Main Results. Contrary to the hypothesis, experimental condition did not significantly predict litter clump weight nor Cat Stress Score. Litter clump weight was significantly predicted by entering the shelter as a stray ($F(1, 51.801) = 4.594, p = 0.037$) and shelter location ($F(1, 49.558) = 24.145, p < 0.001$). A lower Cat Stress Score was significantly related entering the shelter as a stray ($F(1, 56.355) = 13.878, p < 0.001$). Future studies should explore the specific shelter-related factors that impact urine output.

Principal Conclusions and Implications for Field. These findings suggest shelter-related factors might be greater predictors of urine output and stress in shelter cats than the addition of extra space and daily petting.

References: DeTar, L., Doyle, E., & O'Quin, J. (Eds.). (2022). The guidelines for standards of care in animal shelters. Second edition. *Journal of Shelter Medicine and Community Animal Health*. <https://doi.org/10.56771/asvguidelines.2022>

32 A Qualitative Exploration of Owner Experiences Following Dog Adoption
Bethany Moyer, Dr Helen Zulch, Dr Beth Ventura, Professor Oliver Burman
University of Lincoln, Lincoln, United Kingdom

Introduction. The adjustment period—wherein adopted animals transition to their new home—is a critical time for animal welfare and owner satisfaction, yet adoption and scientific literatures inconsistently estimate how long this period lasts in dogs. Therefore, this study sought to better characterize the adjustment period in relation to owner experience and canine welfare, as well as to clarify its duration.

Methodology. We used a qualitative approach to examine owner perceptions of their dog's adjustment period, both in duration and how it was expressed behaviourally. Twenty-seven interviews were conducted and analysed using thematic content analysis.

Main Results. Five main themes were described, focusing on adjustment period duration, behaviours indicative of adjustment, factors influencing adjustment, owner change in routine, and adjustment concerns. Just over half of participants perceived the adjustment period to last longer than 4 months. Behaviours used by owners to assess dog adjustment included: moderation of behavioural extremes (e.g. lethargy and restlessness), appearance of play behaviour, tail wagging, greeting their owner, and learning their owner's routine. Owners commonly reported that their dog's prior experiences and medical needs impacted the length of adjustment, that owners needed to adjust where they walked or how many visitors they had, and raised concerns about being the right fit for their dog.

Principal Conclusions. These findings suggest that future research needs to incorporate a longer timeframe to better understand how and when dogs adjust to a new home. This study has also revealed variation in how dogs behave during adjustment, so it is important that future research takes individual differences into account. As we develop a better understanding of how to characterize this adjustment period, adopters can be better prepared for the initial months of dog ownership, and interventions can be personalised in a way that improves both owner experience and dog welfare.

65 Insights and Implications From 28,424 Housing-Related Shelter Intake Records From 21 Animal Shelters in the U.S.

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³American Pets Alive!, Austin, TX, USA. ⁴Independent Researcher, Toronto, ON, Canada

Housing issues are thought to be a common reason for the shelter relinquishment of pets. This study aims to assess: (1) the share of intakes related to housing issues, (2) characteristics of pets relinquished due to housing issues, (3) longitudinal trends in housing intakes, and (4) the outcomes of the housing-relinquished animals.

From 2019–2023, Human Animal Support Services collected 1,021,204 intake records from 21 open intake shelters in the U.S. We use summary statistics and chi-squared tests to describe intakes related to housing, linear regression to assess longitudinal trends, and multivariate logistic regression to assess the association between housing intake subtype and odds of a live outcome.

Fourteen percent of all relinquishments were related to housing ($n=28,424$). Miscellaneous housing issues (54%) were the most common subtype. Pet-related restrictions (e.g., breed and size bans) made up 27% of housing intakes, landlord issues 8%, and loss of housing and unhoused owners 5% each. Large dogs comprised the highest proportion of intakes (20%), however, the weight distribution of the dogs was bimodal (DIP Test; $p<0.05$) with peaks at 11 and 55 lbs. Over time, intakes due to loss of home increased ($p<0.001$, $r^2=0.576$), while intakes due to pet restrictions ($p<0.01$, $r^2=0.098$) and landlord issues decreased ($p<0.05$, $r^2=0.077$). Ninety-five percent of housing-relinquished animals had a live outcome; however, unhoused owner intakes had the lowest live outcome odds (OR=0.66, $p<0.05$), accounting for species, size, and length of stay.

Our results suggest the share of relinquishments related to housing has stayed relatively steady over recent decades, but the impact of broader housing instability may be increasing. More work is needed to further standardize detailed information related to housing intakes; however, these results can inform programmatic and policy advocacy efforts in both housing and animal welfare.

75 “I Never Thought This Would Happen to Me”: Using Interviews to Understand How Companion Dog Owners Make Sense of Relinquishment

Dr Katrina E Holland, Dr Sarah K Weidman, Dr Ben Cooper, Dr Rachel A Casey, Professor Robert M Christley
Dogs Trust, London, United Kingdom

Introduction: In this study, we explored how companion dog owners made sense of their decision to relinquish their dog (or consider doing so).

Methodology: Twenty-six people were interviewed about their relinquishment experiences. Participants had either relinquished, considered relinquishing, or were considering relinquishing their dog at the time (in the UK or ROI). Interview transcripts were analysed using reflexive thematic analysis, with themes constructed to address research questions,

including “How do owners relinquishing/considering relinquishing their dog make sense of this experience?”

Main Findings: Various contributing factors to relinquishment were reported, though problematic dog behaviour was often cited. Respondents struggled to reconcile their actions or contemplations with their belief that relinquishment was something that *other* people did, not something *they* would ever do: a perception that participants were forced to reconsider. Thus, some owners indicated that relinquishment threatened their self-image. Respondents’ reasons for why they thought the risk of relinquishment was not pertinent to them included their dog-related knowledge and dog ownership experience. Consequently, their dog’s relinquishment was difficult for participants to make sense of and, towards this end, they endeavoured to find a reason/s or way to understand how they had ended up relinquishing, or considering relinquishing, their dog. This sometimes involved seeking answers via professionals and attributing blame (to the dog, other people, or themselves). As well as perceptions of self-identity, relinquishment was also thought to threaten owners’ social-image, as some described judgment from others and feared being blacklisted by rehoming organisations.

Principal Conclusions and Implications: Dog relinquishment is complex and multifaceted, but our analysis suggests that owners’ misconceptions about relinquishment, and who may or may not be at risk (i.e. not themselves), negatively impacted on their sense of self- and social-identity.

Thematic Oral Presentation Session: Equids

1:10–2:40pm Saturday, 29th June, 2024

Chair: Gemma Penhorwood

Session to feature oral presentations each 15–minutes in length followed by 5–minutes of Q&As.

59 Holistic Healing: The Therapeutic Interactions of Horses With Humans

Dr. Anne M. C. Barnfield, Dr. John B Mitchell

Brescia University College at Western University, London, Ontario, Canada

Introduction: Animal assisted psychotherapy is becoming a common form of therapy, however the recognition of its utility is fairly recent. Use of equines in therapy has been properly investigated only in even more recent time, leading to identification of specific beneficial effects of such therapy. There is now accumulating research into Equine Assisted Psychotherapy (EAP)¹, and three main theoretical perspectives – Social Interaction, Attachment/Bonding, and Natural Stimuli – have emerged in explanation of therapeutic effects of interactions with equines. This presentation will summarize the background to the current research situation, describe the three main theoretical perspectives regarding the

functioning of EAP, and report research into use of EAP for treatment of PTSD in military veterans and first responders. Inclusion of equines in therapy appears to confer particular advantages for healing as EAP incorporates bodily reactions with mental and spiritual in a truly holistic fashion.

Methodology and Findings: Previous publications were reviewed for information regarding factors associated with beneficial effects of EAP. For the specific research study participants completed a set of three tests (positive and negative affect, self-esteem, and PTSD checklist) at pre-EAT sessions, post-EAT sessions, and at follow-up, and were interviewed after the end of the EAP sessions and in a six-month follow-up. Improvements in test scores for pre- versus post-session measures were found, and positive experiences and outcomes reported in interviews. Participation in this type of therapy increased positive affect and decreased negative affect, self-esteem increased, and PTSD symptoms were reduced.

Conclusions: The client in EAP is engaged in a more complete form of therapy, being fully involved through interactive and more holistic processes. It appears that EAP is an effective, even preferable, therapy for PTSD and anxiety disorders in military veterans and likely for other similar populations such as first responder personnel.

61 Using Forum Theatre as a Tool to Promote Positive Donkey Welfare on Lamu Island, Kenya
Dr Emily Haddy¹, Dr Leanne Proops¹, Dr Cressida Bowyer¹, Professor Tamsin Bradley¹, Dr
Obadiah Sing'Oei²
¹University of Portsmouth, Portsmouth, United Kingdom. ²The Donkey Sanctuary, Lamu
Island, Kenya

Introduction

When targeting human behaviour change for animal welfare improvement, engaging with communities is vital. To maximise impact, welfare information needs to be culturally suitable and accessible. Equid-reliant communities can present challenges to traditionally utilised forms of engagement: they are typically resource poor, geographically isolated and disparities in literacy rates exist. Arts-based initiatives, non-written storytelling and performance may therefore be ideal mediums in which to convey positive welfare messages. In this study we evaluate the feasibility of using forum theatre to sensitise communities reliant on working donkeys to key welfare issues.

Methodology

We ran focus groups with donkey owners on Lamu Island, Kenya, to discuss the societal and welfare challenges they face. The themes from the focus groups were incorporated into a piece of interactive forum theatre performed by a local theatre group (LATA) in three

performances at a culture festival and in local villages. To evaluate the effectiveness of the theatre piece in engaging the audience and disseminating welfare information, post-performance questionnaire data was collected from 42 adult audience members. Quantitative data was collected using Likert scales and qualitative data via open questions.

Findings

Audience feedback was positive, with 93% of respondents strongly agreeing that they enjoyed the performance. Most respondents (>85%) strongly agreed that the performance raised their awareness of three key indicators: donkey health needs, donkey welfare needs and how much donkeys should carry. Qualitative feedback indicated that 'the importance of donkeys' and 'donkey care' were two important areas of learning.

Conclusion

Arts-based initiatives have been widely used for health messaging due to their general appeal, ability to break down barriers and engage large numbers of stakeholders, however, this approach remains rare in the animal welfare sector. The study highlights the potential value of participatory arts-based methods in promoting community engagement for positive change in animal welfare.

118 Exploring Equine Anticipation of Human Interventions

Assoc Prof Elke Hartmann¹, Dr Therese Rehn², Christa Wyss³, Dr Pedro Henrique Esteves Trindade⁴, Prof Natalie Waran⁵, Prof Linda Keeling¹

¹Department of Applied Animal Science and Welfare, Swedish University of Agricultural Sciences, Uppsala, Sweden. ²Department of Applied Animal Science and Welfare, Swedish University of Agricultural Sciences, Skara, Sweden. ³Agroscope, Swiss National Stud Farm SNSF, Avenches, Switzerland. ⁴North Carolina State University, Department of Population Health and Pathobiology, Raleigh, USA. ⁵Companion Animals New Zealand, Wellington, New Zealand

Introduction. To advance our understanding about how horses express emotions, we created anticipation to predictable human interventions known to elicit distinct reactions varying in valence (rewarding vs aversive) and arousal level (high vs low).

Methodology. Sixteen adult horses were trained using classical conditioning to associate four different object cues with four treatments (receiving food, being pinched, scratched, and sprayed). Once learning criteria were reached, horses were subjected to ten treatment trials, each consisting of five applications with delays of 5 and 10 seconds, respectively (anticipation phase). Gross behaviour and facial expression (EquiFACS) during these anticipation phases were recorded from videos. Initially, all variables (n=93) underwent

PCA, with loading values above/below 0.40/-0.40 used to assess associations with retained PCs. Only variables associated with the PC were considered in modeling (multilevel GLMs, Poisson distribution with Bonferroni's procedure to correct for multiple comparisons).

Main Results. Results (mean±SD) showed that moving at least one leg was observed more often in the negative treatments (spray: 20.8±09.8, pinch: 12.4±0.9 > scratch: 03.3±03.1, food: 02.0±03.7 $p<0.01$), while in the positive treatments, horses were more often close to the handler (food: 48.7±02.0, scratch: 42.9±16.8 > pinch: 34.1±16.1, spray: 16.9±14.1, $p<0.01$), held the head towards the cue area (food: 36.3±07.6, scratch: 32.7±16.0 > pinch: 23.7±12.3, spray: 23.6±14.3, $p<0.01$) and showed a stationary hanging tail more frequently (scratch: 37.1±22.2, food: 34.4±23.9 > pinch: 15.6±23.9, spray: 10.5±19.7, $p<0.05$). During low arousal treatments, horses kept their heads lower (pinch: 01.2±03.0, scratch: 01.1±02.5 ≥ spray: 01.0±02.1, food: 00.3±00.6, $p<0.05$).

Principal Conclusions. Overall, horses exhibited distinct behavioural reactions to events varying in valence and arousal, supporting that anticipatory behaviour could be a tool to assess the emotional state of an individual. Recognising how horses evaluate human interventions enables horse owners, trainers, and other professionals to intervene proactively, promoting positive experiences and ensuring horse welfare.

193 Affiliative Behavioral Expressions of Horses with Conspecifics and Humans: An Exploratory Study

Dr. Emily Kieson¹, Katie Stanley¹, Linda Gibertini², Dr. Helen Sabolek-Consiglio³, Lucy Rees⁴
¹Equine International, Boston, MA, USA. ²University of Edinburgh, Edinburgh, United Kingdom. ³Regis College, Weston, MA, USA. ⁴Pottokas en Piornal, Piornal, Spain

There is emerging research in pro-social affiliative behavioral expressions of horses within stable social structures and indications of preferences for specific individuals within social and family groups. Horses may express a variety of social bonding behaviors with proximity and time serving as the foundation for determining social bonding between two individuals or within family groups. Behaviors range from allogrooming to synchronized movement and resting or grazing in social proximity. Few studies have looked at how horses might express these same behaviors with humans to indicate preference for humans in the same way as they express these preferences for other horses. In this study, a qualitative behavior analysis was done on 55 feral horses in Spain with little human interaction and 13 free-living horses with limited interaction. All horses were observed and recorded via video over the course of two weeks to catalogue pro-social affiliative behaviors that were expressed within horse-horse interactions. All videos were coded by at least two researchers for behavioral indicators of affiliation with both horses and humans. All horses in these two groups demonstrated similar behavioral patterns indicating social affiliations and bonding preferences which served as foundation behaviors against which human interactions could be compared. Horses in the UK study demonstrated behaviors aligned with curiosity and

exploration with unfamiliar humans, but demonstrated affiliative behaviors with humans with whom they shared a history of positive interactions that included responding to equine communication signals of space, proximity, and desire for touch, but did not include any food rewards or operant conditioning. The preliminary results of the study indicate that horses use the same affiliative bonding behavioral signals with humans as with other horses and that these may align with specific interactive histories. This could help provide additional information for assessing equine well-being in both feral and domestic settings.

Thematic Oral Presentation Session: Welfare and Wellbeing

2:45-4:15pm Saturday, 29th June, 2024

Chair: Helen Tedds

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

28 Pawsome Travel Partners: The Social Behavior of Travelling With Companion Dogs
Lori S Hoy, Dr Brigitte Stangl, Prof Nigel Morgan
University of Surrey, Guildford, United Kingdom

Introduction:

Research suggests that spending time and participating in meaningful activities with companion animals can contribute to positive well-being. Travel with dogs is an increasingly popular activity for many. This paper examines what influences the motivation and behavioural tendencies to travel with dogs.

Methodology:

Informed by existing literature and the reflective-impulsive model (RIM) of social behaviour, a conceptual framework was formulated. This framework centres around four key social representations/perceptions: human-dog symbiotic relationship, dog well-being, information acquisition, and perceived risks. These elements collectively shape guardians' motivational orientation (intrinsic motivation) and influence their behavioural tendencies, encompassing intentions and behavioural schemas when it comes to travelling with their dogs.

To comprehensively investigate and validate the model, a mixed methods approach was employed. An online survey (N=611) was conducted to apply partial least squares structural equation modelling (PLS-SEM). Additionally, 34 semi-structured interviews were conducted to delve deeper into the social representations and experiences of guardians who travel with their dogs.

Main results/findings:

The quantitative findings indicate that among the factors considered, dog well-being beliefs exerted the strongest positive influence. Both dog well-being beliefs and information acquisition were identified as contributors to motivation and behavioural tendencies. Perceived risks exhibited a negative impact solely on behavioural schema. Moreover, the human–dog symbiotic relationship necessitated intrinsic motivation to shape behavioural patterns.

Qualitative insights from the study highlighted the real-life experiences of individuals travelling with their dogs. These narratives underscored the significance guardians place on the well-being and enjoyment of dogs in the travel experience. Challenges were noted, particularly in accessing dog-friendly travel information, and concerns regarding potential risks.

Principal conclusions and implications for the field:

Developing travel services and environments where dogs are welcomed, along with clear communication, will make it easier for dogs to be present and participate in travel experiences with people.

36 Veterinary Student Perceptions of the Relationship Between Their Well-Being and the Welfare of Animals Used for Teaching

Sherry Khoddami¹, Dr. Caroline Ritter¹, Dr. Michael W Brunt², Dr. Beth A Ventura³, Dr. Dave L Renaud², Dr. Kathryn L Proudfoot¹

¹University of Prince Edward Island, Charlottetown, PE, Canada. ²University of Guelph, Guelph, Ontario, Canada. ³University of Lincoln, Lincoln, United Kingdom

Introduction: Many veterinary colleges in North America use live animals for educating veterinary students, which can involve inflicting some level of distress, harm, or pain onto the animals. The use of animals may create a moral dilemma for veterinary students; however, little is known about how these experiences affect students. This study aimed to explore: 1) how the perceived quality of life of teaching animals affects veterinary students' learning and emotional well-being, and 2) how veterinary students perceive their own well-being affects teaching animals.

Methodology: We conducted 7 focus groups and 2 interviews with 4th-year veterinary students participating in rotations from 6 North American veterinary schools. Data were analyzed using template analysis and coded inductively.

Main results/findings: Students experienced positive emotions and better learning when teaching procedures benefited the animals (e.g. incorporating positive reinforcement to improve affective states) or aligned with students' values (e.g. neutering to help reduce pet populations). Volunteering for husbandry tasks (e.g. brushing horses or walking dogs) allowed students to cope with negative emotions and was perceived to provide enrichment

for animals. However, requiring students to care for teaching animals resulted in some students feeling overwhelmed, coupled with feelings of guilt if they could not provide animals with optimal care due to heavy workloads. During teaching procedures, students worried about their negative emotions affecting the animals, and experienced increased stress if animals showed signs of discomfort. Aggressive displays from teaching animals hindered learning, and occasionally instilled fear or apprehension towards certain species.

Principal conclusions and implications for the field: We conclude that compromises in the welfare of teaching animals is accompanied by reductions in veterinary student learning and well-being. These insights can help veterinary institutions understand students' perspectives on teaching animals, promote critical reflection on the curriculum, and implement strategies that promote the well-being of both.

64 Effect of "Resident Cats" on the Health and Social Network of Older Adults With Alzheimer's or Disabilities in Nursing Homes

MSc Héloïse Vesque-Annear¹, Dr Cédric Sueur², Dr Marine Grandgeorge³, Angélique Stachowiak⁴, Dr Marie Pelé¹

¹Catholic University of Lille, Lille, France. ²University of Strasbourg,, Strasbourg, France.

³University of Rennes, Rennes, France. ⁴Féron-Vrau Center, Lille, France

Introduction: Presence of pets has positive effects on the health of older adults, such as reducing feelings of loneliness and increasing social interactions. This study describes the effects of the permanent presence of cats on the health of older people and on their social network (number of personal relationships a person maintains). This pioneering study is based on an analysis of the measured, non-subjective social network of residents, caregivers and their cat(s) in the Alzheimer's (ADU) and Disability (DISU) units of a French nursing home.

Methodology: 53 residents (mean age = 79.6 years) and 36 caregivers living in one ADU (without cat), two ADU (with one cat) and DISU (with two cats) were observed using ethological methods over 180 hours. General activity, areas frequented by the cat, and social interactions of residents and caregivers with the cat were continuously recorded (focal sampling). Physical proximity (in contact, nearby, talking to, looking at) between residents, caregivers and the cat was recorded every 10 minutes to create social networks (300 records/individual).

Results: ADU cats spent more time in residents' bedrooms ($\chi^2 = 83.62$; $df = 3$; $p < 0.001$) than the living room ($\chi^2 = 43.88$; $df = 3$; $p < 0.001$) than cats in the DISU. Visualization of the social networks illustrated that cats were placed at network's periphery and interacted in a privileged way with certain residents. Finally, caregivers with a high degree of contact with the cat showed a greater number of social interactions in their unit ($R^2 = 0.41$; $F = 24.88$; $p = 0.001$).

Principal Conclusions and Implications for Field: Cats seem to adapt their behaviors to the disease context of the units by occupying the space differently and interact in a privileged way with certain residents and play the indirect role of "social lubricant" with caregivers.

143 Impact of the 'Cost-of Living Crisis' on Canine Welfare in a UK Cohort of Dogs Aged 36 Months

Dr Claire L Brandl, Dr Dan G O'Neill, Dr Zoe Belshaw², Dr Fiona C Dale¹, Dr Camilla L Pegram¹, Dr Rowena M A Packer¹

¹Royal Veterinary College, Hatfield, Herts, United Kingdom. ²EviVet Evidence-based Veterinary Consultancy, Nottingham, Notts, United Kingdom

Introduction:

The COVID-19 pandemic triggered surging puppy acquisitions internationally, labelled the 'Pandemic Puppy' phenomenon. Previous work identified substantial deterioration in puppy-purchasing behaviours, deficits in puppy socialisation and/or habituation experiences <16 weeks and high levels of owner-reported problem behaviours by 21-months of age in this uniquely vulnerable cohort. This risks future health and behaviour and increases relinquishment risk. Making matters worse, these pandemic puppies are now living through a "Cost-of-Living crisis" (COLC) for owners but the overall canine welfare impacts on these dogs are as yet unknown.

Methodology:

UK owners of dogs purchased aged <16 weeks between 23rd March–31st December 2020 ($n=2345$) within the Pandemic Puppies longitudinal study were invited to complete a new timepoint as their dogs reached 36-months old. This survey explored COLC impacts on canine welfare in addition to ongoing dog health, behaviour, and dog-owner relationships metrics.

Results:

From 543 responses, 67% of respondents still owning their dog reported at least one impact from the COLC on their dog's care. For issues that would previously have prompted veterinary contact, 14% owners no longer sought veterinary advice for health issues and 12% no longer sought veterinary advice for behavioural issues. Further changes included 24% of owners altering their dog's preventive parasite provision, 17% no longer having their dog professionally groomed, and 15% switching their dog to a cheaper diet.

Conclusions:

The COLC has substantially impacted upon UK dog owners and consequently canine welfare. Wider financial support and advice is urgently required for dog owners to protect future wellbeing of this unique Pandemic Puppy cohort as they age, e.g., pragmatic costing of veterinary products and/or services.

Unthemed Oral Presentation Session: Education Focus

2:45-4:15pm Saturday, 29th June, 2024

Chair: Linda Greening

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

2 Sheep Fatigue During Transport: Lost in Translation?

Ms Katerina (Katia) Colittil, Dr Fritha Langford²

¹The University of Edinburgh, Edinburgh, United Kingdom. ²Newcastle University, Newcastle upon Tyne, United Kingdom

Introduction: Although sheep are commonly transported long distances, and sheep welfare during transport is a topic of research and policy discussion, sheep fatigue during transport is under-researched. Insight into stakeholder perceptions on sheep fatigue (a novel area of research) could help improve sheep welfare .

Methodology: The qualitative study, focused on the EU and UK, aimed to critically analyse stakeholder views on sheep fatigue, including behavioural indications of fatigue, the interplay between fatigue and other factors, and identifying fatigue in commercial transport conditions. Eighteen experts from different stakeholder groups were interviewed. Reflexive thematic analysis (“RTA”) was applied to the interview data. RTA is a qualitative research method under which the researcher analyses the data to develop patterns of shared meaning called themes.

Main results/findings: The theme “See the whole animal” contrasts the existing limited guidance on identifying sheep fatigue, focused on isolated behaviours, where participants evocatively described *how* the animal would be behaving when fatigued/fresh. This theme advocates using qualitative behaviour analysis to capture the meaning of animal behaviour in a more complete way than other methods, to deepen our understanding of sheep fatigue. The theme “Let’s anthropomorphise it a little bit” underscores the pervasiveness of anthropomorphism and explains how it can be used intelligently to improve animal welfare. The theme “We think that they’re like we are and they’re not” cautions against transferring human experiences to sheep without considering sheep’s species-specific needs.

Principal conclusions and implications for the field: QBA should be used to better understand how the whole sheep experiences and expresses fatigue. Where no sufficient information is available about an issue, conscious and deliberate use of anthropomorphism can help draw intelligent parallels between humans and sheep to spur research into sheep fatigue. It can also influence public opinion and drive policy change to improve sheep welfare.

46 The Value of Teaching With Animals: A Qualitative Study on Teacher's Perspective on Their Dog-Assisted Educational Work

Dr. Mona Mombeck, Dr. Carina Caruso
Paderborn University, Paderborn, Germany

Introduction:

Findings on animal-assisted pedagogy reveal positive effects on components that are relevant for educational interactions, e.g. on social participation, well-being and working atmosphere. While the effects of animal-assisted pedagogy – more specifically school dogs – have been explored several times to date, studies on the challenges faced by those involved in this setting are a desideratum. Regarding teaching with school dogs, it should be noted that teachers' perceptions of the impact, opportunities and challenges of animal-assisted pedagogy have hardly been the subject of systematic studies to date. In order to benefit from the potential of animal-assisted work, its opportunities and limitations must be systematically examined and discussed with regard to all stakeholders involved (teachers, pupils, dogs, parents, school management).

Methodology:

We conducted a qualitative interview study to explore the opportunities and challenges of dog-assisted pedagogy. Our interviewees were 10 teachers who worked with school dogs at different types of schools in Germany. Data analysis was conducted using a qualitative content analysis, in which inductive categories were formed.

Main results/findings:

Teachers identify opportunities and challenges of animal-assisted pedagogy in schools for all stakeholder groups involved. First, the opportunities from the teacher's perspective are primarily located in the classroom atmosphere, the participation of students as well as relationship building among the child, dog, and teacher. Second, teachers interviewed suggested challenges, which are generally based on the institutional framework conditions, as well as risks for the dog. Third, according to the teachers' perceptions, animal-assisted pedagogy also has an impact on secondary stakeholders (parents, school management and staff) and thus has a multi-variable influence.

Principal conclusions and implications for the field:

Dog-assisted work in schools harbours development potential for all stakeholder groups involved (including the teacher and the animal). While the potential is predominant, adaptations and coping strategies are needed to meet challenges.

80 Co-Creating an Animal Welfare Education (AWE) Program for UK Primary Schools, to Ensure Its Suitability Within the PSHE Curriculum

Dr. Mirena Dimolareva¹, Dr Victoria L Brelsford¹, Dr Paulina A Wegrzynek², Prof. Jermaine Ravalier³

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Introduction: School and visiting pets have increased in popularity and pet ownership has risen, especially for families with children. This is not surprising considering child-pet interactions result in positive physiological and psychological outcomes. Children also form attachment to pets, resulting in a strong emotional human-animal bond. However, the curriculum does not include pet care and welfare, so children are unlikely to know how to behave around and care for animals. This can lead to accidental injury or cruelty, compromising animal welfare. To prevent this, we aim to develop an Animal Welfare Education (AWE) program, co-created with teachers and children to ensure it can be incorporated into the PSHE curriculum within UK primary schools.

Methodology: Phase 1: Co-creation of AWE. Educators (N=10) and children (N=12) took part in Focus Groups (FGs). Teachers discussed the elements of the program and the barriers which may prevent schools from implementing the AWE. Children shared their knowledge of pet care and welfare as well as their regular pet interactions. This informed the development of the AWE.

Results (Phase 1): Thematic Analysis of the FGs with teachers established the practical parameters of the AWE (e.g. length/ number of sessions; structure), whilst those with children established their current knowledge. Each AWE session will have a similar structure, mimicking the teaching within year 1 and 2, using age-appropriate teaching techniques. Basing the AWE on The Five Freedoms will compliment and extend children's learning. The overall structure will be presented.

Conclusions: Co-creating the AWE will ensure its suitability within the PSHE curriculum. Providing all necessary materials will allow an easy implementation, removing barriers for participation. In phase 2, a pilot RCT will assess the AWE's effectiveness. If it is effective, we will extend it to cover all years within primary schools and make it widely available.

130 Impact of The Interaction Between Test-Person, Dog and Support Person on Salivary Cortisol and Systolic Blood Pressure During Pain Trials in Healthy Individuals

Cand. Scient. Animal Science Lene H Fuglsang-Damgaard¹, Assistant Professor Sigrid J Lunde², Associate Professor Janne W Christensen¹, Professor Lene Vase², Professor Poul B Videbech³, Professor Nancy R Gee⁴, Senior Researcher Karen Thodberg¹

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Commonwealth University, Richmond, Virginia, USA

Introduction: Studies of how dogs influence physiological responses in humans in challenging situations have become increasingly popular, but the interaction with the dog is rarely quantified.

The present study investigated how the presence of a dog affected immediate physiological responses in healthy humans during pain infliction and the influence of interaction between participant, dog and support-person.

Methodology: Fifty-eight healthy participants (14 men, 44 women, age: 18-66 years) were randomly allocated to two groups; "with dog and support-person" (WD-S) or "support-person but no dog" (ND-S). The participants were exposed to two 5-min thermal heat pain trials in a balanced order with a 20-min break between trials. For both groups, one trial was a control with no dog or support-person present (WD-C and ND-C). Systolic blood pressure (SBP) and salivary cortisol were sampled at baseline as well as before and after each trial and the difference calculated. The physiological data were analysed using linear mixed effects models.

Main results: No difference was found between the four conditions (WD-S, WD-C, ND-S, ND-C) for cortisol or SBP. Surprisingly, cortisol decreased during each trial and more so ($p=0.008$) during the first heat pain trial (-190pg/mL) than the second (-117pg/mL). In both support conditions (WD-S, ND-S), cortisol decreased more, the more the support-person talked (-0.94pg/mL/sec , $p=0.04$). SBP increased with increased conversation (4.12mmHg/min , $p<0.01$) and the more the participant talked (4.77mmHg/min , $p<0.001$).

Looking at only WD-S, cortisol increased the more participants talked to a dog (2.47pg/mL/sec , $p=0.01$). SBP decreased with the duration the dog was oriented toward the participants (-105.86mmHg/min , $p<0.001$).

In conclusion, the presence of a dog during pain infliction did not alter the overall physiological response of cortisol or SBP compared to control situations without a dog. However, quantification of behaviour during human-animal studies is essential as it can explain the results within a treatment.

Thematic Oral Presentation Session: Veterinary

2:45-4:15pm Saturday, 29th June, 2024

Chair: Gemma Penhorwood

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

77 Chronic Pain Management: An Ethnographic Study of Veterinary Practice Exploring Horse Owners' and Veterinarians' Experiences

Dr Rebecca Smith, Dr Joanne Ireland, Professor Gina Pinchbeck, Professor Liz Perkins
University of Liverpool, Liverpool, United Kingdom

Introduction: Chronic orthopaedic pain is associated with musculoskeletal conditions such as osteoarthritis. Effective pain management is facilitated by a horse's owner and shaped by their access to, and the approaches of, veterinary care providers. This study explored leisure horse owners' and veterinarians' decision-making regarding chronic orthopaedic pain management.

Methodology: Data collection included 130 hours of ethnographic observation in three practices providing ambulatory veterinary services in Great Britain. Fieldnotes following observations of 37 consultations and conversations with 23 veterinarians, and semi-structured interviews with 10 veterinarians and 15 owners were undertaken. Data were analysed using a constructivist grounded theory approach.

Main results: For owners, the practicalities of managing a horse's comfort and what was considered to be required for their health was complex. Owners' pain-related concerns about their horse were not necessarily viewed as issues requiring veterinary involvement. Management adjustments or sources of advice could be sought before a veterinarian. A desire to understand causality, and a means of resolving it by accessing pain relief or investigations under veterinary control, drove advice-seeking. Past interactions with veterinarians generated expectations about what expertise they may offer, and influenced advice-seeking. Veterinarians talked about chronic pain in relation to intensity and duration, with differences between 'background' pain and 'flare-ups'. Identifying a horse in pain, and the significance of pain, was important. However, an individual horse's 'tolerance' to pain meant that veterinarians generally valued the owner's knowledge of the horse when doing so. Judgements about the value of an owner's knowledge, alongside the moralising of pain management, could affect veterinarian-owner relationships.

Principal conclusions and implications for the field: An owner's construction of their horse's needs and reasons to involve a veterinarian had individual meaning. Opportunity for owners to express their concerns, and discuss practical and ethical considerations about pain management approaches, is important and impacts veterinary involvement.

148 Uncovering the Complex Tapestry of Meaningful Work in Early-Career Veterinarians Across Canada

Emily A Morabito¹, Dr. Andria Jones², Dr. Tipsarp Kittisiam², Dr. Adam Stacey³, Dr. John VanLeeuwen¹, Dr. Heather Gunn McQuillan¹, Dr. Caroline Ritter¹
¹University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada. ²University of Guelph, Guelph, Ontario, Canada. ³University of Saskatchewan, Saskatoon, Saskatchewan, Canada

Veterinarians are confronted with various mental well-being challenges, including increased stress, elevated risk of burnout, and increased risk of empathy fatigue compared to the general population. These challenges may lead to reduced concentration, impaired decision-making, and compromised patient care. Positive psychology has the potential to improve veterinarians' mental well-being. From a positive psychology perspective, meaningful work contributes to overall life satisfaction and aligns with established happiness research, including theories related to psychological well-being. However, the perceptions and complexities of meaningful work in veterinary medicine remain underexplored. Therefore, this research aimed to 1) explore how early-career veterinarians perceive meaningful work and 2) investigate the complexities of meaningful work experienced by early-career veterinarians during the transition from student to practitioner. We applied a phenomenological qualitative approach to understanding participants' lived experiences as early-career veterinarians. Individual semi-structured interviews were conducted with 21 veterinarians who graduated between 2016 to 2023 from a Canadian veterinary college. Participants practiced in Canada in small animal practices, emergency clinics, mixed practices, or large animal practices. Interviews were transcribed verbatim, and transcripts were analyzed using template thematic analysis. The data revealed participants had limited prior reflection on meaningful work. However, during discussions, participants strongly tied meaningful work to working with animals, encompassing fear-free handling, alleviating animal suffering, and advocating for improved welfare. Meaningful work also stemmed from being able to practice various forms of communication, including interactions with colleagues, non-verbal communication with animals, and assisting owners in communicating with and understanding their animals. Notably, meaningful work was neither impermeable nor fixed, highlighting meaningful work's dynamic and adaptable nature through the transition from student to practitioner. These results can inform interventions and educational programs and help foster deeper connections with meaningful work to improve well-being and potentially reduce attrition in the veterinary profession.

199 Veterinary Mental Health: How Can We Build Resilience and Improve the Well-being of Staff

Mary Rautkis¹, Aviva Vincent², Laurie Maxwell³, Elizabeth Kudsen³
¹University of Pittsburgh, Pittsburgh, PA, USA. ²Cleveland State University. ³MedVet, USA

Introduction

People entering the field of veterinary medicine are high achievers and may love and may prefer working with animals to people.¹ In the workplace they encounter moral dilemmas, and experience grief, loss and burnout, isolation and trauma. Estimates of depression, suicide ideation and suicide risks suggest that Veterinarians and staff are at higher risk than the general population.²

Methodology

An on-line survey was distributed to social workers working in veterinary practices, hospitals, and shelters in North America. This convenience sample resulted in 75 usable surveys from clinics and 20 from shelters. Bivariate and multivariate analysis were conducted. This study was supported in-kind by MedVet and the International Association for Veterinary Social Workers.

Findings

The pet owners and the staff and veterinarians are the two groups that mental health workers in animal medical settings focus their interventions. The work with owners is primarily assisting with quality of pet life decisions and grief, in shelters it is securing basic needs for animals. Interventions with staff are debriefing with the team members, particularly when there are difficult cases and choices to be made about animals. Approximately a third of the respondents had to intervene with veterinary team members who expressed suicidal ideation. Most of the work is one-on-one although in some larger practices there are structured psychoeducational sessions. Building resilience for the humans means changing organizational structures to support humans as well as the animals, normalizing feelings of grief, de-stigmatizing the need for help and support and recognizing the moral burdens shouldered by these professionals.

1 Stoewen DL. Suicide in veterinary medicine: let's talk about it. *Can Vet J.* 2015 Jan;56(1):89-92. PMID: 25565722; PMCID: PMC4266064.

2 da Silva CR, Gomes AAD, Dos Santos-Doni TR, Antonelli AC, Vieira RFDC, da Silva ARS. Suicide in veterinary medicine: A literature review. *Vet World.* 2023 Jun;16(6):1266-1276. doi: 10.14202/vetworld.2023.1266-1276. Epub 2023 Jun 8. PMID: 37577194; PMCID: PMC10421543

34 Social and Ecological Predictors of Access to Multispecies Healthcare Across the United States

Dr. Jennifer W. Applebaum¹, Courtney Dunn², Kaylinn Escobar¹, Erin K. King³, Dr. Shelby E. McDonald⁴, Dr. Rosalie Corona², Dr. Megan K. Mueller³

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Healthcare access for people and pets is often conceptualized as distance to the closest provider. However, healthcare access should include several factors in addition to geography. We aimed to assess which social and ecological factors predict access to both human and veterinary healthcare within multispecies households.

We analyzed a subset of pet owners from a representative dataset of U.S. adults (n=750), using weighted ordinal logistic regression models to assess the effects of discrimination, race, Hispanic ethnicity, age, gender, sexual orientation, income, education, and home and community-based health threats (lead, mold, crime) on access to human healthcare and veterinary care.

In the past year, most participants (81%) and their pets (68%) had received healthcare. Most received good quality care (89%), and 86% could easily access veterinary care. Older age, higher income, and higher education predicted greater veterinary care access, whereas Hispanic ethnicity, more discrimination, and home and community health threats predicted poorer access (OR range: 0.53-1.28, $p < 0.05$). Higher income and education predicted more frequent veterinary visits, while more home and community health threats predicted fewer (OR range: 0.77-1.15, $p < 0.01$). Older age, higher education, and female gender predicted less time since one's last doctor's visit, and Black or other race (American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, and multiracial), and Hispanic ethnicity predicted more time (OR range: 0.52-1.68, $p < 0.05$). Black race and older age predicted greater perceived healthcare quality, and greater home and community health threats predicted poorer quality (OR range: 0.79-2.68, $p < 0.05$).

Socioeconomic factors and ecological health threats consistently predicted access to both human and veterinary healthcare. Race and gender predicted human healthcare access, while income and discrimination predicted veterinary care access. Expanding both human and veterinary healthcare access is a major priority for multispecies health equity; researchers and practitioners should address social and ecological factors to remove healthcare barriers for multispecies families.

Thematic Oral Presentation Session: Canine Ownership Culture

2:45-4:15pm Saturday, 29th June, 2024

Chair: Ivana Schork

Session to feature oral presentations each 15-minutes in length followed by 5-minutes of Q&As.

89 Unleashing Perspectives: How Laymen and Dog Professionals Define Canine Sociability to People

Dr. Joke Monteny, Dr. Christel P.H. Moons, Dr. Eline Wydooghe
VIVES University College of Applied Sciences, Roeselare, Belgium

Introduction

Sociability, the inclination to seek companionship, is assumed in domestic dogs due to their history and role in society. However, prevalence rates of behaviour problems and bite incidents challenge this assumption, highlighting the need for a clearer understanding. Furthermore, societal discussions on human-dog relationship problems can be challenging, partly due to diverse operationalizations of the term "sociable dog". The purpose of this study was to examine how "a sociable dog" is defined by lay people and dog professionals, using the region of Flanders (Belgium) as a case study.

Methodology

An online survey inquired about respondents' definitions of a sociable dog in terms of sociability to humans (open question), along with gender, background (professional involvement with dogs), and frequency of contact with dogs (closed questions). The open question was analysed using thematic analysis combined with frequency distribution calculations, whereas the closed questions were analysed using the latter. A chi-square test ($\alpha < 0.05$) explored the association between respondents' professional involvement with dogs and the categories mentioned in defining sociable dogs.

Results

Out of 205 respondents, 83.9% were women, with 76.0% having frequent dog contact and 62.9% lacking professional involvement. Twenty-seven categories emerged for a sociable dog. Three categories were mentioned most as characteristics that had to be present: Interaction initiated by the dog (32.7%) Greeting/approaching (24.4%) and Being calm (20.0%). Conversely, the top three of absent characteristics were: Being aggressive (27.3%), Being fearful or anxious (14.1%), and Barking (10.2%). There was no statistically significant association between respondents working professionally with dogs and the prevalence of the top six mentioned categories ($p > 0.05$).

Conclusion

The study reveals diverse definitions of "a sociable dog" compared to the definition used in literature, irrespective of professional experience. Emphasizing a clear definition is crucial in discussions that seek to increase the population of sociable dogs.

154 Using a Systems Approach to Compare Veterinary and Dog Owner Perceptions of Bacterial Risk Associated With Raw Meat Diets

Dr Tamzin Furtado, Dr Genever Morgan, Professor Gina Pinchbeck, Professor Nicola Williams
University of Liverpool, Liverpool, United Kingdom

Aims:

Raw meat diets (RMDs) for companion animals are becoming increasingly popular among dog owners, and are perceived by owners to improve dog health and wellbeing. However, many among the veterinary community are concerned about issues such as bacterial load, and how this could contribute to the global threat of antimicrobial resistance. This study explored owner and veterinary conceptualisation of risks and benefits of RMDs, using a qualitative approach with systems mapping.

Methods:

Focus groups were conducted with vets and vet nurses (13) and dog owners (7); groups included initial discussion, a short presentation about bacterial load in RMD, and subsequent discussion about how this information might impact respondents' perception of RMDs. A thematic analysis was used to explore data, and systems map created to explore the processes, stakeholders, and beliefs.

Results:

Both veterinary professionals and owners were aware of potential bacterial risks from RMDs prior to the presentation, yet their construction of the risks of these bacteria were different. Veterinary professionals were concerned by the production process of meat and contamination that could occur during slaughter and processing. Contrastingly, owners perceived bacteria a normal part of life, and placed trust in the companies producing raw meat diets to mitigate risk. Owners focussed on what they perceived to be visible benefits of RMDs for dog health, where veterinary professionals focussed on less visible risks. Systems mapping visually illustrates how owners and veterinary professionals are focussing on different areas of the production system, and how owners place greater trust in production company processes and dog immune system.

Conclusions:

Veterinarians and dog owners conceptualise the role of bacteria differently in relation to RMDs, and hence conversations about risk of bacteria may be ineffective. Understanding eachothers' perceptions will facilitate communication about risk in the veterinary, dog owning, and dog food manufacturing communities.

150 Looking for a Reaction: Do Children Enjoy Certain Aggressive Behavioural Responses From Domestic Dogs?

Ms Anna Baatz, Prof Robert Young, Dr Gemma Taylor
University of Salford, Salford, United Kingdom

The field of paediatric dog bite prevention research is gaining prominence, particularly in light of recent media attention (Tulloch et al 2023). However, the majority of literature predominantly stems from ethological or epidemiological perspectives, often overlooking exploration from human developmental psychological theory.

Placing front and centre the mind of a child, this presentation introduces a unique angle by examining the possibility that children might derive positive emotions (surprise, joy, amusement etc) from aggressive behavioural responses exhibited by domestic dogs, such as may manifest because of a child 'teasing' a dog. Teasing behaviour, defined as a relational paradigm of communication where a reciprocal partner completes its meaning through a reaction that brings pleasure to the initiator, has been observed in children as early as infancy (Reddy & Mireault, 2015).

Utilising a Dog Assisted Virtual Environment (Oxley et al 2022), along with heart rate monitoring and facial emotion recognition AI software, the lab based project aims to investigate the psycho-physiological arousal and valence responses of 30 children aged 7-11 during specific simulated interactions with a dog, including scenarios with aggressive dog responses.

While the study does not directly examine the phenomenon of child teasing in the virtual paradigm, and acknowledging the challenge of a rigorous theoretical definition due to a lack of scientific inquiry, it does propose to shed light on an underexplored behavioural motivation within the context of child-dog interaction. It is posited this may lend deeper understanding to efforts to prevent paediatric dog bites and promote more symbiotic child dog dyad relationships.

Symposium: Technology in Animal-Assisted Interventions: Opportunities and Drawbacks for Practice and Research

2:45-4:15pm Friday, 28th June, 2024

The symposium features a 10-minute introduction, three 15-minute oral presentations, a 10-minute discussant presentation, and then followed by Q&As.

67 Technology in Animal-Assisted Interventions: Opportunities and Drawbacks for Practice and Research

Dr. Steffie Van Der Steen

University of Groningen, Groningen, Netherlands

Symposium Discussant

Prof. Emeritus M.J. Enders-Slegers, Open University of The Netherlands, Heerlen, The Netherlands, marie-jose.enders@ou.nl

The power of animal-assisted interventions (AAI) lies in the unique contact between humans and animals. People can benefit greatly from this powerful contact and researchers have focused on its effects on various target groups, including children with developmental problems. Yet the growing demand for AAI also raises ethical questions, for instance about the work that animals perform within these interventions, how often animals can be employed, and whether we pay sufficient attention to their welfare.

In an increasingly digital world, this brings up the question of whether we can use technology in a smart way to relieve the burden on animals, strengthen their positive influence, or maintain their influence for a longer period of time. However, this is in a sense contradictory, because doesn't a large part of the effect of AAI come from making connections with another natural life form?

In this symposium we therefore discuss the opportunities and challenges of technology in AAI, and focus on the (sometimes contradictory) findings of three studies. In the first presentation, Ine Declercq discusses how AAI practitioners feel about electronic and telecommunication technologies to substitute part of their interventions. Although they saw useful aspects, practitioners emphasised the drawbacks of technology, stating that active engagement in natural settings is the key factor contributing to clients' wellbeing. This seems in contrast with the study of Steffie Van Der Steen, in which a multilevel analysis revealed only a few group-based differences between a dog-assisted therapy and a robot dog condition for children with Down syndrome or autism spectrum disorder, although this differed on a more individual level. Lastly, the study of Richard Griffioen shows how different virtual AAI alternatives yielded similar effects in terms of stress reduction and affect in a sample with students suffering from exam stress.

At the end of the session we will take time to further discuss the results of these studies and their interpretations. Marie-Jose Enders-Slegers, expert in the field of animal welfare, leads the discussion in which we investigate when technology makes sense in the context of AAI and when it does not.

Symposium Presenters

Presenter 1: Ine Declercq, MSc., Radboud University Nijmegen (Netherlands), Free University Brussels (Belgium), and Open University Heerlen (Netherlands), ine.declercq@ou.nl

Presenter 2: Dr. Richard Griffioen, Aeres University of Applied Sciences, Dronten, the Netherlands, r.griffioen@aeres.nl

Presenter 3 and Chair: Dr. Steffie van der Steen, University of Groningen, Groningen, the Netherlands, s.van.der.steen@rug.nl

Presenter 1 Abstract

Telehealth in Nature and Animal-Assisted Intervention Strategies: Defining the Potentials and Limitations in Practice

Declercq, I.J.N., Leontjevas, R., Keizers, S., Janssens, M., Reniers, P.W.A., Gerritsen, D.L., & Hediger, K.

Introduction: Telehealth (health-related services provided via electronic and telecommunication technologies) has played an increasingly prominent role in health care. In the context of the COVID-19 pandemic, the global significance of telehealth has been underscored. However, there is a lack of insight into the extent to which, and for which clients, telehealth can be considered an appropriate solution in NATure and Animal-assisted Intervention Strategies (NATAIS). The aim of this study was to capture practitioners' experiences with telehealth, and to explore the barriers and facilitators to the use of telehealth in NATAIS.

Methodology: Impressions of practitioners' use of telehealth was obtained through an online questionnaire. To contextualize the questionnaire results, additional in-depth interviews were conducted.

Results: Nine participants completed the questionnaire, and eight in-depth interviews were conducted. Professionals in NATAIS had limited telehealth experience which was, together with technical challenges (e.g., privacy laws), considered as the main obstacle. Practitioners did not perceive technology as a proper substitute for the in-person sensory experiences in NATAIS. Interviews revealed that these sensory experiences were considered essential for promoting relaxation and encouraging clients to step out of their comfort zones. Practitioners also emphasised that active engagement in natural settings enables clients to develop a deeper understanding, extending beyond the merely cognitive perception, of the relationship between themselves and their environment, thereby contributing to their overall well-being. However, practitioners recognised the potential of

telehealth to enhance animal welfare and acknowledged its added value, e.g., in situations where immediate in-person interaction is impractical.

Conclusions and Implications: While practitioners recognised the potential of telehealth as a supplementary tool and its benefits in enhancing animal welfare, the findings underscore the importance of in-person sensory experiences in NATAIS. The limited experience, together with technical challenges, indicates the need for further exploration and adaptation of telehealth in NATAIS.

Presenter 2 Abstract

Cultivating Calm: Exploring the Efficacy of Virtual Animal Assisted Interventions in Alleviating Stress Perception in Students

Griffioen, R., Haven-Pross, S., & Poel, K.

Introduction: Research shows that half of students in the Netherlands experience stress during their studies, resulting in an increased demand for stress reduction programs, which often involve animals. While these programs show promise, challenges in animal welfare, accessibility, and costs have created a need for alternatives. This study examines the impact of virtual animal-assisted interventions on the perceived stress and affective state of vocational and higher education students.

Methodology: Students ($n = 90$) following vocational or higher education at Aeres University of Applied Sciences participated in this study one week before final exams. Participants were randomly assigned to three groups and underwent different 10-minute interventions: swimming among dolphins in virtual reality (VR), interactive VR sessions involving petting and feeding a rabbit, or watching a nature documentary. The Perceived Stress Scale (PSS) was used as a baseline measurement. Heart rate monitors measured both heart rate (HR) and heart rate variability (HRV). Participants completed the Visual Analog Scale (VAS) for stress and the Positive and Negative Affect Schedule (PANAS) before and after each session.

Results: The first results, based on a subsample of 10 participants and analysed using a Kruskal-Wallis test, revealed no significant differences in VAS, and positive and negative affect scores between the different interventions (VAS: $H(2) = 2.41, p = 0.3$; Positive Affect: $H(2) = 0.72, p = 0.7$; Negative Affect: $H(2) = 3.61, p = 0.17$), suggesting that the three virtual animal-assisted interventions did not yield a different stress reduction or affect response in students.

Conclusions and Implications: Our larger sample analysis provides definitive results regarding students' stress reduction and affect responses across the virtual animal-assisted interventions. We discuss how these results can help practitioners who are struggling with workload or who are concerned about animal welfare to make a well-informed choice between the virtual alternatives.

Presenter 3 Abstract

Comparing the Effects of Dog-Assisted and Robot Dog-Assisted Therapy for Children with Autism Spectrum Disorder or Down Syndrome

Van Der Steen, S.

Introduction: Animal-assisted therapy (AAT) is a popular intervention to improve the social-emotional functioning of children with developmental problems, such as Down syndrome (DS) or autism spectrum disorder (ASD). Research into AAT has largely used no-treatment control groups, or treatment as usual. This could possibly inflate the effect of AAT. This study used a robot dog condition as a comparison group to overcome this.

Methodology: 65 children with ASD or DS (Mage 11.24; SD 2.29) were randomly assigned to 5 sessions dog-assisted therapy ($n = 24$), a similar therapy with a robot dog ($n = 21$), or a control group ($n = 20$). We measured children's social behaviours before and after the intervention/waiting period, and after 4-6 weeks (follow-up). Questionnaire items were based on five social constructs: Attunement, social cognition, motivation, and confidence, and emotion regulation. During therapy, the children playfully practiced their social skills. Therapists followed a predetermined protocol to ensure comparable therapy sessions.

Results: We carried out multilevel models with repeated measures nested in participants for each questionnaire scale. On an individual level, we computed the reliable change index (RCI). Overall, mean social skills increased from pretest to posttest, for all conditions. Children who received dog-assisted therapy improved more on the attunement scale compared to children in the control condition ($p < .05$). Concerning the RCI for that scale, children in the dog condition (MRCI = 0.55) showed a significantly higher reliable change as compared to the robot (MRCI = -0.03; $d = .36$) and the control (MRCI = -0.19; $d = .33$) condition. No significant differences were found for the other scales.

Conclusions and Implications: Interestingly, this RCT shows that, contrary to our expectations, the social skills of some children seemed to improve after therapy with a robot dog, while other children benefitted more from a real dog.

Emerging Topic Oral Presentations: Application of Animals for Mental Health and Wellbeing

11:15am-12:10pm Saturday, 29th June, 2024

Chair: Darcy Bornemann

Session to feature oral presentations each 5-minutes in length followed by a group Q&A at the end.

84 Human-Pet Attachment and Mental Health in Young Adulthood

Miss An T Le, Dr Roxanne Hawkins, Dr Steve Loughnan

University of Edinburgh, Edinburgh, United Kingdom

Problem Statement

Mental health challenges, particularly anxiety and depression, are prevalent in young adulthood and can result in significant adverse life outcomes. It is therefore important to identify self-management strategies to mitigate ill effects and enhance well-being. Many healthcare practitioners recommend pets for improving mental health. However, recent empirical evidence suggests that the relationship between pet ownership and psychological health is diverse and complex. While pets can play a role in self-management of mental health, the efficacy of their role may depend on numerous factors. This study aims to clarify the complexities of pet ownership and psychological well-being in young adults by exploring important yet understudied variables: mental health symptoms, human-pet attachment, social support, and human-pet compatibility.

Research Questions

1. How do the severity and type of mental health symptoms impact human-pet attachment?
2. Does a secure human-pet attachment contribute to greater psychological well-being?
3. Are the benefits of having a secure human-pet attachment greater for individuals with lower social support?
4. How does human-pet compatibility influence human-pet attachment and its relationship with psychological well-being?

Methodology

Using secondary data from a cross-sectional online survey targeting young adults (N = 600), the study will analyze measures including: the Pet Anxiety and Avoidance scale, Human-Dog Behavioral and Emotional Compatibility, Human-Cat Behavioral and Emotional

Compatibility, Multidimensional Scale of Perceived Social Support, direct assessments of pet quality of life, Psychological General Well-Being Index, Generalized Anxiety Disorder Questionnaire, and PHQ depression module. We plan to examine the data through path analysis.

Anticipated Challenges

A key challenge is that human-pet attachment measures do not align with psychological attachment theory, and therefore, may not be capturing an attachment relationship. Additionally, reliance on self-reported measures introduces inherent subjectivity. Finally, cross-sectional data limits our ability to infer causality and directionality.

Discussion Points

- Challenges of measuring human-pet attachment
- Feedback on proposed pathway model
- Implications for mental health interventions and policy

101 Could Our Emotional Bond With Our Pets Impact Their Health?

Dre Manon Ouellette

none, Ste-adèle, Quebec, Canada

In my veterinary practice, I have frequently encountered owners and their animals suffering from the same disease, with seasonal allergies being one of the most common problems.

Recent research has shown that owners can transmit their stress to their animals, and a new approach to allergies suggests that not only the allergen itself can trigger an allergy but also the *souvenir* of stressful contact with this specific allergen. In my experience, owners can resolve their allergy by understanding the underlying mechanism and uncovering the specific stressful event linked to their allergy from their unconscious mind.

I also experienced that breaking the unconscious bond between both parties was sufficient for the animal to heal.

Indeed, by transferring the animal to a new environment where he could create new links with a different and healthy person, the animal recovers from his disease.

This study aims to show that when a strong emotional link in the human-animal dyad is present, the animal also spontaneously recovers once the owner recovers health.

2-Methodology: Through a conversation, uncovering the stressful event that triggered the owner's allergy and watching the effect on the participant and his animal.

3-Challenge: Not finding the unconscious link in the owner's life.

Being faced with the possible fact that both the animal and the owner have their specific triggering event.

Proving the theory to be wrong.

4-Discuss the extent of this emotional link. The necessary conditions to impact the animal's health.

194 Paws for Professional Development: Crafting a Post-Master's Certificate Program in Animal-Assisted Interventions for Mental Health Professionals

Dr Katherine Compitus

New York University, New York, NY, USA

This presentation explores the development of a post-master's certificate program in animal-assisted intervention (AAI) for mental health professionals, aimed at addressing the growing demand for specialized training in this field.

The increasing recognition of the therapeutic benefits of AAI in mental health treatment has highlighted the need for qualified professionals with specialized training in this area. This abstract seeks to address the following research questions: What are the essential components of a comprehensive AAI training program for mental health professionals? How can such a program effectively prepare participants to integrate AAI into their clinical practice?

The proposed methodology involves a multi-phase approach, beginning with a comprehensive review of existing literature, guidelines, and certification standards related to AAI in mental health settings. This will be followed by consultations with experts in the fields of animal-assisted therapy, mental health education, and professional development. A focus group will be conducted with practicing mental health professionals to assess their training needs and preferences. The program itself will be assessed by administering a survey before and after the course, to determine the level of acquired knowledge. The program will also consider the rate of graduates who pass the certification exam of the Association of Animal-Assisted Intervention Professionals. The program will follow up with graduates one year after completing the program to determine if they have been able to implement the AAI model in their work with clients.

Anticipated challenges include logistical considerations such as developing a curriculum that balances theoretical knowledge with hands-on training, securing qualified instructors with expertise in both mental health and AAI, and navigating regulatory requirements for certification and licensure. Additionally, concerns may arise regarding the ethical

implications of incorporating animals into therapeutic practice, as well as the potential for cultural differences in attitudes toward AAI.

Discussion points will center on the potential impact of a post-master's certificate program in AAI on the quality of mental health care delivery, including its ability to enhance client engagement, treatment outcomes, and clinician well-being. Consideration will also be given to the broader implications of integrating AAI into mental health practice, including the need for ongoing research, advocacy, and professional collaboration in this evolving field.

66 Can Foster Caregiving Promote Human Mental Health?

Dr Lauren Powell, Roxy Ackerman, Dr James Serpell, Dr Chelsea L Reinhard, Dr Brittany Watson

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Introduction: Foster care programs are an important tool for animal shelters to support their life-saving efforts and improve animal welfare. A preliminary body of evidence suggests foster caregiving may also promote human health. The goal of this study was to investigate the impact of providing foster care to a shelter animal on caregivers' mood and quality of life. We also explored caregivers' experiences of grief post-foster.

Methodology: Between March 2022 and May 2023, 131 foster caregivers from five animal shelters in the United States completed an online survey before, during and after caring for a foster animal/s in their home. We used linear mixed effect models to examine changes in positive and negative affect over time, and Mann Whitey U tests to consider differences in quality of life between dog and cat caregivers.

Main results/findings: Positive affect decreased significantly from baseline to post-foster ($F=5.71$, $p<0.01$), particularly among dog caregivers ($F=6.17$, $p<0.01$). Negative affect remained unchanged ($F=0.47$, $p=0.63$). Foster caregivers reported their foster animal provided companionship, affection and emotional support, with dog foster caregivers reporting significantly higher emotional ($U=313.50$, $p<0.01$) and social/physical quality of life ($t=4.42$, $p<0.01$) than cat caregivers. Most caregivers experienced ambiguous grief, with 92% agreeing they often wondered if their foster animal was doing well. Half the sample experienced anticipatory grief, meaning they had to mentally prepare for the departure of the animal (50%), but a minority felt lonely (18%) or had periods of tearfulness (30%) since their foster animal left.

Principle conclusions and implications for the field: Our findings suggest fostering may serve as a One Health intervention to offer companionship, affection and emotional support to human caregivers. However, these benefits did not translate to improvements in

caregiver mental wellbeing, so caution should be used when considering foster caregiving as a potential mental health promotion tool.

100 Prevalence and Characteristics of Fetching Behavior in Owned Domestic Cats (*Felis Catus*)

Dr. James A Serpell¹, Dr. Mikel M Delgado², Dr. Judith L Stella²

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Introduction: Although common in dogs, fetching behavior is not considered typical of domestic cats. However, a recent survey of >1,000 owners of cats who fetch suggests the behavior is widespread and spontaneous [1]. We investigated the actual frequency and correlates of owner-reported object fetching and carrying in companion cats, and consider the possible evolutionary origins of this behavior.

Methods: Data from an online survey of cat behavior (N = 8,224) (Fe-BARQ; <https://vetapps.vet.upenn.edu/febarq/>) were used for the study. The Fe-BARQ includes three Likert scales relevant to fetching/carrying objects in the mouth. Cats were classified as "non-fetchers/carriers" if they "never" or "seldom" fetched/carried objects, and as "fetchers/carriers" if they "sometimes," "usually" or "always" fetched/carried objects. Backwards stepwise regression models were used to examine which demographic factors predicted fetching/carrying behavior, and chi-square tests were used to explore the relationship between breed and fetching/carrying.

Results: Fetching and carrying behavior were highly correlated ($r = 0.51$). Fetching was more common in cats than previously reported (40.9%), though less common than carrying (57.9%). Indoor cats and cats who lived in dog-free homes were more likely to fetch. Females, older cats, and cats with health problems were less likely to fetch ($\chi^2(5) = 432.68$, $p < 0.001$). Oriental shorthaired cats were more likely than expected to fetch, while longhaired cats were less likely to ($\chi^2(24)=89.44$, $p < 0.001$).

Conclusions: Fetching behavior is common in cats and influenced by demographic factors such as age, sex, and health status. The increased frequency of fetching in some breeds suggests a genetic basis for the behavior. The prevalence of fetching in the pet cats implies that cats who engage their owners in interactive games of this type may be at a selective advantage over their less interactive peers.

[1] Forman et al., 2023. *Sci. Rep.* <https://www.nature.com/articles/s41598-023-47409-w>

Emerging Topic Oral Presentations: Animal Communication and Human Experience

11:15am-12:10pm Saturday, 29th June, 2024

Chair: Ben Klinkenberg

Session to feature oral presentations each 5-minutes in length followed by a group Q&A at the end.

169 The Utilisation of Police Officers as Court Facility Dog Handlers

Miss Phoebe Mayhew

Hartpury University, Gloucester, United Kingdom

Introduction. This research aims to evaluate the possible utilisation of police officers as court facility dog handlers as a sustainable yet innovative alternative to current court facility dog handlers using a mixed methods questionnaire given to UK police officers.

Proposed Methodology. A minimum sample of 30 serving police officers within UK police forces will be required, with a mixed-method survey being used. The survey will utilise unipolar Likert scale questions to gather quantitative data alongside open-ended questions for gathering qualitative data. Quantitative data will be analysed using ordinal data analysis with qualitative data being analysed using conceptual content analysis. Analysed data will then be formatted into graphs and described in detail to further explain the findings and aid in the formulation of future steps required to enrol this within the field.

Anticipated Challenges. This research has limited challenges; however, a possible issue surrounds the willingness of UK police forces to participate within the study due to its novel nature, creating a risk of not reaching the minimum sample size therefore effecting the ability to form an informed plan for future steps within the field.

Discussion. There is no existing research on the question proposed, highlighting the need for this study. The use of court facility dogs has grown over recent years, however due to their specialised nature their handlers are required to be legal professionals which can limit availability due to a lack of handlers, opening for the possible utilisation of police officers as handlers. With police officers being more readily available than other legal professionals not utilising them is a missed opportunity to improve court experiences and victim care. Furthermore, studying the use of officers as handlers will enhance knowledge surrounding the use of court facility dogs, while providing an insight into the viability of officers within this role.

128 Do Horses Involved in Equine-Assisted Interventions Show Cognitive Judgment Biases?

Dr Céline Rochais, Dr Marine Grandgeorge, Dr Séverine Henry

EthoS Department of Éthologie animale et humaine, UMR 6552, CNRS, University Rennes, Normandie University, Paimpont, France

Introduction: Equine-assisted interventions (EAIs) have become increasingly popular. While the effects of EAIs on humans have been examined, researches focusing on the equines

involved remain scarce. This study tested whether such working activity can alter the affective state of equines revealed by cognitive judgement biases.

Methodology: We studied 23 horses either involved in riding school (RS, N=12, X=13.9±0.7 y.o) or in both RS and EAI activities (EAI-RS, N=11, X=19.0±1.5 y.o). They all lived in the same naturalistic conditions. In a judgement biases task, horses were initially trained to spatially discriminate a bucket containing either edible (positive location) or unpalatable food (negative location). They were then tested with three ambiguous locations (empty buckets): near positive (NP), intermediate (M) and near negative (NN). The latency time (adjusted for walking speed) to go to the bucket and the expression of go-responses were recorded.

Main Results: Results indicated: 1/ no difference between work groups in spatial discrimination (W=58.5, P=0.65); 2/ an impact of the bucket location in go-responses number (X²=49.43, P<0.0001) and latencies (X²=69.04, P<0.0001), with a pessimistic bias in both groups in NN location compared to P location (RS: W=4, P=0.003; EAI-RS: W=3, P=0.005), 3/ no difference between groups in pessimistic bias (W=74, P=0.65), but high interindividual variation intra-group.

Principal Conclusions and Implications for Field: This study revealed a pessimistic bias in horses whatever their type of work but less severe compared to that scored in restricted RS situations. Naturalistic conditions may help decreasing pessimistic states but work has a negative impact. EAI and RS activities alter horses in the same way but intra-group profiles appeared. We need to further elucidate whether there may be some aspects of EAI that are more difficult to manage for some horses than others. This will contribute to suggest activities that are more respectful of equine welfare and needs.

152 “My Horse Has a Voice; Now, I’m Trying to Figure Out What to Do With it” Communication Between Canadian Dressage Coaches, Riders, and Horses

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⁴Campbell Centre for the Study of Animal Welfare, Guelph, Ontario, Canada

Introduction: Ethical and welfare concerns regarding the training of dressage horses are increasing. This project examined perceptions of the horse-human relationship and the use of dressage training methods in practice. The objectives of this study were to explore 1) the ways in which dressage coaches and riders interpret, respond to, and elicit specific horse behaviours; and 2) the communication and language used between dressage coaches and riders during dressage lessons.

Methodology: We included four Equestrian Canada certified coaches at four different horse barns and their dressage students (n=26) ranging from training to 3rd level. Ethnographic data collection included semi-structured interviews, fieldnotes, and videographic footage of dressage lessons. Data are analyzed using methods derived from grounded theory and multimodal interaction analysis.

Preliminary Results: Participants believed “good quality” training has the potential to improve horses’ longevity and soundness and expressed that horse behaviour informed their training approaches. While overt horse behaviours (e.g., ear positions, stiff and stilted gaits, kicking) were easily recognized, participants grappled with understanding more subtle horse cues (e.g., spinal alignment, oral behaviours, head and neck positions). With emphasis being placed on the horse’s body positioning and compliant behaviour, coaches often instructed riders what the horse should do without informing the rider how to communicate with the horse. In some cases, despite recognizing confused ridden horse behaviour, unclear communication between coach and rider led to an escalation of cues and aids from the rider.

Conclusions: Participants valued “good quality” training and acknowledged the nuanced nature of horse behaviour. However, communication between rider, coach and horse remains a challenge. Monological communication from the coach may obscure riders’ and coaches’ ability to comprehend the horse and rider “dialogue”. Preliminary findings indicate a need to define “good quality” training and coaching and to improve methods to elicit and clearly communicate desired ridden horse behaviour.

158 Pathways to Understanding the Variety of Zoosexuality: Sexual Self-Concept and Zoosexual Classes

Birgit Ursula Stetina, Armin Klaps, Anastasiya Bunina, Lisa Emmett
Sigmund Freud University Vienna, Vienna, Austria

Zoophilia remains a major taboo and there are still limited findings. After the evaluation of early classifications (Aggrawal, 2011) the newer classification ideas (Emmett et al, 2020) need re-evaluation as well by further exploration of this hidden population. In addition to that more insights on sexual self-concept in the different groups (classes) of zoophile people are needed.

Using a cross-sectional mixed methods approach 1680 volunteers participated in an online-study focusing on zoosexuality. In cooperation with an active forum for zoophile people forum members (female: 11.4%; male 74.9%; man-to-woman transsexual/transident: 4.8%; woman-to-man transsexual/transident: 3.9%; intersexual/intrasexual: 0.8%; other: 3.9%) aged 31 years on average ($M=30.95, SD=11.25$) were surveyed regarding demographic information, zoosexuality and statements to assign zoophilic classes and the Multidimensional Sexual self-concept questionnaire (MSSCQ Snell,1998). Data was analyzed

using IBM SPSS Statistics 27.0 employing explorative analysis and mean difference calculations, GLMs and effectsize computations.

The largest group of the sample identified themselves as “opportunistic zoophiles” (OF; $n=671$ 40.9%), people who have sexual intercourse with animals if an opportunity arises. MSSCQ calculations reveal that the volunteers showed significantly higher scores ($M=1.26, SD=1.16$) in sexual depression ($t(527)=6.64, p<.001, d=.29$) compared to the validation sample ($M=0.93, SD=0.80$) and significantly lower scores ($M=2.34, SD=1.15$) in sexual satisfaction ($t(524)=-3.97, p<.001, d=-.17$) in comparison to the validation sample ($M=2.54, SD=1.09$). In addition to that data show a significant difference between classes with regards to their sexual self-concept ($L=.79, F(140,9690.20)=2.50, p<.001$) which will be presented in detail.

On one hand the results are a starting point for a more precise classification and better understanding of the psychodynamics for zoophilia with a special attention to sexual self-concept on the other hand we need to notice that the significant differences between the target population and the validation sample and between the different classes are small interpreting the effect sizes.

Emerging Topic Oral Presentations: Domestic Behaviour, Training and Education

11:15am-12:10pm Saturday, 29th June, 2024

Chair: Linda Greening

Session to feature oral presentations each 5-minutes in length followed by a group Q&A at the end.

18 You Passed! The Development of a Counseling-Focused Canine Team Evaluation

Dr. Elizabeth K Hartwig

Texas State University, San Marcos, TX, USA

Problem Statement & Research Questions

As the field of animal-assisted counseling continues to grow, canine-assisted counseling (CAC) teams are emerging in settings such as schools, agencies, and group practice offices. Many CAC practitioners seek out credentialing through volunteer therapy animal programs since these programs are more widespread and accessible. Canine team evaluations in volunteer programs are developed to assess skills in volunteer settings, such as assisted living facilities or hospitals. However, in counseling settings CAC teams are interacting with clients for longer periods, participating in counseling interventions, and working with diverse clients who have varied mental health needs. It's essential that CAC teams develop and are assessed for comprehensive skills that they use in clinical settings. The purpose of this study is to identify CAC team skills as a means to develop a CAC Team

Evaluation. The research question is: What skills do CAC teams need to demonstrate for a CAC team evaluation?

Methods

Participants for this study will be AAC practitioners who have training and experience in partnering with a canine in a clinical setting. The study will use a researcher-developed survey through Qualtrics that will consist of inclusion questions, a demographic section, and three content areas. The content areas include basic skills (e.g., sit, settle), facilitation skills (e.g., reviewing CAC informed consent, facilitating client-animal relationship), and clinical skills (e.g., treatment planning that involves CAC interventions). Each item will be rated from 0 (not important) to 4 (very important). Items that score an average of 3 or more will be identified for a potential CAC Team Evaluation. In each content area, participants will have a section to include additional skills that should be assessed.

Anticipated Challenges

- Recruitment of qualified practitioners

Discussion Points

- Current team evaluations for therapy dogs
- Skills needed for CAC sessions versus CAC Team Evaluations

98 Bells, Bibs, and Beyond: Investigating Factors that Influence UK Cat Owners' Willingness to Mitigate Wildlife Predation

Megan M Barker, Jack R Merrifield, Ella Bartlett

Merrist Wood University Centre, Guildford, United Kingdom

The popularity of domestic cats has rapidly increased in recent years, with 24% of UK adults sharing their home with one. Companionship is a driving factor behind cat ownership, however this relationship has widescale implications for native wildlife, with an estimated 52–63 million mammals killed within a 5-month study period. As opportunistic predators, cats pose threats to various taxa when allowed to free-roam, with potential repercussions for local biodiversity. Despite this, there are currently no restrictions on the extent to which cats are allowed to free-roam, thereby placing responsibility on cat owners themselves.

There are a multitude of different strategies that owners could employ to reduce their cat's impact on wildlife, ranging from purchasing specific devices to imposing additional spatio-temporal restrictions. Understanding the factors that motivate owners to adopt these strategies would be beneficial to inform future policy, product development and promote responsible cat ownership whilst accounting for wildlife conservation. Consequently, our study aims to investigate these driving factors and their influence on cat management.

To explore this, a self-administered online questionnaire will be utilised targeting UK cat owners. This will include a mix of both open and closed questions to explore associations between demographic data, perceptions of cat management, prior experience of wildlife, and willingness to adopt effective mitigations. A robust statistical approach will be applied – involving chi-squared and regression analyses – conducted in R statistical software. Anticipated challenges in this study include the capacity for perceptual bias, particularly considering the controversial nature of the topic, and the inability to control for extraneous variables that may confound the data.

The findings from this research will play a vital role in enabling strategies to be tailored to the UK context, facilitating the development of initiatives that prioritise both conservation efforts and cat welfare concerns.

116 The Dog Mentor: School Dogs Improving Educational, Social, Emotional and Therapeutic Outcomes Through Targeted Interventions

Mrs Jenny Duckworth

The Dog Mentor, Rochester, Kent, United Kingdom

Background: Since the start of The Dog Mentor in 2013, over 1000 handlers and over 500 dogs have been trained to provide support for students in over 400 schools. The program includes face-to-face training within the school, removing barriers (e.g. cultural, religious) to support the needs of the pupils. This includes an initial assessment with consideration for the welfare of all involved. Human training is carried out in conjunction with the dog training and assessment to advise on both curricular and non-curricular interventions to create a positive universal offering within the environment. Canine learning theories are taught in a way that parallels can be drawn between human and animal behaviour to enable more effective implementation and a mutually beneficial human-animal interaction. Although the provision is setting specific, there is a universal offer to benefit all pupils and a targeted small group or individual intervention as required.

Problem statement: Due to the varied nature of the work, it has been difficult to quantify the impact in a summative and consistent way.

Methods: A mixed methods approach will capture the quantitative impact through standardised questionnaires. The qualitative element will help us understand the nuances and differences between the settings as well as the potential challenges.

Issue: Measures of impact vary across learning environments and often exclude important areas that need to be captured such as emotional projection and applied empathy. We are seeking to identify the measures we can use, across all schools, in the most effective way.

Discussion points: A discussion of the outcomes and measures to use across the different schools and dogs involved. To find ways to enhance the provision overall, specifically looking at applied empathy that enable positive relationships to be built between humans and dogs as well as improving dog welfare understanding within education.

124 The Development of Dog Safety Education using DAVE (Dog Assisted Virtual Environment) in Virtual Reality

Dr Marie-Claire Pagano¹, Dr James A Oxley¹, Mr Matthew Butcher¹, Dr Georg Meyer¹, Mr Jake Flatman², Ms Hollie Sevenoaks², Prof Carri Westgarth¹

¹University of Liverpool, Liverpool, United Kingdom. ²Dogs Trust, London, United Kingdom

Dog bites are a global public health concern. As well as causing injuries and psychological trauma in victims, they can result in the breakdown of the human-dog relationship, relinquishment or euthanasia. Dogs can signal distress through visual displays which people often misinterpret. Dog bite interventions often focus on teaching people how to behave appropriately around dogs rather than how to identify and correctly interpret dog behaviour. Teaching adults and children how to identify and interpret dog behaviour through videos improved their assessment of dog behaviour. However, interventions of this nature often present dogs through videos, photographs or animations because of the risks associated with placing dogs and humans in aversive situations. Virtual reality (VR) can provide a realistic but safe way to assess human-dog interactions and explore how the environment and morphological features of the dog impact human behaviour. VR also provides a controlled situation to deliver an intervention to aid the understanding of dog behaviour.

We have developed the first evidence-based Dog Assisted Virtual Environment (DAVE) in which user distance results in a Labrador displaying behaviour and signals of response to perceived threat. Pilot work with university students suggests early signals of appeasement are missed and misinterpreted. Our aim is to now develop an educational intervention using DAVE to improve the identification and interpretation of canine visual signals leading to appropriate interactions with dogs and ultimately a reduction in dog bite incidents. We anticipate challenges in creating an effective stand-alone intervention in VR that is widely accessible. We would like to discuss: What might an educational VR intervention look like? Which behaviours and perceptions should the messaging focus on? In which contexts would the intervention be of use? What other factors need to be considered (e.g. transferability to the real world)?

170 Therapy Dog Training: "Crucial Basic Foundations"

Lieve L Meers¹, Elizabeth A Walsh², Liesbeth Jorissen¹, Carolina Duarte-Gan³, Laura Contalbrigo⁴, William E Samuels⁵, Vicky A Stevens⁶, Daniel Berckmans^{7,8}, Simona R Normando⁹

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During canine-assisted therapy (CAT), trained dogs assist therapists, as they help clients to achieve therapeutic goals. CATs are diverse (e.g., animal-assisted psychotherapy/occupational/speech therapy), raising the importance of targeted training for CAI dogs to ensure participant welfare, quality therapy session, avoiding accidents and inappropriate/unpredictable behaviour. To investigate training programs, we searched Google using the search string "training a therapy dog" (Jan 2024).

The cut-off was set at 100 websites out of 86.500.000 results. 68% mentioned behavioural training, (e.g. socialization of puppies (66.18%) and obedience training (94.12%). The most common criteria were sitting (32.35%), loose-leash walking (30.88%), staying (27.94%), lying down (22.06%), leaving objects and grooming (19.12%). Specialized training goals included exposure/desensitization to stimuli in therapeutic environments (54.51%), such as response distraction (55.88%), noisy environments (26.47%) and stranger acceptance (20.59%).

The (partial) use of training techniques for assistance dogs is seen in practice (24.64%) in AAI; however, skills required may differ, and similar reasons for rejection may apply.

Most websites (80.88%) showed photos of dogs embraced by clients and/or stared in the eyes. Therapy sessions can elicit fear in clients. Endorphin/oxytocin/phenylethylamine release and cortisol decrease elicited by hugging dogs may benefit clients. Dogs (42%) responded by looking at the client and (42%) by turning their head/body away. The latter behaviour may be a calming signal elicited by stress. CAI dogs are habituated/desensitized/counter-conditioned (57.35%) not to respond to humans/strangers touching them nor to inappropriate client behaviour; any influence on the dog's welfare is unknown.

Alternatives are offered in some legal AAI frameworks, where dogs may leave the session and retreat to a safe place if uncomfortable. Our web search did not identify training initiatives where CAI dogs are trained to communicate their preference/consent with clients behaviour or show their "like/dislike" in response to requests/tasks/environments. We advocate for a consent based approach.

Poster Session A: In the Pursuit of Caring for People in Need

11:00am-12:30pm Friday, 28th June, 2024

Session A - ID #: 1 Physical and Mental Well-Being Impacts of Care Farming Activities on Adults With Learning Disabilities and Autism Spectrum Disorder: Perceptions of Care Farm Employees

Miss Jennifer C Howse

Royal Agricultural University, Cirencester, United Kingdom

Care farming; ecotherapy which sees farming practices used for therapeutic benefit has become a popular activity for individuals who may otherwise have limited interaction with the natural world. Opportunities are increasingly available for individuals with learning disabilities and autism spectrum disorder although there is continued need for evidence of its' benefits to allow enterprises to develop and grow. Evidence of benefits is also required by external organisations, especially when enterprises are financially supported by governing bodies or charities who seek to ensure attending clients gain from their experiences. This research project aimed to establish physical and mental well-being impacts resulting from care farming activities at an enterprise operating within a UK charity.

Individual qualitative interviews were held with employees who worked across four areas; animal care, market garden, woodland and garden nursery. Interviews contained questions across five topic areas with data collected using a Dictaphone and undergoing thematic analysis to identify key themes.

Impacts on well-being were seen to result from involvement in unintentional exercise, working with others and participation in 'purposeful' activities which saw clients gain a sense of empowerment. The specific activity being completed was not the most influential aspect on well-being, rather it was the environment the activity was taking place within as well as those around the client at the time which led to well-being changes.

Future investment in care farming enterprises would be valuable, both in relation to increasing their scope and the numbers of clients who can attend. It is likely the popularity of care farming will continue to increase moving forward although it is important to continue collecting evidence on both successes and challenges. Future research would benefit from collecting the views of those attending care farms themselves as well as the views of those supporting them or those offering such opportunities.

Session A - ID #: 2 Relationship of Pet Attachment to Deterioration of Cognitive Function in

Community Residing Older Adult Pet Owners: Evidence From the Baltimore Longitudinal Study of Aging (BLSA)

Erika Friedmann¹, Nancy R. Gee², Eleanor M. Simonsick³, Melissa H. Kitner-Triolo³, Barbara Resnick¹, Merve Gurlul, Soyeon Shim¹, Ikmat Adesanya¹

¹University of Maryland Baltimore, Baltimore, MD, USA. ²Virginia Commonwealth University, Richmond, VA, USA. ³Intramural Research Program, National Institute on Aging, Baltimore, MD, USA

Background and Objectives Pet ownership has been associated with less deterioration in cognitive function as older adults age. Deterioration in cognitive function with age was slower for pet owners (verbal memory, attention, language function, executive function); dog owners (verbal memory, attention, language function, executive function); and cat owners (verbal memory, language function) than non-owners independent of age and comorbidities. As level of pet attachment may impact cognitive deterioration, we sought to evaluate this association using data from the BLSA.

Methods In this longitudinal observational study of 214 pet-owning, generally healthy community-dwelling adults aged 50-100 years ($M=68.0, SD=7.8$), pet attachment and cognitive function were assessed during regularly scheduled visits every 1-4 years over 1-13 years ($M=7.5, SD=3.6$). Instruments included: Lexington Attachment to Pets, California Verbal Learning (Immediate, Short, Long Recall), Benton Visual Retention, Trail-Making (Trails A, B, B-A), Digit Span, Boston Naming (Naming); and Digit Symbol Substitution (Digit Symbol) Tests. Linear mixed models with pet attachment, time, and pet attachment by time interaction were used to examine the relationship of pet attachment to deterioration in each cognitive outcome.

Results Pet attachment was associated with slower deterioration in executive function (Trails B: $p=0.005$; Trails B-A: $p<0.001$) and faster deterioration in long-term recall ($p<0.001$). Among dog owners ($N=121$) higher attachment was associated with slower deterioration in attention (Trails A: $p=0.046$) and faster deterioration in short- ($p=0.025$) and long-term ($p=0.019$) recall. Among cat owners ($N=100$), higher attachment was not associated with changes in cognition.

Implications We provide important longitudinal evidence that pet attachment is differentially associated with the rates of decline in different types of cognitive function that older adults experience as they age and that attachment to different types of pets may have different relationships to rates of cognitive decline. Potential explanations for these differences are proposed.

Session A - ID #: 3 Pet Dog Versus Pet Cat Interactions With Children With Typical Development or Autism Spectrum Disorder: Same or Different Visual Attention Patterns?
Dr Marine Grandgeorge¹, PhD Yentl Gautier^{1,2}, Ms Héloïse Mossu¹, DR Martine Hausberger³

1Ethos lab, University of Rennes, Rennes, France. 2University of Rhones Alpes, Grenoble, France. 3CNRS, Université de Paris Cité, UMR 8002, Integrative Neuroscience and Cognitive Center, Paris, France

Introduction: Visual social attention is part of many species social life, but its patterning may vary between species. Visual attention is also part of such interspecific interactions. Little is known on comparison between pet species, nor how the human's own social skills may influence the visual attention patterns in human-animal interactions, especially for human with particular visual attention skills (e.g. autism spectrum disorders, ASD)

Methodology: In this study, we investigated with ethological methods, visual attention patterns directed to partner in 26 dog-child and 16 cat-child dyads in their home environment (1h per dyad). We also compared these patterns between groups of 6-to-12 yo children with ASD (n=22) and children with typical development (TD ; n=20).

Main results: Attention patterns differed according to species, with dogs displaying more gazes ($p < 0.001$) and cats used similarly gazes and glances ($p = 0.649$) toward their child interlocutor, while children used more gazes toward both species ($p < 0.001$). Only slight differences were observed according to children developmental status: ASD children displayed much more visual attention with their cat than with their dog ($p < 0.05$) and the same amount of visual attention toward their pet, whatever the species, as TD children ($p > 0.05$).

Conclusion: This study highlighted differences in visual attentional patterns according to animal species involved whereas ASD and TD children have quite similar visual attention patterns. Slight differences suggest that ASD children, with a less typical pattern of interaction, may be more comfortable with the less "invasive" short glances of cats. The important visual attention to their pets displayed by ASD children confirms that (1) pets are perceived as potential partners, being less intrusive and "judgmental" than humans and (2) animal faces are less "aversive" than do human faces for these children.

Paper published : Grandgeorge et al (2020) *Frontiers in Psychology*

Session A - ID #: 4 How Can Browsing at Photos and Videos of Their Pets Help Young People Aged 18-30 Alleviate the Effects of Human-Pets Separation?

Hua Fan, Dr. Roxanne Hawkins

University of Edinburgh, Edinburgh, Scotland, United Kingdom

Introduction. Young people aged 18-30 often encounter more stressful and challenging situations compared to other age groups. The emotional distress caused by these negative events can be intensified by separation from their pets. As a result, those in the 18-30 age bracket, one of the groups most affected by pet separation, require mental support. The

recognized therapeutic role of pets in human lives has led to extensive research. However, the effects of virtual interactions with animals, browsing photos and videos of pets, following separation have not been fully explored for this age group. This paper investigates the potential benefits of these virtual interactions for young pet owners.

Methodology. This study utilized a qualitative research design. Our team collected data from 20 participants age ranging from 18–30 year-old by semi-structure interview. Interviews questions included demographic information, pet details, emotions, social connections, experiences of human-pet separation, and activities impacting well-being at university. The study employed inductive thematic analysis, following these steps: familiarization with the data, generating initial codes, searching for themes, reviewing and refining these themes, and finally, producing a thematic map.

Main Results. The results identified three key themes: (1) Photos and videos as tools to moderate the impact of human-pet separation anxiety; (2) Photos and videos potentially maintains the human-animal bonds; (3) Sharing and posting photos and videos of their own pets on social media may enhances owners' social connections.

Principal conclusions and implications for the field. Those results shown a positive correlation between mental resilience and three themes. This research proposes new direction for future support methods for individuals facing mental challenges due to human-pet separation, such as enhancing mental resilience through viewing their pets' photos and videos. It also suggests the potential integration of virtual engagement in clinical therapy.

Session A - ID #: 5 Pups Uplifting Public Speaking: Developing Key Components of a Pilot Canine-Assisted Intervention for Children with Public Speaking Anxiety
Dr. Camille X Rousseau, Ms. Amelia A Willcox, Dr. John-Tyler Binfet
University of British Columbia (Okanagan), Kelowna, BC, Canada

Introduction: Given the known importance of public speaking (PS) and the detrimental impact of early, negative experiences on children's PS skills and confidence, there have been calls to develop ways to promote children's PS competence. Whereas interventions for older populations are available, research on interventions for children is lacking. Canine-assisted interventions (CAIs) hold promise to both reduce PS anxiety (PSA) and to bolster PS skills. This research therefore aimed to develop guiding principles for a pilot canine-assisted PSA reduction program. Drawing on Collaborative Action Research, the insights and experiences of key stakeholders (i.e., teachers, students, and dog handlers) were embraced to enhance the learning experiences of students with PSA.

Methodology: Study 1 involved focus group discussions with 15 Grade 6 and 7 teachers ($Mage = 36.6$, $SD = 10.6$) in British Columbia to understand the curricular expectations

around PS, supports provided to students with PSA, and perspectives on therapy dogs in classrooms. For Study 2, semi-structured interviews were conducted with 12 students with PSA ($Mage = 12, SD = 0.47$) to understand their experiences of PSA, supports and strategies used to reduce their PSA, and impression about canine assisted PS. For Study 3, an online survey was administered to 13 dog handlers ($Mage = 52.28, SD = 10.91$) with prior handling experience participating in CAIs with children. Insights were gleaned regarding considerations for animal welfare and priorities, with respect to dog-handler teams, that need to be considered when organizing and running CAIs for children.

Findings: Thematic analyses were conducted within and across each study. Findings across all three studies were then converged into seven guiding principles for a PS CAI for children with PSA.

Conclusion and Implications: Key findings and guiding principles will be discussed within the broader context of CAIs for children whilst safeguarding animal welfare.

Session A - ID #: 6 After-School Care Programs Created in Japan for Children with Developmental Disabilities or Special Needs: Occasionally Featuring Cats
Dr. Canna Takise, Ms. Marina Tani, Prof Lynette A Hart
University of California, Davis, School of Veterinary Medicine, Davis, CA, USA

Introduction: In 2012, legislation in Japan provided for special governmental funding to offer after-school care specifically for children with developmental disabilities or special needs verified by a doctor. These facilities often grew out of cram schools that deliver supplementary instruction during after-school hours. These new facilities were initiated at a local level to offer supplementary learning to children with developmental disabilities that were separated from children with typical development.

Methodology: Japanese/English interviews were conducted and videotaped on Zoom in 2020 with administrators from 27 of these developmental disability facilities, as well as some animal rescue organizations. The two interviewers were fluent and semi-fluent in Japanese, permitting use of both English and Japanese during the interviews.

Main Results: Facilities used no specific diagnoses when charting guidance and activities for the children. Varied approaches were used to enrich the children's quality of life and education. Administrators ($11/27 = 40.7\%$) often had personal experience with an affected family member that motivated them to become involved in creating a new program. These locally-administered programs offered varied curricula that were oriented on types of learning, specific sports, meditation experiences, and/or exposure to animals. Children's special needs were not culturally acknowledged; specific individual diagnoses were avoided. Advanced professional knowledge for children's specific treatment was not available. Administrators cautioned about cultural sensitivities regarding references to the

children's developmental disabilities. Very few of these programs had cats or other animals.

Principal Conclusions: These imaginative programs for the Japanese disability community, often created by families caring for a child with special needs, provided after-school care without considering childrens' diagnoses such as autism spectrum or attention deficit hyperactivity disorder when planning activities. Nonetheless, the unique and varied approaches used in the programs could serve to inform offering similar programs in other countries and offer models for locally-initiated activities.

Session A - ID #: 7 "Resident Cats" in Nursing Home: Pilot Study of Acceptability and Attachment as Perceived by Residents and Caregivers in Alzheimer's and Disability Units
Dr Marie Pelé¹, Héloïse Vesque-Annear¹, Dr Cédric Sueur², Dr Marine Grandgeorge³,
Angélique Stachowiak⁴, Pr Anthony Piermattéo¹

¹Catholic University of Lille, Lille, France. ²University of Strasbourg, Strasbourg, France.

³University of Rennes, Rennes, France. ⁴Féron-Vrau Center, Lille, France

Introduction: In nursing homes, presence of animals can be a vector of social stimuli between caregivers and residents, promoting communication, trust and openness to others. This study focuses on residents and caregivers in four living units: three Alzheimer's units (ADU) and one disability unit (DISU). The objective was to describe both the impact of the "resident cat(s)" on the daily work of the caregivers and the attachment that the residents and caregivers have to the cat(s).

Methodology: Questionnaires were distributed to 24 caregivers and 24 residents (mean age = 81.9 years) in: two ADU with one cat, one DISU with two cats and one ADU having had a cat in the past. The caregiver questionnaire consisted of three parts, including their opinion on 1) the presence of the cat in the unit, 2) the presence of the cat with the residents, and 3) the presence of the cat in their daily work. The residents' questionnaire included eight questions about their attachment to the animal of their unit.

Results: Among the caregivers, 62.5% were in favor or very much in favor of the "resident cat" and 87.5% felt that their cat(s) contributed to the psychological and emotional well-being of the residents. In terms of attachment to the animal, our results show that 95.8% of residents and 58.3% of caregivers are attached or strongly attached to their cat(s).

Main findings and implications for the field: The permanent presence of a cat generates attachment for both caregivers and residents. Some caregivers feel that "there can be a strong bond between caregiver and cat", and that the cat provides "soothing and gentleness", while some residents "enjoy the purring and petting". This pilot study highlighted the importance of resident cats as emotional support of both caregivers and residents.

Session A - ID #: 8 Recruitment Feasibility for a Randomized Controlled Pilot Study of Animal-Assisted Intervention for Hospitalized Older Adults

Dr. Lisa Townsend¹, Dr. Nancy R. Gee¹, Dr. Erika Friedmann², Dr. Megan K. Mueller³, Dr. Sandra B. Barker¹

¹Virginia Commonwealth University - Center for Human-Animal Interaction, Richmond, VA, USA. ²University of Maryland - School of Nursing, Baltimore, MD, USA. ³Tufts Institute for Human-Animal Interaction, Cummings School of Veterinary Medicine, Tufts University, Boston, MA, USA

Introduction: This study evaluated the feasibility of recruiting hospitalized older adults into a randomized controlled trial (RCT) comparing canine-assisted intervention to an active/conversational control and treatment as usual delivered over three days to address health and mental health outcomes. Human-animal interaction (HAI) science could benefit from more methodologically rigorous studies of HAI intervention efficacy.

Methodology: Recruitment occurred on acute care hospital units and a long-term, inpatient physical rehabilitation facility. Feasibility data included number of recruitment contacts, recruitment rate, and reasons for non-enrollment. Recruitment rate for this study was compared to rates reported in other randomized trials with hospitalized older adults.

Main results/Findings: A total of 1124 patients were included in the recruitment pool. The recruitment rate was 4.8% (n=54), significantly lower than those of comparison studies [X² (7, N=8) 138.73, p = 0.000]. A total of 425 declined participation: 52 considered but did not enroll, 9 failed screening, 299 were unable to be contacted, 272 were not appropriate for screening, 7 were missed opportunities, and 6 were duplicate referrals.

Principal Conclusions and Implications for the Field: This study explored the difficulties in recruiting medically ill, hospitalized older adults for an RCT of a hospital-based therapy dog intervention. We believe this is the first evaluation of the feasibility of recruiting this population for an animal-assisted intervention RCT. Although the intervention was well-received, older adults' illnesses presented significant barriers to enrollment. Nevertheless, the trial was successfully completed. Published studies with higher enrollment rates incorporated interventions directly into treatment and required fewer intervention sessions than studies with lower enrollment. Future trials should employ multiple sites, multi-modal study advertisements, and shorter interventions. Despite challenges associated with recruiting medically compromised older adults, RCTs of HAI interventions can be completed successfully.

Session A - ID #: 9 Exploring and Responding to the Value of Human-Animal Relations on Human Communication Disorders

Dr Janette Young, Ms Lauren Hartman, Ms Erin Burns, Ms Charlotte Mitchard, Dr Carmel Nottle, Professor Maria Kambanaros
University of South Australia, Adelaide, South Australia, Australia

Introduction

Recognising the role that human-animal relationships may play in supporting people with health disorders is not generally an accepted clinical concern. This is despite evidence of the importance of human-animal bonds in human wellbeing. Specifically little research exists on the impact of human-animal connections on communication disorders. There is a great need to better understand the everyday experiences of human-animal relationships for individuals with communication disorders. Furthermore, developing guidelines may assist health professionals recognise, support, and build on the wellbeing benefits human-animal relationships provide.

In this presentation findings from three qualitative studies that have focused on the impact of relationships with animals for (i) people with post-stroke aphasia; (ii) people with Parkinson's Disease and (iii) children with selective mutism will be presented.

Methodolog(ies)

All three projects collected data through interviews, with the third project also incorporating observations of children with their Assistance dogs. From the findings, a draft framework for best practise clinical guidelines for health professionals working with people with communication disorders who are either pet owners or have an assistance animal, is being developed using the WHO International Classification of Functioning and Disability framework (ICF).

Results

Across the three studies the way human-animal relationships prompt increase communication both as individuals (e.g., being with a known animal) and with other humans has emerged. These engagements increase communicative confidence and mental wellbeing, fundamental to human thriving, and can prompt intense care and concern for their non-human other "saviours". We are mapping the observed improvements and their clinical implications to the WHO's ICF framework as a first step to developing applicatory guidelines for clinicians to make use of.

Conclusions/implications

Taking human-animal relationships seriously, and valuing being with and observing animals on the part of clinicians requires a mix of both evidence and applicatory frameworks.

Session A - ID #: 10 Developing a Research Agenda on Nature-Based and Animal-Assisted Intervention Strategies (NATAIS) in People With Neurodegenerative Diseases With a Specific Focus on Social Isolation and Loneliness

I. J.N. Declercq^{1,2}, R. Leontjevas¹, M.-J. Enders-Slegers¹, M. Molog¹, P. W.A. Reniers¹, D. L. Gerritsen², K. Hediger¹

¹Open Universiteit, Heerlen, Netherlands. ²Radboudumc, Nijmegen, Netherlands

Introduction. Social isolation and feelings of loneliness are very prevalent in people with neurodegenerative diseases and are associated with a lower quality of life and other negative outcomes. These problems were increased during the COVID-19 pandemic resulting in initiatives to address social isolation. Given the potential benefits of nature-based and animal-assisted intervention strategies (NATAIS), it is crucial to further investigate if and how these might minimize negative effects of social isolation and feelings of loneliness in this population. Therefore, the aim was to develop a research agenda for NATAIS in people with neurodegenerative diseases, especially during challenging times, such as pandemics.

Methodology. To facilitate the development of the research agenda, a group concept mapping procedure was conducted. In total, 19 work group members participated through a combination of in-person and online group meetings. Additionally, face-to-face group sessions were held at two conferences, during which feedback was solicited from 12 experts in the field of NATAIS and psychogeriatrics.

Main Results. The group concept mapping procedure resulted in 14 clusters describing various future research topics, which were refined and detailed during group discussions. The remaining eleven clusters, encompassing important research themes within the field of NATAIS, were organized into a logic model and summarized into the research agenda. The overarching cluster 'Ethical issues, possible risk factors, and their solutions' were considered the most relevant during times of increased social isolation, such as during a pandemic, along with the necessity for 'more accessible NATAIS'.

Principal conclusions and implications for the field: This project resulted in a research agenda, directing future research and fostering collaboration between practitioners and researchers in the field of NATAIS. Such an enhanced partnership between science and practice has the potential to significantly contribute to the well-being of people with neurodegenerative diseases, in their daily lives and also during pandemics.

Session A - ID #: 11 'Oh Yeah, I Am Very Much a Non-Person When I Don't Have the Dog': Visibility, and Identity Through Interspecies Partnerships in Human-Animal Interactions in Disability

Dr Gráinne A O'Connor

The Open University, Milton Keynes, United Kingdom

Introduction: In recent decades, the use of assistance dogs by people living with a wide range of physical, sensory, and intellectual disabilities and mental illness has rapidly expanded in many countries of the global north. What can current theories in human-animal interaction research and critical disabilities studies tell us about the perceptions and understandings of participants of their lived experiences of using an assistance dog?

Methodology: In this qualitative study, eleven participants, who between them have used nineteen assistance dogs for more than two decades, were recruited from two of the four accredited charities who train assistance dogs for people with physical disabilities across the United Kingdom (UK). Single in-depth, semi-structured interviews were undertaken. Interpretative Phenomenological Analysis (IPA) was applied to the data resulting in three super-ordinate themes: VISIBILITY, (UN)CERTAINTY and IDENTITY.

Key findings: The use of an assistance dog was perceived to transform participants' self-identity to one which was shared with their dog. Experiences of interactions between participants and society in which their assistance dog served to misdirect negative public gaze away from visible impairment were understood to amplify shared human-ness and minimise difference. This interspecies relationship was however, revealed to be vulnerable to the uncertainties of ageing (human and canine) intertwined with the unpredictability of living with a degenerative condition.

Conclusion: Findings offered in this study enhance and inform both critical disability studies and human-animal interaction studies through its exploration of new understandings of identity.

Session A - ID #: 12 Humans and Animals Learning Together (HALT)

Debbie Morgan¹, Evangelos (Vangelis) Diamantakos²

¹Cheltenham Animal Shelter, Cheltenham, United Kingdom. ²Hartpury University, Gloucestershire, United Kingdom

The HALT project, an acronym for Humans and Animals Learning Together, is an Animal Assisted Intervention program that has been successfully operating at Cheltenham Animal Shelter (CAS) for over 15 years. Our close collaboration is with children and young people in need throughout Gloucestershire, particularly those facing behavioural challenges, special educational requirements, and mental health needs. We receive referrals from specific professionals and various educational settings.

Throughout the year, the CAS Education team facilitates activity sessions that offer attendees an opportunity to interact and cooperate with our staff and animals, educate them on responsible pet care, and provide carefully managed opportunities for additional

socialisation and training for rescue dogs. In this programme, children are paired with a resident rescue dog and tasked with caring for, exercising, and training the dog over a 2-week period. The primary goal is to foster the development of empathy and compassion in the participants.

The designers and facilitators of the project recognise the necessity of following specific guidelines to promote the health, safety, and welfare of both human and animal participants. Therefore, to the best of our abilities, we continuously seek to improve our organisational and operational standards and procedures to align with the Code of Practice for AAI issued by the Society for Companion Animal Studies (SCAS, UK). As part of this endeavour, we believe that a more thorough study and academic research in various aspects of the project are essential to help us standardise our procedures and further promote animal welfare and human well-being.

Session A - ID #: 13 The Contribution of Bonding with Animals to Experiencing Secure Attachment in Children on Autism Spectrum Condition
Psychologist Ruhane Koşar
Private Autism Center, Istanbul, Turkey, Turkey

Introduction: Secure attachment is an innate need for all mammals to survive. According to Bowlby the determinant of attachment is not food but care and responsiveness. The infants who receive adequate attention and care from their caregivers have a secure attachment.

Autism Spectrum Disorder is a neuropsychiatric disorder which begins in the first years of life with delays and deviance in social, communicative and cognitive development and with restricted repertoire of activities and interests.

The studies have shown that autistic children have difficulties in establishing a secure attachment with their mothers or caregivers because they have difficulties in interacting in the reciprocity required for this attachment. However, studies conducted in recent years, especially in the field of animal-assisted intervention, have shown that autistic children can experience the secure attachment in the bond established with animals.

Methodology: Animal Assisted practice carried out between 2006 and 2013 in Istanbul with a special dog Sensy and autistic children provided the opportunity to observe how this secure attachment between children and therapist dog Sensy formed.

Also, when studies conducted in this field around the world are examined, findings emerge that animal-assisted practices positively support secure attachment in autistic children.

Main Findings: Experiencing secure attachment is one of the basic needs and anxiety is very high if there is no secure attachment. Strengthening the bond with animals reduced this anxiety and autistic children opened up to the people and to the social world with more confidence.

Principal Conclusions and Implications for Field: There is a need to increase scientific studies on the effects of bonding with animals for secure attachment of autistic children.

Session A - ID #: 14 Healing Power of the Herd: An Experiential Group with Horses at Duke University
PhD Ping-Tzu Lee
Duke University, Durham, NC, USA

Introduction/Background:

It has been estimated that people remember 20% of what they hear, recall 50% of what they see, and retain 80% of what they do and experience. In traditional psychotherapy, clients and therapists primarily focus on verbal interactions. This experiential group with horse aims to diversify therapeutic approaches at Duke University, Counseling and Psychological Services (CAPS) as well as enhance students' relations between their cognitive self and somatic self.

Methods:

Nine students were recruited in this group. 7 of them identify as international students (3: India; 2: China; 1: Korea; 1: Belgium); one of them identify as an African American; one of them identify as an Asian American. Total 5 group sessions were facilitated on a farm in NC, USA; each session lasted 2 hours and 15 minutes. Qualitative data were collected and analyzed through group notes and group evaluation forms.

Main Results:

1. Interactions with horses open opportunities for students to strengthen their somatic self. For example, a student reported that she can re-experience/re-connect to a lead mare's calmness outside of the group, which gives her ability to calm herself (i.e., calm her somatic self).
2. Interactions with horses provide opportunities for interactions between students' cognitive self and somatic self. For example, a student expressed when she starts to criticize herself (i.e., cognitive self), she recalls a group moment when a horse "pulled" her away from self-criticism corner to the self-compassion corner (i.e. somatic self).

Session A - ID #: 15 ADHD Symptom Severity in Response to a Manualized Animal Assisted Intervention (AAI): Results of a Replication Study

Elissa Monteiro¹, Cassie Zeiler², Annamarie Stehli², Aubrey H. Fine³, Lydia Steinhoff², Sabrina E.B. Schuck²

¹University of California, Riverside, Riverside, CA, USA. ²University of California, Irvine, Irvine, CA, USA. ³California Polytechnic University, Pomona, Pomona, CA, USA

Introduction. Several studies have investigated the viability and effectiveness of AAI to treat children with autism. Research investigating AAI to treat children with ADHD, a neurodevelopmental disorder often co-occurring with autism, however, remains nascent. In our previous work we conducted a 12-week randomized, controlled trial examining a manualized protocol for AAI with therapy dogs compared to psychosocial treatment as usual (TAU) for children with ADHD and found AAI a viable approach to improving children's social skills and self-regulatory behaviors. Maximum benefit of the AAI was revealed by the eighth week of the AAI. The objective of this study is to extend findings regarding improvements in ADHD symptom severity (e.g., inattention, hyperactivity) utilizing an abbreviated 8-week AAI protocol.

Methodology. Thirty-nine children (aged 7–9 years, 79% male) with ADHD participating in a clinical trial pilot project were randomly assigned to intervention groups with, and without therapy dogs (AAI versus TAU) across 6, 8-week cohorts. Parents completed baseline ratings of symptoms of ADHD prior to treatment, immediately following treatment, and then at 8 weeks post-intervention. Mixed-effects multi-level modeling with random coefficients was utilized to test outcome differences between the AAI and TAU groups across time points. We also compared outcome trajectories across groups.

Results. Across both groups, parents reported significant improvements over time in the severity of children's symptoms of inattention ($p < .01$) and hyperactivity ($p < .001$). For symptoms of hyperactivity, a significant group effect emerged ($p < .05$), however, no time by intervention effect emerged. No group effect was found for symptoms of inattention.

Conclusions and Implications. AAI offers a viable therapeutic intervention for children with ADHD, particularly those with symptoms of hyperactivity. These findings are different from our initial work, however, and suggest a reduced dose of the previously employed protocol may factor in the strength of the results in this pilot.

Session A - ID #: 16 Acute Salivary Cortisol Response in Children With ADHD During Animal Assisted Intervention With Therapy Dogs

Lydia A. Stehli, Cassie Zeiler, Sara Jeffrey, Douglas A. Granger, Annamarie Stehli, Rachel Stokes, Sabrina E.B. Schuck

University of California, Irvine, Irvine, CA, USA

Introduction. Individuals with ADHD experience dysregulated stress responses in Hypothalamic Pituitary–adrenal axis (HPA) activity. Animal-assisted interventions (AAI) may help regulate stress responses in this group. To examine this hypothesis, saliva was collected from children with ADHD participating in a randomized clinical trial pilot comparing AAI to psychosocial treatment as usual (TAU).

Methodology. Thirty-nine participants ($n = 39$) with ADHD, aged 7–9 years (79% male) provided saliva at 3 points during 90-minute sessions; (i) upon arrival, (ii) +20 minutes, and (iii) 15 minutes prior to departure, on 3 occasions across an 8-week intervention (weeks 1, 4, and 8). Acute cortisol response was measured by calculating slopes for change in Cort (ug/dL) among the 3 in-session points. Average slopes were compared across the intervention weeks to determine within subject and between group effect sizes. Spearman’s correlations between baseline individual neurodevelopmental symptoms and in-session response were also evaluated.

Results. No significant in-session changes in Cort slope mean differences for either group were revealed at week-1. By week-4, clinically meaningful in-session changes in Cort were revealed, with significantly greater decreases in the AAI group with moderate effect-size (Cohen’s $d = -.40$). This trend held at week-8, with a stronger effect-size ($d = -0.60$). Symptoms of autism, as measured by parent A-SRS at enrollment, were significantly correlated with the in-session slope at week-1 ($r = -0.42557, p = .0097$). Specifically, higher t-scores were associated with steeper decreases in cortisol across the session. This relationship remained moderate at week-8 ($r = -0.3400, p = .0529$). Moreover, in week-8, the relationship was larger in the AAI group ($r = -0.529$) versus TAU ($r = -0.247$) yielding a moderate effect size (Cohen’s $q = 0.413$)

Conclusions. Findings suggest that AAI may reduce stress responses for children with ADHD during sessions, which may play a role in improving response to traditional interventions for these individuals. Individual differences in symptoms of autism may influence acute responses.

Session A - ID #: 17 Polyvagal Principles and the Power of Observation with Equines: A New Lens on Trauma

Dr. Jennifer H Forstrom D’Agostino¹, Dr. Rebecca Bailey^{2,3}

¹Blue Lotus Mental Health Counseling PLLC, Pleasantville, NY, USA. ²Polyvagal Equine Institute, Glen Ellen, CA, USA. ³Transitioning Families, Glen Ellen, CA, USA

This poster presentation will cover the foundations of Polyvagal Theory and its application with equine-assisted interventions. An overview of the role of the autonomic nervous system through the Polyvagal Theory lens will provide a new conceptualization for how we understand the impacts of trauma on humans and how to support healing from trauma. Through a Polyvagal foundation, we will reframe the understanding of trauma and will

explore interventions that promote bottom-up processing, supportive of altering the sensitivity of the automatic functions of the autonomic nervous system (ANS), which can go awry for individuals impacted by single episode or complex trauma. Polyvagal interventions with equines support opportunities to enhance improved self-regulation and rewiring of neural pathways of the ANS. Interventions that focus on observations with equines can facilitate learning about trauma responses and rewire our brains with animals to transform our perceptions, nervous system and maladaptive responses to trauma.

Poster Session B: Health, Physiology, and Behaviour

1:00-2:30pm Friday, 28th June, 2024

Session B - ID #: 1 Horses as Part of the Health and Wellbeing Sector – Service User Perspectives

Ms Rita Seery, Dr Deborah L Wells

Queen's University Belfast, Belfast, Northern Ireland, United Kingdom

Introduction

Horses are being increasingly incorporated into health and wellbeing treatments and interventions. These Equine Assisted Services (EAS) vary widely in both theoretical and practical application. Until now, service user perspectives across these practices have received little attention. This project therefore explored, for the first time, EAS from the experiences and perceptions of the clients themselves.

Methodology

A purpose-designed questionnaire was distributed via Qualtrics and advertised to people who had taken part in any type of EAS. The survey collected largely quantitative data on the nature of the EAS undertaken, reason/s for doing so, and perceived changes to wellbeing arising from the intervention. Information on any obstacles faced in accessing this type of service was also collected.

Results

131 EAS users responded to the survey. Services were most often accessed on the basis of self-referral (50%), lasted less than 90 minutes (71.8%), and comprised of 6 sessions or less (50.8%). The overarching reason for taking part in EAS was to improve general mental wellbeing. More specific reasons were to improve self-awareness, skills/ confidence, communication and/or to alleviate symptoms of anxiety. The most frequently reported benefit was an improvement in mood, with 78% considering this to be 'much improved'. Other benefits included improvements in feelings of connectedness to nature (69.2%) and anxiety levels (51.9%). Although EAS users were broadly satisfied with the EAS they engaged

in, the majority (>60%) highlighted multiple barriers (e.g., lack of funding, awareness among medical professionals, lack of clarity and information) that influenced access to services.

Principal Conclusion

This survey gives an insight into the perspectives of EAS users. Overall, individuals perceived EAS to be beneficial, with improvement in mood universally reported. However, barriers to accessing EAS exist and need to be addressed. These findings provide valuable information for funders and policy makers going forward.

Session B - ID #: 2 Exploring the Neuromechanisms of Human-Animal Interaction Through EEG Measures

MSc Fabio Carbone¹, Dr. Jan Hattendorf², Eve Yael Gerber³, Camille Rerat³, Prof. Karin Hediger³

¹University of Basel, Basel, Basel, Switzerland. ²Swiss Tropical and Public Health Institute, Basel, Switzerland. ³University of Basel, Basel, Switzerland

This research explores the neurological aspects of human-animal interaction. Specifically, we focused on frontal alpha asymmetry (FAA), a feature indicating differences in alpha power between the left and right frontal cortex, which is recognized as a sign of approach motivation and positive affect.

Twenty-nine healthy adults participated in this study, where we used electroencephalography (EEG) to measure their brain activity. The study comprised five phases: baseline measures, interaction with a real dog, interaction with a fake dog, interaction with a plant, and a neutral phase. Participants had both physical and visual contact with the stimuli in each phase, and we repeated this comprehensive session three times for each participant. At the same time, participants shared their subjective experiences through the “Multidimensional Well-being” (MDWB) and the “Intrinsic Motivation Inventory (IMI)” questionnaires, assessing mental state and intrinsic motivation.

Although objective measures of motivation and positive affect through FAA did not show a significant difference between interactions with a real dog and control conditions, subjective assessments told a different story. Participants reported significantly higher self-report motivation (LMM, condition dog, estimate = 5.91, $p < 0.001$) and a more positive state of mind (LMM, condition dog, estimate = 17.35, $p = <0.001$) after interacting with a real dog compared to the control conditions.

In summary, this study highlights the complexity of human-animal interaction, showing the intricate interplay between objective and subjective measures. Our findings emphasize the importance of considering both neural markers and subjective experiences to understand

the nuanced mechanisms involved in these meaningful connections with our four-legged friends.

Session B – ID #: 3 All in the Family: Is Man's Best Friend at Risk of Acquiring Pathogens From Their Humans?

Peggy A. Pritchard¹, Dr. Scott Weese^{2,3}, Karli E. Chalmers⁴, Dr. Jason B. Coe¹, Dr. Lauren E. Van Patter⁵, Dr. Kelsey L. Spence¹

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Introduction: The benefits to human health of interacting with pets are well documented, as is the evidence that pets can, and do, transmit pathogens to humans. However, human-to-animal (zooanthroponotic) transmission of pathogens is significantly understudied and seldom documented. This represents a serious gap in our knowledge. Our objective was to conduct a scoping review of the literature documenting evidence of pathogen transmission from humans to dogs (*Canis familiaris*).

Methodology: Published findings (in English) in the peer-reviewed and grey literature were systematically searched, collated, screened, and reviewed for evidence of zooanthroponotic transmission, following the methodological framework developed by Arksey and O'Malley (2005) and the PRISMA-ScR reporting guidelines. No restrictions were placed on study design, geographic location, document type, or date of publication. The peer-reviewed protocol for this review was published prior to commencement of the study.

Main Findings: Preliminary results suggest that most studies of documented zooanthroponotic transmission were published within the past 10 years, and described occurrences of transmission through direct contact between humans and dogs in long-term care facilities and healthcare contexts during animal-assisted activities. Pathogens reported among the studies included methicillin-resistant *Staphylococcus aureus*, *Clostridioides difficile*, *Salmonella* spp., *Escherichia coli*, *Campylobacter* spp., influenza A viruses, and SARS-CoV-2.

Principal Conclusions and Implications for Field: Though human-to-dog pathogen transmission has gained considerable attention since the SARS-CoV-2 pandemic, documenting the evidence remains challenging. Affected animals may not become ill; instances of transmission, therefore, may not be reported in the literature. Our findings will describe what is currently known about this topic and identify future research directions. The results of this study will begin to fill the gaps in our knowledge of zooanthroponotic transmission to our canine companions, inform future scientific research,

identify potential vulnerabilities during human-animal interactions, and influence the development of One Health policies and guidelines that will safeguard animal and human health.

Session B - ID #: 4 Psychological Viewpoints on Quality of Life in Pets - Benchmarks for Assessment

PhD Christine Krouzecky¹, Friederike Felicitas Rhein², Dr. med. vet. Stephanie Krämer², Dr. Rebecca Klee³, Dr. Balazs Albrecht³, Alexandra Haslinger¹, Dr. Jan Aden¹, MSc. David Seistock¹, Dr. Birgit Ursula Stetina¹

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Introduction. The assessment of quality of life is a self-evident method in human medicine and psychology for making treatment decisions (eg Kane, 2006). It is therefore all the more significant that this topic is highly relevant for the veterinarian practitioner (daily business) but research seems to fall behind offering valid instruments for practice and scientific application. More and more studies indicate that the quality of life of pet owners is closely linked to the human-animal relationship (e.g. Krouzecky et al., 2022). This makes it all the more important, especially from a psychological point of view, that veterinary decisions can be made on the basis of a set of valid benchmarks, more comprehensible for the animal handler as well.

Methodology. On the basis of an instrument for the comprehensive assessment of the quality of life of pets developed by veterinarians psychologically relevant aspects were added. For this reason, the raw version questionnaire was subjected to a pre-test analysis with pet owners. In addition, items were added to record the quality of life of pets by experts from the fields of psychology and human-animal relationships. Following a further pretest analysis, the items were both methodically analyzed and re-categorized in terms of content to create a set of potential scales.

Results. Based on the pretest analyses, seven main categories, covering the essential aspects of the quality of life in pets, were formulated using a theory-based approach and statistical evaluation. Additionally, the existing items were revised with regard to the wording, the response format and the number (reduction from n=136 items to n=93).

Principal conclusions and implications for the field. By incorporating the psychological perspective, it has been possible to create a new structure for pet quality of life that now follows a bio-psycho-social concept. On this basis, veterinarians and pet owners are able to assess the quality of life of pets using the multiprofessional created bio-psycho-social criteria.

Session B - ID #: 5 Unveiling Joint Attention Dynamics in Autism: Analyzing First Fixation Latency and Transition Patterns to Human and Animal Social Cues.

Carolina Duarte-Gan1, Lieve L Meers2, Elizabeth A Walsh3, Laura Contalbrigo4, William E Samuels5, Simona R Normando6, Rafael Martos-Montes1

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Autism spectrum disorder (asd) poses significant challenges in the development of social-communicative skills, particularly in the domain of joint attention, the shared focus of interacting individuals. Recent investigations have unveiled a compelling phenomenon wherein autistic children demonstrate heightened responsiveness to animal faces, potentially offering a novel avenue for animal-assisted interventions (aai) and social interaction interventions. This study explores the intricate visual patterns underlying joint attention responses and initiations in autistic (n=21) and neurotypical (n=20) children aged 5 to 12 years when observing social cues from both humans and dogs. Through the analysis of eight videos, participants engaged in tasks that necessitated either responding to or initiating joint attention with a person and a dog. Utilizing an eye-tracking apparatus, we measured total fixation time, response latency, accuracy of object glances, and transitions between areas of interest. Children with asd exhibited shorter first fixation latencies towards dog faces during both initiating and responding to joint attention tasks, coupled with a greater success rate coordinating gazes with the animal when responding to joint attention tasks, compared to their responses to human faces. Remarkably, the number of transitions between faces and objects is significantly higher among children with asd when dogs provide them with social cues rather than humans. These results underscore the potential of animal stimuli to more readily engage the attention of children with asd, thereby fostering enhanced opportunities for decoding social cues within their immediate surroundings. This study not only sheds light on the nuanced dynamics of joint attention in autism but also paves the way for innovative interventions, such as animal-assisted therapies, to enrich social communication competencies in children with asd.

Session B - ID #: 6 Behavioral Coding of Adolescent and Therapy Dog Interactions During a Social Stress Task

Seana Dowling-Guyer, Katie Dabney, Elizabeth A.R. Robertson, Megan K Mueller
Cummings School of Veterinary Medicine at Tufts University, North Grafton, MA, USA

Introduction: Animal-assisted interventions/services are an increasingly popular approach for supporting youth mental health. There is a high level of variability in how AAls are implemented, but little data on how specific interactions between therapy dogs and

participants can promote anxiety reduction. The goal of this study was to assess the frequency and duration of affiliative and stress-linked behaviors demonstrated by adolescents and dogs during a social stress task.

Methodology: This study used existing video data collected during a laboratory-based study assessing the effects of therapy dog contact on social anxiety in adolescents during the Trier Social Stress Task. The research team developed human and dog behavior ethograms based on prior literature and behaviors were coded as counts (point in time) or duration (length of time). Videos were coded for adolescent interactions directed towards therapy dogs as well as therapy dog behaviors.

Results: The videos were coded by two researchers, who demonstrated high levels of inter-rater reliability across behaviors ($k=0.85$ to 0.97). During the 70 minute-long session, the most frequent dog behaviors were laying down ($M=39.7$ min), laying alert ($M=9.3$ min), head toward handler ($M=5.5$ min), and sitting ($M=2.3$ min). Dogs exhibited few stress-linked behaviors (e.g., panting, yawning), however, they spent little time near or interacting with participants. When able to interact with the dog, participants pet or touched the dog for approximately a third of the session.

Conclusions and Implications: The results from this initial behavior coding study will provide the basis for future analyses with this data set that will combine observational video data with objective physiological data to better understand the timing and effects of how particular interactions within therapy dog services can produce anxiety reducing responses with precise resolution. This work represents a critical step in informing how AAls can be optimally designed to maximize effective interactions.

Session B - ID #: 7 Von Economo Neurons (VENs) and Mirror Neurons: Brain Features Humans Share with Elephants or Dogs Provide a Neural Basis for Empathy and a Special Attachment to These Animals

Professor Emeritus Benjamin L. Hart, Prof Lynette A. Hart

University of California, Davis, School of Veterinary Medicine, Davis, CA, USA

Introduction:

People always are interested in the behaviors of animals as a way to better understand our strong attachment to them. Considering intelligent elephants, though so different than ourselves, provides some comparative understanding of the brain and behavior similarities and differences. The human cortex neurons have a higher proportion of short, high-density connections leading to complex zones for cognitive behaviors. In contrast, elephants have more long globally-connected neurons leading to long distance orientation and extensive long-term memory. Also, very different than primates, dogs achieve remarkable compatibility with humans despite not having a particularly large brain.

Methodology:

Published findings were reviewed on empathic behavior and brain structures of humans, elephants, and dogs.

Main Results:

Von Economo neurons (VENs) are a type of brain neuron known to affect capacity for empathy: large spindle-shaped bipolar neurons. Elephants and people both have a larger proportion of VENs, related to social empathic behavior, than the great apes, who also have them, as do whales. VENs are involved in behaviors like helping an injured group mate or prolonged grieving for a deceased family member. Recent studies on human brains are revealing enhanced long-distance cortical connections in more intelligent people; their neural structure more resembles elephants. These studies show some similarities between the two big brain, terrestrial species.

Mirror neurons are brain cells that respond when someone performs an activity or observes someone doing the same activity. Initially discovered in macaque monkeys, extensive studies with dogs suggest mirroring systems. Contagious yawning, mimicry, and behavioral synchrony are examples of affective responding affected by social bonding, related to mirroring. These studies increase understanding of animals with whom we have a special attachment, such as dogs.

Principal Conclusions: Understanding neuroanatomy and behaviors shared and contrasting with animals that play a role in our lives can enrich our interactions with them.

Session B - ID #: 8 When Play Gets Too 'Ruff': A Study of Paediatric Dog Bites at a Children's Hospital in the UK

Prof Carri Westgarth¹, Dr John Tulloch¹, Vicky Pimblett², Mr Christian Duncan², Mr Matt Rotheram², Mr Simon Minford², Dr Victoria Gray²

¹University of Liverpool, Neston, Cheshire, United Kingdom. ²Alder Hey Children's Hospital, Liverpool, Merseyside, United Kingdom

Introduction

Dog bites are a cause of injury to children, typically occurring to the face. Common perceptions are that their own dog would not bite them, and certain breeds are more dangerous. Educational interventions focus on perceived high-risk activities such as petting or eating.

Methodology

Audit of hospital records for the year 2021 occurred and included a dog bite proforma completed in the Emergency or Plastics Department. In addition, all parents and children were encouraged to undertake a survey with additional follow-up at 2 and 6 months, to investigate in more detail the context of the bite and psychological impact on the child.

Main results/findings

195 dog bites were recorded in the year 2021, the majority being to the face/head (52%), seen in the Emergency Department (85%) and discharged with antibiotics (51%). The majority of bites occurred in the patient's own home (47%) by their own dog (44%). French Bulldog (14%), Shih Tzu (10%) and Jack Russell Terrier (6%) were common breeds. 29% of dogs were under 1 year old and when described sufficiently, bites occurred in various contexts including during play, around food/beds, or attempting to hug or kiss. Worryingly, 9% of dogs were known to have shown aggression to people before and 43% had no change to the management/fate of the dog planned and 33% this was unknown. Only 7 children volunteered for the survey; one was suffering from anxiety and nightmares at follow-up.

Principal conclusions and implications for the field

Hospital notes are generally insufficient to assess the context of the bite or impact however recruitment to more detailed research is challenging. Of particular concern is that in most cases no changes around the dog were planned post-bite, making likelihood of further incidents high. Interventions should target all breeds and safety whilst playing with dogs.

Session B - ID #: 9 The Impact of Service Dog Partnerships on Veteran Sleep Quality
Stephanie M. Bristol¹, Sarah C. Leighton¹, A.J. Schwichtenberg², Rebecca L. Campbell¹, Erin L. Ashbeck¹, Daniel J. Taylor¹, Edward J. Bedrick¹, Marguerite E. O'Haire¹
¹University of Arizona, Tucson, Arizona, USA. ²Purdue University, West Lafayette, Indiana, USA

Introduction: Posttraumatic stress disorder (PTSD) is prevalent within the military population, with sleep disturbances being one of the most frequently reported symptoms. Although numerous sleep interventions exist and can be effective, many veterans still struggle to sleep at night, potentially contributing to a heightened risk of insomnia and suicidal behaviors. Thus, investigating complementary sleep interventions is imperative. One potential approach is the partnership of a veteran with PTSD with a psychiatric service dog. This study sought to examine if service dog partnership predicted better sleep quality via both subjective and objective reporting.

Methodology: This study draws from the sleep components of an NIH-funded (R21HD091896) non-randomized clinical trial (clinicaltrials.gov ID: NCT03245814) to investigate $N=164$ veterans with PTSD. We evaluated $n=88$ veterans allocated to the service dog intervention arm and $n=76$ waitlisted controls. Assessments took place at baseline and 3-month follow-

up. Participants completed subjective survey measures of PTSD severity and overall sleep quality, as well as wearing an objective wrist-worn actigraphy device (Actiwatch).

Main Results: Based on regression analysis, service dog partnership was significantly associated with better subjective sleep, including lower sleep disturbances ($b=-4.0$, 95% CI [-6.5, -1.5], $p=.002$), lower fear of sleep ($b=-6.5$, 95% CI [-9.6, -3.4], $p<.001$), and better overall sleep quality ($b=-2.0$, 95% CI [-3.1, -0.8], $p=.001$). No significant differences in objective measures of sleep via actigraphy were identified, including sleep onset latency ($b=-4.3$, 95% CI [-11.4, 2.9], $p=.243$), wake after sleep onset ($b=5.8$, 95% CI [-1.7, 13.4], $p=.130$), sleep duration ($b=-8.1$, 95% CI [-28.2, 12.1] $p=.429$), and overall sleep efficiency ($b=-0.9$, 95% CI [-3.6, 1.9], $p=.530$).

Principle Conclusions: For veterans with PTSD, service dogs may significantly impact subjective, but not objective sleep quality, demonstrating their potential influence on areas of sleep unrelated to movement. Results also highlight the importance of investigating subjective sleep measures alongside any movement-based devices to better understand nuanced sleep related functional impairments.

Session B - ID #: 10 The Combined Use of Physiological, Endocrine, and Behavioural Parameters for the Evaluation of Dog Welfare During Animal Assisted Interventions With Elderly People: Preliminary Results

Ms. Carmen Borrelli, Ms. Giulia Granai, Prof. Francesco Paolo Di Iacovo, Prof. Angelo Gazzano, Prof. Chiara Mariti

University of Pisa, Pisa, Italy, Italy

Despite the great interest for Animal-Assisted Interventions (AAIs), the welfare of involved animals is still under-researched. This study aims at monitoring the welfare of 11 dogs involved in animal assisted education in two nursing homes within the In-Habit project H2020 (grant n. 869227).

Physiological (heart rate, blood pressure, and rectal temperature), endocrine (saliva oxytocin and cortisol concentrations CC), and behavioural parameters (occurrence of stress signals) were collected at three time points: at home (basal), before (T0) and after (T1) a session.

Statistical analysis comprises descriptive (percentiles and normality test) and non-parametric (Wilcoxon rank test) analysis.

Results highlighted a high variability in basal CC compared to T0 and T1. In addition, a significant decrease was observed in CCs at T1 compared to both basal ($p=0.021$) and T0 ($p=0.017$). Oxytocin concentrations tended to increase throughout the collections ($p=0.069$). Physiological data did not report any significant differences, nevertheless, a high

variability for basal heart rate was observed compared to T0 and T1. Occurrence of stress behaviour were not correlated with CC.

Variations in basal CC and heart rate may be due to the diversity of home environments, while procedures before and after AAI might be more standardized for the dogs. The significant decrease in cortisol levels after AAI might suggest a low level of stress during the sessions, indicating that handlers effectively safeguarded the dogs' welfare. Nevertheless, CC at T0 was already elevated and this may be linked to the extended car travel (>1h) to the location. The slight rise in oxytocin may be the result of positive human interaction, but the lack of prolonged engagement with elders during session could explain the absence of significant results.

In conclusion, activities in nursing homes did not compromise the welfare of the dogs, as indicated by cortisol and oxytocin concentrations. Further research is needed to explore the importance of considering external factors, such as car travel, in interpreting endocrine parameters.

Session B - ID #: 11 Piecing Together the Puzzle: Horse Owner Sense-Making Around Unwanted Horse Behaviour Using Online Forums

Dr Tamzin Furtado¹, Professor Elizabeth Perkins¹, Dr Gemma Pearson², Professor Catherine McGowan¹, Professor Carri Westgarth¹, Professor Gina Pinchbeck¹

¹University of Liverpool, Liverpool, United Kingdom. ²University of Edinburgh, Edinburgh, United Kingdom

Intro: In past decades, research and knowledge around horse behaviour and training has progressed, leading to updated recommended practices. However, owner understanding of horse behaviour has received less research attention. This study explores the perception of horse owners participating in discussions about unwanted horse behaviours.

Methods: Two regularly-used equine discussion fora were identified, and 17 discussion threads involving conversation around horse behaviour were collected over a two-month period. Data were anonymised and subject to thematic analysis to identify common themes.

Results: Unwanted behaviours discussed included ridden problems such as: bolting, bucking, inattention, head tossing and others; and handling problems including grumpiness, refusing to be mounted, difficulty leading. Most commonly, participants discussed the need to "rule out pain" as a potential cause; however, how pain could be identified was not explained beyond consulting a professional (e.g. veterinarian), and no one professional role was viewed as being able to fully "rule out pain". Beyond pain, participants discussed 28 potential causes of behaviour, ranging from excitement through to purposeful naughtiness, and inappropriate equipment use. In order to identify which

cause might apply in each case, participants utilised a dynamic, long-lasting process of piecing together evidence, such as the timing and location of the behaviour, characteristics of the horse (e.g. age, breed), and known history. No one cause particularly linked with any one type of unwanted behaviour, and participants perceived each case as being a unique interplay between the horse-rider relationship and potential contributing environmental factors.

Implications: Horse owners were aware of a range of potential reasons for unwanted behaviours, and the need to explore the reason for the behaviour occurring in order to find a suitable solution. This exploration was dynamic, complex, and unstructured, and thus owners may require intervention to support decision-making, particularly in relation to complex issues such as identifying pain.

Session B - ID #: 12 Horses' Behavioural Responses During Therapeutic Riding: A Field Study
Dr.ir. Kathalijne Visser, Ir. Lianne Jens, Ir. Lydia Nieuwe Weme, Pieter Tromp, Drs. Kyra Maarleveld, Drs. Sandra Haven-Pross
Aeres University of Applied Sciences, Dronten, Netherlands

Introduction: While there is a growing body of evidence on human benefits of animal-assisted interventions, relatively little research has been conducted on how horses perceive these interventions. The aim of this study was to examine the relationship between noticeable behaviours of horses during therapeutic riding indicative of their affective state.

Methodology: Horses were monitored for two months, and behaviour of each therapeutic riding lesson was scored after the lesson. Twenty-one behaviours were selected for the study. Riding instructors underwent training in scoring utilizing this approach. Principal Component Analysis was used to extract underlying factors of the behavioural responses of horses during lessons. In order to determine the influence of equine and session related variables on the PCA factor scores, multiple linear regression was performed, using information criteria to determine the important variables.

Main results: The study included 13 horses that were continuously monitored for a period of two months resulting in data of 398 lessons. The average age of the horses was 12 (range 2-28) years. The PCA revealed four factors with eigenvalue above 1 explaining 72 percent of the total variation. The factors were labelled as: 'building tension', 'agitated', 'release tension', and 'comfortable'. Therapeutic riding lessons lasted on average 30 tot 45 minutes with a frequency of 3.5 per week. More people around the horse during the lesson was positively associated with 'building tension' and with 'agitated'. Moreover, when client sits unbalanced, this was positively associated with 'agitated' ($P < 0.005$).

Principal Conclusions and Implications for Field: Knowledge of how horses perceive therapeutic riding lessons is beneficial for the welfare and safety of both the client and the

horse. This study revealed how behavioural responses indicate different emotional states during the lessons. Key characteristics of horses, their management, the client, and the instructor influence the affective states of the horses.

Session B - ID #: 13 Free-Ranging Dogs Are Capable of Individual Human Recognition
Srijaya Nandi¹, Mousumi Chakraborty¹, Aesha Lahiri¹, Hindolii Gope¹, Sujata Khan Bhaduri²,
Dr. Anindita Bhadra¹

¹Indian Institute of Science Education and Research Kolkata, Kolkata, West Bengal, India.

²Indian Institute of Science Education and Research Mohali, Mohali, Punjab, India

Introduction. Individual human recognition is important for species that live in close proximity to humans. Numerous studies on domesticated species and urban-adapted birds have highlighted this ability. One such species which is heavily reliant on humans is the free-ranging dog (FRD). We investigated if FRDs are capable of identifying the person rewarding them and the amount of time required for them to learn it.

Methodology. We conducted field trials on randomly selected adult FRDs in West Bengal, India. On Day 1, a choice test was conducted. The experimenter chosen did not provide reward while the other experimenter provided a piece of boiled chicken followed by petting. The person giving reward on Day 1 served as the correct choice on four subsequent days of training. Day 6 was the test day when none of the experimenters had reward. We analyzed the choice made by the dogs, time taken to approach during the choice tests and the socialization index (SI) which was calculated based on the intensity of affiliative behaviour shown towards the experimenters.

Results. The percentage of correct choice was significantly higher on the fifth ($\chi^2= 8.99$, $df=1$, $P= 0.003$) and sixth day ($\chi^2= 6.516$, $df=1$, $P= 0.011$) compared to the first day, indicating learning. A GLMM with binomial distribution indicated SI and day of experiment to be significant predictors of the dog's ability to make a correct choice.

Conclusions and Implications. This study accounts for the first time the ability of individual human recognition in free-ranging dogs and the amount of time required for it. Due to the territorial nature of FRDs, they have a high probability of encountering the same people multiple times on the streets. Being able to distinguish individual humans might be helpful in making decisions regarding people from whom to beg for food or social reward.

Session B - ID #: 14 Tendency of Approach in Pups and Juveniles of Indian Free-Ranging Dogs

Arpan Bhattacharyya, J.V.R Abishek, Mainak Mitra, Dr. Anindita Bhadra

Indian Institute of Science Education and Research Kolkata, Mohanpur, West Bengal, India

Introduction: The tendency to approach other individuals is called sociability. It is an important personality trait in animals. Free-ranging dogs (FRDs), the model organism of this study, are group-living canids not directly supervised by humans and inhabit diverse human-dominated landscapes. By virtue of their habitats, FRDs come in frequent contact with humans and receive contrasting treatments. This study aimed to investigate whether anthropogenic disturbance affects aspects of sociability in early life-history stages of FRDs.

Methodology: Mother-litter units of FRDs were randomly selected in diverse locations of southern West Bengal, India. An unfamiliar experimenter proceeded with 2 phases: a 30 seconds low-motivation phase, where only a positive auditory cue was given followed by a 30 seconds high-motivation phase, where a food reward (glucose biscuit) was added along with the auditory cue. In both the phases, the experimenter stood >1.5 meters from the dogs. Approach was considered if at least one pup/juvenile of an unit came within 0.3 meters of the experimenter in the low-motivation phase or inspected/ate the food in the high-motivation phase.

Results: Analysis of N=30 units with 121 dogs revealed that although number of units with approaching pup(s)/juvenile(s) did not vary with human footfall (contingency χ^2 test; $p=0.29$), number of units with pup(s)/juvenile(s) approaching in high-motivation phase was higher in low footfall sites (Fisher exact test; $p=0.03$).

Conclusion: Although human disturbance did not affect the decision of approach in pups and juveniles, it affected the pattern of approach. Pups/juveniles in low footfall sites approached more when given high-motivation/food reward. This helps us identify aspects of personality in FRDs, how anthropogenic disturbance plays a role in development of personality traits and in turn aids in explaining drivers of dog-human conflicts in the streets of the Global South.

Poster Session C: Human-Animal Culture

1:15am-12:30pm Saturday, 29th June, 2024

Session C - ID #: 1 "Know Your Horse" Ethnographic Insights on Epistemological Ethics and British Equestrianism

Dr Rosie Jones McVey

University of Exeter, Exeter, United Kingdom

Introduction, Objectives, and Methods: This presentation draws on research which set out to investigate the ethics and politics of British equestrianism, using anthropological frameworks and ethnographic methods (Jones McVey, 2023). These methods consisted of fourteen months of fieldwork, including participant observation, focus groups, informal interviews, and audio-recorded riding sessions, with around 200 horse riders, owners or

professionals participating in the project, and around 35 participating as long-term interlocutors in greater depth.

Results and Conclusions: British horse owners employ epistemological ethics in order to navigate their path through a field of contested expertise, critique, invention and debunking. 'Epistemological ethics' refers to the way people evaluate and judge themselves and others in relation to what it means to know well. Whether of 'traditional' or 'alternative' bent, many horse owners have some things in common, for example, many are sceptical about prescriptive systems ("cults" or "dogma"). They critique one another for 'labelling' horses with human-held meanings, which is held at odds with authentically attending to horses as responsive, idiosyncratic beings. This suggests riders hold a meta-ethical imperative to construct their ethical relationships through feel, rather than through the application of formal, prescriptive, and generalised codes. In the end though, this meta-ethic is never completely satisfied, since riders rely upon systems of pedagogy and (sometimes new) conventional descriptions even though they are suspicious of the programmatic nature of those forms. This presentation hopes to set up new parameters for the contrasts and comparisons between 'us' and 'them' in equestrian ethics, looking instead to recognise new forms of similarity and difference in terms of our ethical relationships with knowledge. This may help to foster better communication across lines of conflict, and to generate new solutions to ethical predicaments.

References: Jones-McVey, Rosie. (2023). Human-Horse Relations and The Ethics of Knowing. Routledge.

Session C - ID #: 2 Understanding Kitten Fostering and Socialization Practices Using a Mixed-Method Survey

Dr. Courtney Graham¹, Dr. Katherine E. Koralesky², Dr. David L. Pearl¹, Dr. Lee Niell
¹Ontario Veterinary College, Guelph, ON, Canada. ²University of British Columbia, Vancouver, BC, Canada

Introduction: Many companion kittens entering shelters are fostered by volunteers over their socialization period, during which experiences are critical to behavioural development and kitten welfare. Yet, little is known about the socialization practices that foster parents use, particularly for fearful kittens.

Methodology: We used a mixed-method survey to investigate kitten foster parent demographics, personality traits, and current practices around kitten care that are relevant to optimal behavioural development and welfare. We analyzed qualitative data using qualitative descriptive analysis and quantitative data using a multivariable logistic regression model.

Results: Foster parent participants worldwide (n=487) provided insight into their fostering practices, resources needed, and challenges faced for providing optimal socialization. Most foster parents provided kittens with recommended socialization experiences, such as handling and play opportunities, and adapted practices for fearful kittens, such as ensuring gradual and positive experiences and considering kittens' agency. Foster parents felt supported through shelter-supplied resources, external support, and having access to socialization opportunities (e.g., children, other animals). Challenges included personal (e.g., time constraints), shelter-specific (e.g., lack of support), and kitten-specific issues (e.g., illness). Some non-recommended techniques (e.g., flooding) were reported for socializing fearful kittens. Foster parents with a higher level of agreeableness personality trait had decreased odds of mentioning the use of these techniques (OR=0.69; 95%CI: 0.50, 0.95; p=0.021), whereas those whose fostering practices had been impacted by the COVID-19 pandemic had increased odds of mentioning the use of these techniques (OR=2.74; 95%CI: 1.35, 5.55; p=0.005).

Conclusions: This study highlights areas where further resources are needed to ensure foster parents provide optimal socialization and to address the challenges they face. Provision of education to prevent flooding of fearful kittens is a particularly important area for improvement. These findings can help shelters improve their fostering programs while enhancing the behavioural development and welfare of kittens in foster care.

Session C - ID #: 3 The Role of Perception of Animal Mind in Explaining Violence Against Animals: Moral Status Versus Anthropomorphization

Agnieszka Potocka¹, Maksymilian Bielecki²

¹The Maria Grzegorzewska University, Warsaw, Poland. ²SWPS University, Warsaw, Poland

Introduction. In two studies, we investigated the role of perception of animal mind in morality and explaining violence against animals. We examined the function of perception of two sets of animal mental capacities. The first set, referred to as the experience dimension, covers capacities to feel hunger, fear, pain, emotions, as well as consciousness and personality, which allow people to establish animals' moral patient status. The second set, referred to as anthropomorphization, consists of the capacity for reasoned action, self-control, planning, and thoughts.

Methodology. We conducted correlational (N = 532, 91% women) and quasi-experimental (N = 533, 50% women) studies. We measured the acceptance of instrumental violence against animals, perception of the two sets of animals' mental capacities, and intuitive morality according to the Moral Foundations Theory. To reveal the function of mind perception in morality, we conducted regression and mediation analyses and tested the model with care and authority intuitions as predictors, experience dimension of animal mind and anthropomorphization as two mediators, and instrumental violence as the dependent variable.

Main Results. We found a contradiction in participants' moral foundations: care correlated negatively, while authority correlated positively with the acceptance of instrumental violence. Moreover, only the perception of the experience dimension of animal mind plays a mediatory role in tested model, while anthropomorphization does not serve the same function.

Principal Conclusions and Implications for Field. We infer that when people have opposing moral intuitions in care and authority, they regulate this contradiction by establishing the moral patient status based on the perception of the set of animals' experience capacities, not by anthropomorphization based on the perception of the agency capacities. People do this to avoid moral ambivalence or dissonance, fear of moral judgment and deterioration of social relationships.

Session C - ID #: 4 Sun, Sea, and Cats: Humano-Cat Cultures of the Costa Del Sol, Spain
Dr Kris Hill
University of Exeter (Alumni), Berlin, Germany

Introduction:

While not a typical tourist attraction, many people enjoy seeing healthy, happy cats (*Felis catus*) and are disturbed by an abundance of sick or abused animals. An understanding of both feline and human needs, wants, and desires, within a specific cultural context, is imperative for harmonious multispecies co-existence. This multispecies ethnographic study of a cat colony on the Costa del Sol, Spain, explores cat-human relations within a 'sun and sea' style holiday destination.

Methodology:

Data collection and analyses consisted of three complementary approaches, namely a thematic analysis of observations and interactions with free-living cats, combined with qualitative interviews, and a discourse analysis of TripAdvisor reviews of hotels, cafes, and restaurants within the vicinity.

Main results/findings:

Individual cats were observed occupying loosely defined sub-territories and interacting with the same groups of conspecifics. Both fieldnotes and TripAdvisor comments demonstrated that tourists not only observe the cats, but many feed them leftovers and seek physical contact. Furthermore, several cats were observed initiating physical contact with strangers. Emergent themes from the discourse analysis of Trip Advisor comments revealed how the cats are adored, abhorred, pitied, and ignored by human visitors. Comments expressing the sentiment that local cats are an unsightly and unwelcome presence are examined within a broader framework of entitlement and tourist expectations. However, most visitors appear either indifferent towards the cats or express delight at watching and interacting with them. That the cats appear healthy and human-friendly

suggests that most of their interactions with both human residents and tourists were positive.

Conclusions and implications for the field:

These findings provide insight into how local cats interact with human residents and tourists, and vice versa. They also form the basis of an ongoing longitudinal study and will inform comparative studies where cat-human relations are less harmonious and where welfare concerns arise.

Session C - ID #: 5 Visitor Perceptions of Temple Elephant Welfare Intervention
Rachna Subramanian, Dr Tracie McKinney
University of South Wales, Pontypridd, United Kingdom

Introduction: Captive elephants are an iconic part of South Indian temples and are worshipped. Ironically, their living conditions do not correspond with their cultural importance. They endure behavioural restrictions, social isolation, un-natural environments, and modified diets which severely impact their overall wellbeing. Temple elephants earn revenues as they attract public who in turn possess power to regulate the welfare status of temple elephants. This study aimed to survey the public regarding their perspectives and willingness to support improvement of temple elephant welfare and their reasons for doing so.

Methodology: An anonymous survey consisting of 14 questions was distributed via Facebook. The survey had scenario-based questions that collected demographics, people's opinions and their position on supporting poor welfare mitigation for temple elephants. While the survey was targeted at people who have visited temples, people of all ages and nationalities were invited to take it, which totaled to 259 people. The data collected was analyzed statistically with SPSS software to find dominating perceptions and reasons behind them.

Main Results: Analyses revealed that 87% of 289 people supported improvement of temple elephant welfare. Their support was determined by age; younger people were more likely to report support for elephant welfare than older people. Knowledge regarding the current situation of temple elephants in India was another factor to influence their support. Lastly, cultural attachment to elephants did not determine their support for poor welfare mitigation, rather their personal wish to conform to changes in temple rituals for the sake of elephants did.

Principal Conclusions and Implications for Field: The new insights provided on the public perception of temple elephants and can aid in formulating culturally sensitive mitigation strategies. More investigation on how public can participate in improving temple elephant

welfare beyond providing financial support for temples would be a revolutionary step towards transforming temple elephant lives.

Session C – ID #: 6 A Closer Look at Relinquishment: Unpacking the Reasons for Giving Up Companion Dogs

Dr Sarah K Weidman, Dr Katrina E Holland, Dr Ben Cooper, Dr Rachel A Casey, Dr Robert M Christley

Dogs Trust, London, United Kingdom

Introduction: Behavioural issues are regularly cited as the biggest reason for the relinquishment of companion dogs. However, previous work in this area often does not speak to the complexity of how behaviour relates to other factors. The aim of this study was to take a closer look at why owners choose to relinquish their dogs, specifically exploring (a) which factors are most frequent vs. considered most important and (b) the interplay between dog behaviour and owner-related factors.

Methodology: 190 respondents (living in the UK or ROI) who had relinquished a dog in the previous five years completed an online survey. Respondents were asked to select all factors that had contributed to their decision to relinquish a dog, and to rate each factor on importance. A hierarchical cluster analysis was used to identify which factors were often selected together.

Main Findings: The most frequent reason cited for relinquishment was ‘the dog’s behaviour’ (52%). Conversely, the reasons considered most important were ‘fleeing domestic abuse’ and ‘a child in the household/family does not get on with the dog’. A majority of respondents selected two or more reasons. To explore which reasons typically grouped together, a Manhattan 4-cluster solution was determined as most discriminatory and used to identify four ‘relinquishment profiles’, in which behavioural issues often co-occurred: (1) issues between household dogs (n= 20, 100% included behaviour) (2) adult/child fear of dog (n= 46, 90% included behaviour) (3) insufficient support and time/financial constraints (n= 18, 61% included behaviour), and (4) human health and financial constraints (n= 29, 31% included behaviour).

Principal Conclusions: Dog behaviour as a reason for relinquishment often needs to be considered in relation to owner-specific factors, rather than as an isolated factor. This has implications as to how relinquishment due to behaviour is discussed by rehoming organisations and the wider dog welfare community.

Session C – ID #: 7 Great Expectations Meet the Sobering Reality of Adopting a Dog! The Adopters’ Stories

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1The University of Queensland, Brisbane, Queensland, Australia. 2RSPCA Qld, Brisbane, Queensland, Australia

Introduction: The adoption (re-adoption) journey for dogs and adopters can be challenging. It may take several attempts to find a long-term home. The paper provides a unique insight into the adopter's journey up to four years post-adoption. It explores the complexities of building a positive human-animal relationship and successful adoption.

Methodology: Thirty-one adopters were interviewed using semi-structured interviews. The cohort of dogs included those identified as more likely to be returned. The data were then analysed using thematic analysis.

Main findings: Adopters believed it takes time to build mutual trust and learn the dog's limits in various contexts and situations. It was also acknowledged that owners might need to moderate expectations to create a safe space for dogs and humans, with several commenting that 'you take them on for life' and that navigating the canine-human relationship can be frustrating and challenging.

Principal conclusions and implications for the field: When the expectations and reality of caring for a dog are unmet, life can be rough and muddied. Many adopters in our study admitted their expectations were unrealistic and realised they were ignorant of the time and patience needed to build a positive relationship with their new dog.

Using real-life stories of dogs and their adopters as a resource for shelter staff and adopters could provide greater insight into the adoption journey from the perspective of previous adopters. Stories could be a powerful resource available to shelters to improve the well-being outcomes for all animals in their care.

Session C - ID #: 8 The Pet Education Partnership: Advancing Animal Welfare Education Through Collaboration

Kerry Taylor¹, Tracy Genever¹, Anna Baggott², Rebecca Ashman², Shelley Brown³, Maria Kyle⁴, Louise Doran⁴, Aimee Griffiths⁴, David Allen⁵, Caroline Francoli⁵, Anna Cowling⁶, Chris Bennett⁶, Siobhan McHaffie⁷, Lauren Agnew⁷, Justine Noon⁸, Emily Smith⁸

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In 2023, the Pet Education Partnership (PEP) marked significant milestones in its mission to promote animal welfare education across primary schools in the UK. This collaborative effort by leading UK animal welfare charities: PDSA, RSPCA, Blue Cross, Cats Protection, Dogs

Trust, Woodgreen, USPCA and Scottish SPCA, aims to make animal welfare education accessible to children aged 5 to 11.

Key achievements in 2023 included the expansion of PEP, welcoming two new partners, USPCA and Scottish SPCA, to reach a broader audience nationwide. Additionally, PEP launched a website, supported by UK Pet Food (UKPF), facilitating nearly 4000 downloads by year-end.

Collaborative efforts resulted in the creation of engaging learning resources, notably a session on Animal Sentience endorsed by charity ambassador GB Gill. The partnership's digital event on World Animal Day attracted over 2000 primary school children, fostering active participation and prompting insightful discussions on animal welfare.

Looking ahead to 2024, PEP plans to develop additional content, conduct research in collaboration with Defra and YouGov, and host a series of digital events. Training for educators, impact measurement tools, and market research will further enhance PEP's outreach and influence.

Challenges in 2023, including capacity constraints and lengthy approvals, were mitigated through agile project management and effective communication strategies. PEP's successful navigation of these challenges underscores its commitment to advancing animal welfare education and shaping the future of responsible pet ownership in the UK.

Working together under the PEP umbrella has promoted a sense of unity and shared purpose among partner organisations. By aligning their efforts towards a common goal, PEP members have demonstrated the potential for collective impact and meaningful change in the field of animal welfare education.

Session C – ID #: 9 A Burden on Four Paws? – Systematic Overview of the Role of Responsibility in the Relationship with Pets

PhD Christine Krouzecky, Dr. Birgit Ursula Stetina
Sigmund Freud University, Vienna, Austria

Introduction: Anthrozoological research has changed and stressful factors in human-animal relationships have come to the fore. These factors are particularly evident in long-term bonds with pets while several studies investigating short-term interactions with animals continue to show positive bio-psycho-social effects. This leads to the question of the source of this ambiguity. We propose that the level of responsibility is of particular importance for various effects of the human-animal bond. For this reason, the research group examined the relationship between humans and animals in three environments with different levels of responsibility towards the animal (AAs, pet-ownership and veterinarians).

Methodology: Using cross-sectional mixed-methods designs, three settings in which humans enter into different types of relationships with animals were examined with regards to stressors and positive effects using an online-questionnaire with open and closed questions.. Short-term interactions (AAIs) were investigated regarding the effectiveness of dog-assisted interventions in socio-emotional competencies and with the focus on veterinarians. Long-term relationship were analyzed using pet ownership. Results from all three settings were then subjected to a systematic analysis.

Main results/findings: The systematic overview shows that short-term interactions in the form of AAI have consistently positive effects on people's well-being. In contrast, pet ownership might be associated with pet-related stressors and a reduction in quality of life when compared with non-pet owners ($t(201)=-2.38, p=.019$). Additionally, the second short-term setting (veterinarians), showed that the focus was even more strongly on stressors related to interactions with treated animals.

Principal conclusions and implications for the field: Results support the idea that the level of responsibility is of particular importance. The whole range of results should be taken into account in order to avoid sweeping statements about positive effects of the human-animal relationship in the future. These might lead to (false) expectations of pets harming our relationships with them.

Session C - ID #: 10 A Study to Assess the Human Pet/domestic Animal Interaction
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A random cross sectional survey was conducted to assess the human pet/domestic animal interaction. The study was conducted by a physical survey done among a total of 1452 participants in Karnatak state India under a project funded by Indian council of Medical research. The questionnaires were designed in such a way to assess human animal interaction by using Pet attachment scale (PAS) and Perceived stress scale (PSS). The survey participants were from urban (41.25%), semi urban (21.35%) and rural (37.40%) parts of Karnataka and the data was collected from both pet owners and non pet owners. The data obtained from the survey was classified according to gender, marital status and whether they owned a pet (N=1446) or non pet owners (N=196). The data was subjected to statistical analysis using Graph pad Prism software. The total score obtained by the participants with respect to the schedule on Pet attachment scale revealed that there is significant difference between rural, urban and semi urban pet owners and non pet owners (P. There was also significant difference between the perceived stress scale (PSS) between the pet owners and non pet owners of different regions. The pet owners who are married

(N=1154) and having a pet also showed highly significant perceived stress level than the unmarried (N=697). The male unmarried showed lesser significance when compared to female who has highly significant level of PAS as well as PSS. This study gave an idea about the level of stress a pet owner experiences and further studies needs to be undertaken.

Session C - ID #: 11 Dimensions of Dog Acquisition: Understanding How to Better Capture a Complex Process

Dr Rebecca Mead, Dr Katrina E Holland, Dr Melissa M Upjohn, Dr Rachel A Casey, Dr Robert M Christley

Dogs Trust, London, United Kingdom

Introduction: Dog acquisition is a complex and understudied process. Existing studies use variable, and often limited, measures of the characteristics of the acquisition process, making interpretation and comparison difficult. As acquisition practices can impact canine behaviour, health and welfare, better understanding is needed to inform strategies to promote responsible acquisition practices. The aim of this study was to suggest key 'dimensions' that enable better characterisation of the complicated nature of dog acquisition.

Methodology: A 2019 online survey of current (n=8,050) and potential (n=2,884) UK dog owners collected quantitative and qualitative data about dog acquisition. Two follow-up surveys collected additional data about these potential owners' searches for dogs between 2020 and 2021. Qualitative data were also collected through semi-structured interviews with a total of 170 current and potential owners.

Main findings: Developed from project data, we propose ten "dimensions of dog acquisition" that should be considered when designing questions about how people get dogs. These consist of: the origin of a dog ([i] type, [ii] location, and [iii] motivation of source); [iv] how a potential owner became aware of the dog; [v] the nature of any transaction or sale; [vi] communication and [vii] relationship between the owner and source; [viii] interactions between the new owner and their dog, prior to taking their dog home for the first time; [ix] post-acquisition support provided by the source; and [x] whether the acquisition was planned or unplanned.

Principle conclusions and implications for field: The dog acquisition process is complicated: it is not easy to measure or summarise within one simple question. Instead, we propose ten aspects that enable better description of the dimensions of dog acquisition, based on a large-scale research project. Findings may be of interest to academics and organisations involved in pet welfare who wish to better understand the acquisition process.

Session C - ID #: 12 Bright Minds & Bushy Tails: Ethnographic Insights from Two Animal-Focused Summer School Courses at Hokkaido University

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This study explored the impact of a 2-week animal-focused summer school course (AC) at Hokkaido University, on graduate students' perceptions, attitudes, and empathy toward non-human animals. Grounded in a social constructivist framework, the research utilized a mixed-methods approach, including quantitative and qualitative surveys, ethnographic field notes, and photographs. Spanning two months, the study also involved extensive field research across Japan, investigating how the experiential dimensions of animal cafes and zoos contribute to a more nuanced understanding of these establishments.

Throughout the course, AC students showed no significant changes in empathy, attitudes, or beliefs regarding animals. However, ethnographic insights unveiled four key themes, related to teaching and learning, observed in two distinct animal-focused classrooms (AC and AC2). Emphasizing a holistic learning environment and student-centric learning, both classrooms transformed challenges into opportunities, placing a strong emphasis on interdisciplinary learning. Collaborative and inclusive classroom dynamics spotlighted problem-solving, adaptability, appreciation of diverse cultural backgrounds, and shared experiences. Further, the application of practical knowledge was illustrated through active participation in experiential activities, and particularly through observing and interacting with animals during field trips to animal cafes and zoos. This focus on being with animals also played a central role in the ethical considerations in animal welfare theme, highlighting responsible interactions in both tourism and educational contexts.

This research provides a comprehensive understanding of teaching and learning practices employed in two animal-focused summer school courses in Japan. Highlighting experiential activities, particularly those involving animals, it also offers valuable insights into ethical considerations in human-animal interactions.

Session C - ID #: 13 Social Kittens: A Quantitative Survey of U.S. Cat Caregiver Attitudes Towards Kitten Socialization Programs

Jennifer K Link, Dr. Carly M Moody

University of California, Davis, Davis, CA, USA

Socialization is important for normal social and behavioral development in companion animals and may help reduce the risk of future fear and aggression related behavior problems. However, little research has focused on kitten socialization and there is a lack of information on caregiver attitudes towards kitten socialization programs. Thus, we used a quantitative online survey to: 1) describe U.S. cat caregiver attitudes towards kitten

socialization, and 2) elucidate aspects of socialization programs deemed important from the caregiver's perspective. Questions included: participant demographics (n=14), caregiver experiences with socialization (n=8), information about participant's cats (n=13), where caregivers receive socialization information (n=8), and ratings of various aspects of socialization (n=2). Participants were recruited via an advertisement posted on social media and an online news article. Of the 2,238 complete responses, participants were primarily women (74.7%) owning two or more cats (71.8%) who had not worked with cats professionally (72.9%). Most participants had not heard of socialization programs for kittens (69.3%) although they would be interested in enrolling in a future program (50.4%). Caregivers reported receiving socialization education from the internet (52%), with less indicating their veterinarian (31.2%) and/or shelter staff during cat adoption (20.3%). Participants indicated important aspects of kitten socialization programs as: strategies to reduce problem behaviors (87%), education about cat body language (85.8%), and getting kittens used to handling (83.1%). A logistic regression revealed that caregivers whose cat currently exhibits elimination behavior problems had an increased interest in attending a future socialization program (OR=1.73, 95% CI [0.15, 0.94], p=.006). Overall, these results suggest a lack of caregiver awareness and education on kitten socialization despite many being interested in enrolling in a future program. Future research should explore methods to improve access to reputable kitten socialization information, elucidate components of current socialization programs and assess their impact on future cat behavior.

Session C - ID #: 14 The PET@home Toolkit: (Preliminary) Results of a Process-Evaluation Study

Peter W.A. Reniers¹, Prof. dr. Karin Hediger¹, Ine J.N. Declercq², Em. Prof. dr. Marie-José Enders-Slegers¹, Prof. dr. Debby L. Gerritsen², Dr. Roeslan Leontjevas¹
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Introduction: In previous work, we used a participatory research approach to develop the PET@home Toolkit. The aim of the Toolkit is to support pet ownership in long-term home care by fostering awareness of challenges, promoting mutual understanding, improving communication, and facilitating planning concerning pets. This study aimed to collect feedback from stakeholders who have used the PET@home Toolkit to improve its materials.

Methodology: Professional caregivers, clients receiving long-term care while living at home with pets, and their family caregivers, all of whom used Toolkit materials, were invited to participate in individual semi-structured interviews. The interview topics were based on a process evaluation framework in long-term care, focusing on satisfaction, quality/relevance, feasibility, and implementation characteristics of the Toolkit materials. Two researchers independently analysed interview transcripts using ATLAS.ti for Windows. Subsequently, discussions were conducted until consensus was reached on themes related to the interview topics.

Main Results/Findings: The results will be updated prior to the congress. Until February 2024, we had conducted and analysed eight interviews involving professional caregivers (N=4), clients receiving long-term care at home (N=2), and family caregivers (N=2). Outcomes were discussed within the work group, two additional interviews with professional caregivers showed data saturation. Preliminary themes emerged for each topic: Satisfaction (design, language, usefulness), relevance (awareness, context, repetition, pet-related challenges), feasibility (quantity, daily practice, instruction), and implementation (pilot study, digitalisation, individual support workers, team meetings).

Principal conclusions and implications for the field: Overall, participants expressed positive views about the PET@home Toolkit and its materials. Various suggestions were identified to improve Toolkit materials, aiming to better align them with the daily practices of long-term home care. The experienced pet-related challenges underscore the importance for organisations in home care to pay attention to clients' pets.

Session C - ID #: 15 Moral Disengagement in Animal Abuse: Validation of a New Measure for Adolescents

Mr Sergio Almeida, Mr Enrique Chaux
Universidad de los Andes, Bogotá, Colombia

Introduction. Measuring moral disengagement in animal abuse (MDAA) is crucial to advancing our understanding of how to prevent it. However, the only known measure for MDAA assesses it in meat consumption (Graca et al., 2016). This research sought to validate a new, more general measure for MDAA with adolescents: the MDAA Scale (MDAAS).

Methodology. Based on a literature review, an initial set of 21 items related to 7 types of animal abuse was developed. In Study 1 (319 participants from 9th to 11th grade of a school in Bogotá) EFA was conducted to assess factor structure. In study 2 (224 participants from 8th and 9th grades of 2 schools in Bogotá) CFA, internal reliabilities, test-retest reliability, and convergent correlations with related measures were evaluated. Analysis was made with Jamovi 2.8.28.

Results. Study 1: EFA showed a four-factor structure, explaining 58.2% of the variance for 15 items with a factor loading $> .50$. Study 2: CFA revealed that the model met three criteria for model fit ($\chi^2/df = 1.96$; CFI = .91; SRMR = .06) and values close acceptable for other two (TLI = .88; RMSEA = 0.0653). Cronbach's Alpha suggested acceptable internal consistency for the full scale and for factors 2 and 3 subscales ($\alpha > .78$); also values close to acceptable for factors 1 and 4 subscales ($\alpha > .66$). Test-retest reliability was significant for participants who completed MDAAS again two months later (Rho = .61; $p < .001$). As expected, MDAAS correlates negatively with a measure of animal-oriented empathy (Rho = $-.343$; $p < .001$), and positively with measures of speciesism (Rho = .480; $p < .001$) and moral disengagement in meat consumption (Rho = .395; $p < .001$).

Conclusions. These findings support the validity of the MDAAS and open the possibility of conducting quantitative studies on MDAA beyond meat consumption.

References: Graça, J., Calheiros, M. M., & Oliveira, A. (2016). Situating moral disengagement: Motivated reasoning in meat consumption and substitution.

Session C - ID #: 17 Are Cat Owners Failing Their Pets? Provision of Resources in Multi-Cat Households

Rachel Malkani, Emma Tipton, Lynne James, Rebecca Ashman, Abi Collinson, Sean Wensley, Anna Baggott
PDSA, Telford, United Kingdom

Introduction:

Published annually since 2011, the PDSA Animal Wellbeing (PAW) Report provides UK companion animal welfare surveillance to identify trends and priorities, and to promote and monitor change. The Report is nationally representative of the UK dog, cat, and rabbit owners.

The optimal number of resources is important for ensuring good welfare in cats (Finka & Foreman-Worsley, 2022). Generally, it is recommended that in multi-cat households each cat should have one resource each plus an additional one to ensure they can access resources at all times to avoid conflict.

Method:

In 2023, we have asked 2,452 UK cat owners questions surrounding the resources they provide cats that live in multi-cat households*.

Results:

58% of cats living in multi-cat households had one or no litter trays.

51% of cats living in multi-cat households had one or no scratching posts.

48% of cats living in multi-cat households had access to one or no water bowls.

42% of cats living in multi-cat households had access to one or no cat beds.

41% of cats living in multi-cat households had access to one or no high places.

13% of cats living in multi-cat households had access to one or no food bowls.

Discussion:

The results suggest that a large proportion of cats living with other cats lack sufficient resources, potentially contributing to feline stress. Increasing resource availability provides cats with a better sense of control and more security in their

environment. Educating owners about the importance of resource availability is key to improving this aspect of cat welfare.

References

Finka, L. R., & Foreman-Worsley, R. (2022). Are multi-cat homes more stressful? A critical review of the evidence associated with cat group size and wellbeing. In *Journal of Feline Medicine and Surgery* (Vol. 24, Issue 2). <https://doi.org/10.1177/1098612X211013741>

*Both indoor and outdoor cats, households of 2 or more cats

Session C - ID #: 18 Dog Adoption Process in Italian Shelters: A Survey-Based Pilot Study
Doctor Emma Bassan¹, Doctor Luisa Bellissimo², Doctor Laura Contalbrigo¹, Professor Franco Manti², Professor Barbara De Mori³

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Introduction: Dog shelters play a crucial role in the delicate process of adoption. They handle the first encounter between two species that will undertake a journey of mutual acquaintance. The shelters' responsibility is to ensure the well-being of both the animals and the adopters by evaluating their characteristics and matching them accordingly. This pilot study examined dog adoption process in various Italian shelters, aiming to support their methodologies, to increase adoption rates and to reduce the number of dogs returned or abandoned.

Methodology: Semi-structured interviews with shelters' managers, staff and volunteers were used as starting point for the elaboration of an online survey on the platform Google Forms. The survey prioritized qualitative data and included short and long answer text, multiple-choice questions, check boxes, and multiple-choice grids. Descriptive analysis was employed to investigate the adoption process and other factors that could influence shelters' adoption rates, including dog-training programmes, communication and human resources, as well as structural and economic factors.

Main results: In April 2023, 27 Italian shelters took part in the survey. Participating shelters offer various adoption services, including 85.2% of facilities performing adopter home visits, to ensure living suitability for candidate dogs. Adopter familiarisation with the staff involves meetings (88.9%), often requiring the presence of the entire adopter's family (77.8%) and/or completion of a questionnaire (66.7%). Most shelters carefully analyse the dog-adopter matching process for compatibility (92.6%). Shelters' staff aims to establish a trusting relationship with adopters, maintaining in contact, and conduct post-adoption monitoring (85.2%).

Principal conclusions and implications for the field: This pilot study emphasises the importance of dog-adopter matching and offers guidance for shelters seeking to enhance their adoption programmes, with the goal of improving both well-being and adoption rates. To achieve significant results, further research with a larger sample size will be necessary.

Session C - ID #: 19 The Power of Human Stories in Shaping Horse Worlds and Welfare

Colleen E Winkelman

University of Virginia, Charlottesville, VA, USA

Introduction

In human-equine interaction research, most attention has been focused on either human or horse experience while less has been done to explore how human perspectives shape interaction and affect equine welfare (Luna and Tadich 2019). I address this gap by using participant observation and language socialization theory to understand human-horse interactions as co-creating social identities. I discuss how horses in equine assisted therapies are constructed as social others in their multispecies communities and demonstrate the material impacts this has on horse well-being.

Methodology

I conducted 11 months of participant observation at a collegiate therapeutic riding center in West Texas. Additionally, I interviewed practitioners, volunteers, and clients about their understandings of horses and horse-human interaction in assisted therapies. Interviews were transcribed and analyzed for themes regarding equine therapy, horses, and work.

Main findings

I focus on the decisions to euthanize two horses in my fieldsite: Duchess* an admired retiree and Dalia* a plain pony who became a burden. Duchess' death was continually postponed and ultimately carried out lovingly, while Dalia's death was ordered abruptly and implemented with minimal attention to her comfort. I will show how community narratives which shaped their social identities had a significant impact on such care decisions and their implementation.

Principal conclusions and implications for the field

The stories we tell about animals has the power to create them as social persons which in turn can impact their experience and welfare. When used in combination, narrative analysis and participant observation can provide insight into the unconscious shaping of the human-horse relationship. Bringing attention to this is critical if humans are to engage in multispecies partnerships in an ethical way.

References: Luna, D. and T. A. Tadich. 2019. "Why Should Human-Animal Interactions Be Included in Research of Working Equids' Welfare?" *Animals* 9 (42)

Session C – ID #: 20 Political Orientation Is Associated With Animal Product Consumption Style in Backyard Chicken Keepers

Dr. Ashley J. McFalls, Igor O. Osadchyi, Jordyn M. Hartsock, Rachel E. Casella
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Introduction: We previously reported that chicken ownership was associated with an increased awareness of sentience in chickens and other farmed animals and a shift towards more ethically sourced eggs and meat. Despite reporting high levels of enjoyment of and bonding with their chickens, many chicken owners still engage in varying amounts of animal product consumption. In this study, we examined beliefs and attitudes that influence a chicken owner's decision to consume animal products.

Methodology: Chicken owners completed survey in which they provided their political and dietary identities and then were assessed based on measures of moral disengagement in meat consumption, human supremacy beliefs, level of attachment to owned chickens and type of eggs and meat consumed after owning chickens.

Main results/findings: Political conservatism was associated with higher moral disengagement in regards to meat consumption ($p < 0.001$, $f = 0.54$), particularly concerning denying negative environmental and ethical consequences of meat consumption ($p < 0.001$, $f = 0.48$). Conservative chicken keepers were more likely to identify as dietary "carnivores" and to believe that meat is a necessary part of the human diet ($p < 0.001$, $f = 0.53$). Conservatism was also associated with a higher level of desensitization (to animal killing, butchering, etc.) ($p < 0.01$, $f = 0.24$) and a switch to raising one's own chickens for meat. Politically liberal chicken keepers were more likely to cite ethical concerns as a reason to switching to eggs and meat associated with higher levels of animal welfare and were less likely to believe that humans are superior to non-human animals ($p < 0.001$, $f = 0.42$). However, the switch to eggs and meat associated with better animal welfare after acquiring chickens and level of emotional attachment to chickens was independent of political orientation.

Principle conclusions and implications for the field: Although conservative chicken owners tend to consume greater amounts of meat and dairy, higher levels of desensitization to killing and butchering animals may enable chicken keepers to raise their own animals for meat, a practice that is associated with better animal welfare than factory farm practices.

Session C - ID #: 22 When Dogs Are More Than Just Pets: Exploring the Relationship Between the Social Functions of the Dog, Behaviour, and Management Practices

Laura Gillet^{1,2}, Barbara Simon^{1,2}, Professor Eniko Kubinyi^{1,2}

¹Department of Ethology, ELTE, Budapest, Hungary. ²MTA-ELTE Lendület "Momentum" Companion Animal Research Group, Budapest, Hungary

Introduction: In Western countries, dogs are often regarded as family members, best friends, or even as substitutes for children. While dog companionship is commonly assumed to have emotional benefits for humans, the consequences of attributing such social functions to dogs are rarely investigated from the dog's perspective. Our questionnaire study aimed to investigate the relationship between the social functions of the dog, the characteristics of the owner and the dog, the management practices, and the dog's behaviour.

Method: We collected data from 790 Hungarian dog owners. A k-means cluster analysis identified three profiles of dog owners based on the social functions they attribute to their dog: owners keeping their dog as a *companion animal* (N=153), owners assigning a *dual status* to their dog, including a child-like role and practical functions (N=246), and "*dog parents*" (N=391). A Multinomial Log-linear Model was used to analyze the potential relationship between these profiles and owner variables, dog variables, and management-related variables. Statistical analysis was conducted using R.4.3.2 software.

Main results: Dogs with a dual status were perceived as more obedient, provided higher safety benefits to their owners, and were more likely to be trained with positive reinforcement and professional methods than others. Compared to companion dogs, dogs of owners in the two other groups spent more time with their owner, had younger owners, and their owners experienced more inconsistency in their education.

Principal conclusions and implications for the field: The social functions that humans attribute to pet dogs may have direct implications for dogs' daily lives. Although attributing human-like roles to dogs seems to have some positive effects on canine welfare, their specific needs should not be overlooked.

Poster Session D: Animals in Work, Humans at Work

1:00-2:30pm Saturday, 29th June, 2024

Session D - ID #: 1 Between Heart and Expertise: Caring and Providing in Veterinary Medicine and Animal Welfare

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The driving force behind animal-related careers is often a deep love of animals. This applies regardless of financial reward and social standing. At the same time, societal perspectives on the treatment of animals are constantly evolving, creating complex intersections of personal, institutional, and societal expectations. This can be seen, for example, in conflicts between animal welfare ideals and practical realities.

This article explores the nuanced dynamics within the fields of veterinary medicine and animal welfare, using two qualitative studies rooted in common institutional frameworks. The animal welfare study uses in-depth interviews and ethnographic material to illuminate the complex interactions between animal welfare actors and the animals themselves. In contrast, the second study delves into the perspectives of veterinarians through interviews, providing detailed insights into the specific challenges and decision-making processes within the profession. Applying Strauss' theory of social worlds, the study analyzes the delicate balance between professional distance and personal closeness, care, and nurturing. The aim is to identify similarities and differences in (care) work with animals.

In summary, the analysis of the work with animals in the field shows that challenges and conflicts arise from the tension between personal ideals and institutional guidelines. This discrepancy highlights the differences and similarities in (care) work with animals and emphasizes the importance of a holistic approach that takes into account individual values alongside societal expectations.

Session D - ID #: 2 Anthropomorphism – A Double Edged Sword: Influences on Acceptance of Livestock Keeping

Andrea Knörr¹, Xiao Zhou², Angela Bearth², Michael Siegrist²
1ETH, Zürich, Switzerland. 2ETH, Zurich, Switzerland

Introduction.

The assignment of human-like traits to non-human entities, known as anthropomorphism, can have an impact on how people perceive the world around them. This study aimed to delve deeper into how the act of anthropomorphising a specific animal species affects public opinion on livestock keeping practices. As many people today have no direct experience with livestock keeping, they may be inclined to apply their own preferences and values to their judgement of such practices when it comes to animals.

Methodology.

Building on previous research that has primarily focused on assessing the general tendency towards anthropomorphising, we developed an anthropomorphism questionnaire and assessed the acceptance of livestock keeping practices among a

sample of the Swiss German public (N = 1232) for three commonly farmed animals: cattle, pigs, and poultry.

Main results/findings.

Our research demonstrated a connection between the public's perception of animal husbandry and an anthropomorphic view of animals. This phenomenon displayed two opposing trends: On one hand, anthropomorphizing was associated with a more critical assessment of livestock keeping practices. On the other hand, attributing higher cognitive abilities to animals was linked to a greater tolerance for welfare-infringing livestock practices in cattle and poultry. The tendency to anthropomorphize appeared to be species-specific, with the two mammals studied eliciting a greater tendency to anthropomorphize compared to poultry.

Principal conclusions and implications for the field.

The results imply that the act of attributing human-like characteristics to non-human entities is a complex phenomenon that significantly influences the public's perception of animal husbandry. We discuss that there should be a careful consideration of the potential consequences when employing anthropomorphic depictions in media, advertisements, or political campaigns, as highlighting such features may lead to unintended effects.

Session D – ID #: 3 The Human–Horse Relationship: Human Direct and Meta Perceptions of Its Importance for Performance and Welfare in Equestrian Sport

Miss Lauren R Tufton¹, Dr Nichola Kentzer², Dr Barbara E Kingsley¹

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Introduction: Expanding upon prior qualitative rider–horse relationship research, this quantitative study explored participants' direct and meta perceptions of the importance of a quality relationship between human and horse for performance and welfare in equestrian sport.

Method: A purposeful sample of 204 participants (female = 199, male = 4, undisclosed = 1) from a breadth of equestrian disciplines, both amateur and professional, took part in this study (mean age = 45.9yrs, range = 18–90yrs). Participants responded to a 22-item questionnaire (11 items from a direct perspective [their own] and 11 items from a meta perspective [the horse's, as understood by the human]) using a 7-point Likert scale, ranging from "strongly disagree" to "strongly agree", for both performance and welfare.

Results: Multiple linear regression (MLR) analyses revealed that the predictor variables of closeness (feelings), commitment (thoughts), and complementarity (behaviours) [direct

and meta combined] were all statistically significant at the 0.001 level, with all independent variables contributing significantly to the prediction of the importance of the human–horse relationship for performance; closeness (88.4% variability), commitment (88% variability), complementarity (91.5% variability), and for welfare; closeness (78.9% variability), commitment (82.9% variability), and complementarity (88.8% variability). Interestingly however, further exploration of the *B* values indicated that for both performance [closeness ($B = 3.84$ vs. $B = 2.66$) and commitment ($B = 4.27$ vs. $B = 2.19$)] and welfare [closeness ($B = 3.54$ vs. $B = 2.54$) and commitment ($B = 3.85$ vs. $B = 2.51$)] the meta perspectives were stronger predictors than the direct perspectives.

Conclusion: These outcomes suggest that the quality of the human–horse relationship is perceived by humans to be important for performance and welfare. However, future research and education of applied practice in horsemanship would merit greater focus on human self-awareness and self-regulation strategies to help individuals recognise the role their thoughts, feelings, and behaviours play in the quality of communication with their horse.

Session D – ID #: 4 Two Thousand Years of Life Centered Around Rice Cultivation With Horses and Cattle in Japan – the Roles Played by Horses and Cattle

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Introduction: Rice has been the major food source for over 2000 years in Japan, and cattle and horses have been part of the cultivation. Throughout history, globally, cattle and horses were important transportation means for nomads, major food source, and power source for rice cultivation, and used for ritualistic purpose. The understanding of how they have been handled in the past and how their existence has helped humans survive and prosper can help to know how to treat them in the 21st century. Therefore, we investigated the role that cattle and horses played in old Japan before the door of the country was opened to the West in the mid-19th century.

Methods: Research literatures, books on history and municipal history, and exhibits from museums were used.

Findings: Both cattle and horses were valued power source and asset used by farmers for cultivation and transportation of goods. As late as around the 5th century, they were brought to Japan from the Asian continent by people from overseas. They may have been used as a source of food at that time. The awareness of impurity and the Buddhism–forbidden–killing gradually spread around the 8th century, and the people refrained from eating the meats until the mid-19th century. They were important assets owned by the nobles and those with power and money. Wealthy farmers owned many of them and lend

them out to poor farmers. They were treated well, housed together with human, and treated if injured or sick. Until the arrival of Western livestock-culture, they were not neutered.

Conclusion: Cattle and horses were very close to human in daily life and were important part of the circular agricultural system. We will be investigating how this relationship changed when they turned into food source in the mid-19th century in our future studies.

Session D – ID #: 5 ‘What’s in a Name?’ the Soldier and His Horse as Co-Participators in the Great War

Dr Jane Flynn

The University of Derby, Derby, United Kingdom

‘Fips has come back from leave and is now parted from “His Billy” for the first time in two years.’

During The Great War horse supply was largely a matter, not of names, but of numbers. The War Office saw numbers of horses supplied, numbers on the British Army’s strength, where it would find the thousands more horses, mules and donkeys the War demanded, and how much it would all cost. The personnel of horsed regiments, however, saw their horses from a very different perspective. It was relatively straightforward to think of a horse or mule only as a number while it remained just one of many thousands, but it became increasingly difficult to ignore the character traits that made each animal a ‘person’ once they were issued to their unit. These were named individuals, referred to not as ‘it,’ but as ‘he’ and ‘she.’

That these horses were far from being mere numbers, but were named individuals, only emphasises how fraught the circumstances were in which the soldier–horse relationship was formed. Writing in his diary in September 1918, E.J. Billington expressed concern for one of his drivers knowing, as Fips did not, that his horse was gone. Billington gave no further details as to where or why, but was clearly concerned about how Fips would react. When he referred to the horse of Driver Fips not just as ‘Billy,’ but as as ‘his Billy’ it was because he so closely identified the two with each other. They had been co-participators in the War’s events.

Session D – ID #: 6 Shared Work? Entanglements, Agency and Equids at Work

Tamlin Watson, Dr Cara Clancy, Dr Fiona Cooke

The Donkey Sanctuary, Sidmouth, Devon, United Kingdom

The purpose of this presentation is not to reject animal work entirely (i.e., say that there should be no working animals/donkeys/mules – as the philosophy of “animal liberation” might), but to explore what work might look like to the subjects themselves. We recognise

that some forms of work, when combined with the right environment/working conditions, can create positive experiences for humans and 'other' animals; some work can be stimulating, even enjoyable, for both the 'other' animal and their human worker/owner/companion.

However, there is potential for a significant imbalance of power for all equids at work, ranging from exploitation to utility, wherever they are located and within whatever roles they are employed. This power imbalance is well documented for donkeys and mules working in poor and marginalised communities, which often have extremely poor welfare and minimal agency. Therefore, it is necessary to take a cautious approach with respect to ideas (and ideals) of mutuality and equality in the context of multispecies work, be that in fields, on roads or in assisted activity settings.

We explore the entanglements of relationships in multispecies work contexts using examples from interviews and observation studies involving donkey assisted activities in the UK, and with mules employed for goods distribution in Nepal. Through this exploration, we discover that in both contexts there is some way to go if we are to truly acknowledge the subjectivity of equids that we employ to work with us and in doing so, to increase their visibility, support understanding and encourage appreciation in all contexts.

Session D - ID #: 7 School Dogs: Recommendations for Best Practice

Dr Helen Lewis, Dr Janet Oostendorp-Godfrey

Swansea University, Swansea, Swansea, United Kingdom

This poster presents findings from a study of 800 teachers exploring whether they involved dogs in their schools, and if so what happened when they did. Research (eg Gee et al, 2021) suggests there are benefits of interactions between children and dogs in educational contexts, in terms of social-emotional (eg. Lee et al. 2022), cognitive (eg Hediger et al, 2017) and physical development. But there is a lack of research examining potential challenges and limitations of such approaches, particularly regarding canine well-being (Lewis et al, 2023a, 2023b). The need for guidelines to ensure the welfare of dogs in schools is gaining acknowledgement (Grové et al., 2021).

RQs.

1. Why do schools decide to have a dog?
2. What are school dogs expected to do and what are the implications for their wellbeing?
3. What recommendations can be made regarding effective and ethical involvement of dogs in schools?

An online questionnaire was circulated. Follow-up interviews were conducted with a convenience sample of 10 UK-based teachers. Video case studies were captured to examine interactions between child, teacher and dog. Ethical approval was obtained.

The survey received over 800 responses, from teachers in UK, USA, Europe, Canada, Australia, Thailand, New Zealand, and the UAE. 75% were from the UK. 453 respondents reported involving dogs in school.

Teachers primarily intended the dogs to support pupils' wellbeing. Although perceptions were overwhelmingly positive, there were challenges eg dealing with hygiene, managing over-enthusiastic dogs and children, and in a small number of cases dealing with more serious incidents. Many teachers lacked time to observe the dogs, and lacked confidence in recognising body language cues.

The poster includes key recommendations that would be of interest to practitioners and policy makers regarding best practices, with a focus on careful observation and interpretation of canine communication.

This poster illustrates plans for a National School Dog Alliance as a resource for teachers to access guidance.

Session D - ID #: 8 Agency: The New Frontier in Promoting and Assuring Sport Horse Welfare?

Dr Karen L Luke¹, Dr Jo Hockenhull², Dr Andrea Rawluk³

¹Central Queensland University, Rockhampton, Victoria, Australia. ²The Donkey Sanctuary, Sidmouth, Devon, United Kingdom. ³The University of Melbourne, Parkville, Victoria, Australia

There is growing debate and dissent among industry insiders and outsiders regarding the acceptability of using horses in sport due to welfare concerns. A recent industry-sponsored report highlighted significant deficits in sport horse welfare and the need for action from all stakeholders, including equestrian organisations, riders and horse owners, to remedy the problem or risk losing their social licence. Generally, horse industry proponents have used horses' physical health to demonstrate their excellent welfare. However, scientists increasingly argue that while health is an important contributor, welfare is better understood as the subjective experience of the animal, that is, how they experience their life. One such widely accepted model of animal welfare is the Five Domains Model. This approach uses the term mental state to represent subjective experience, and recognises that welfare status is the result of a complex, dynamic system. Approaching welfare in this way, it is assumed that to have good welfare, an animal must experience mostly positive affect (mental state). Subjective experience, or affect, cannot easily be measured empirically, however, one group has proposed that agency, the ability of an animal to engage in voluntary, goal-directed behaviour that is intrinsically motivated, may be a new frontier in welfare assessment. They argue agency provides an additional objective measure from which affect can be cautiously inferred. This review provides an overview of agency, its role in welfare, and examines several horse keeping (stabling, transportation and breeding) and training (bits, whips, and hyperflexion) practices to explore their effect on agency and illustrate its potential as an objective measure of sport horse welfare.

Further, we provide suggestions of how current practices can be modified to provide opportunities for agency and thereby promote optimal wellbeing for horses in their interactions with humans.

Session D - ID #: 9 Melampous Dog Assisted Interventions Multidisciplinary Team (Greece) and Animal Assisted Interventions Code of Practice Issued by the Society for Companion Animal Studies (UK)

Dr Ioannis Chaniotakis¹, Evangelos Diamantakos^{2,1}, Dr Sandra McCune³

¹Melampous Multidisciplinary Dog Assisted Interventions Team, Healthcare Directorate of Hellenic Air Force General Staff (HAFGS), Athens, Greece. ²Animal Department, Hartpury University, Gloucestershire, United Kingdom. ³School of Psychology and School of Life Sciences, University of Lincoln, Lincoln, United Kingdom

Melampous is a multidisciplinary team that has been operating in Athens, Greece since 2016, delivering Dog Assisted Intervention (DAI) programmes in health, education, and care institutions. Throughout the years of operation, Melampous has faced several challenges related to the design and implementation of DAI programs in a wide variety of populations and settings.

Current DAI research and studies have consistently provided valuable information, not only inspiring but also guiding Melampous' practices, overall philosophy, and approaches. However, the need to adhere to specific DAI guidelines is crucially important. This practice is not only time-efficient but also facilitates and better promotes the health, safety, and well-being of both human and dog participants.

The aim of this presentation is to discuss the valuable guidance provided by the Animal Assisted Interventions Code of Practice issued by the Society for Companion Animal Studies (SCAS). The SCAS Code is aligned with the International Association of Human-Animal Interaction Organizations (IAHAIO) guidelines.

Specific examples of DAI practice delivered in a Children's Psychiatric Clinic and a Men's Unit for Psychological and Drug Rehabilitation will be provided during the presentation as appropriate in an attempt to explain: a) the application and challenges Melampous Team faced during the design and implementation of the DAI programs, and b) the necessity to move towards a global consensus for minimum standards in DAIs.

Session D - ID #: 10 Welfare of Horses Used in Horse Assisted Interventions

Johanna Johansson¹, Anna Lundberg², Petra Boelhauwers¹, Jenny Yngvesson²

¹Department of Animal Science and Welfare, Uppsala, Sweden. ²Department of Animal Science and Welfare, Skara, Sweden

Introduction

Horse assisted interventions (HAI) is a highly variable field and we aimed to quantify HAI horse welfare. Further aims were to examine risks of injury and practitioners' horse welfare knowledge.

Methodology

Quantitative data and interviews were combined. The welfare of 28 horses, from seven HAI businesses, was assessed using the Welfare Quality® criteria and an adapted AWIN assessment protocol. Eight practitioners were interviewed.

Main results

Of the horses, 86% were partly group housed and 50% were so always. All but three injured horses, could move freely in their paddocks on average 18 h (SD=7.12) daily. 43% were fed roughage ad lib and the rest got limited rations. No horses were underweight but 59% were overweight.

None of the horses showed avoidance in a standardized approach test (N=23). In a touch test, 75% of horses showed positive interest in the assessor (N=24), one horse showed aggression and the rest avoidance behavior.

Interestingly several practitioners said that conflict behaviors shown by horses are not necessarily unwanted behaviors, rather a form of communication by horses.

All practitioners correctly mentioned signs of stress, fear, and pain. However, they sometimes failed to mention common indicators of negative affective states, e.g. only three practitioners mentioned that aggressive behaviors can indicate pain.

A point of concern was that, during their time in HAI (mean 5.38 years, SD=4.41), five described incidents when humans or horses, had or could have, been injured. Three humans, but no horses had suffered actual injuries.

Principal conclusions and implications for the field

In conclusion horse welfare was good as most horses were kept in groups outdoors, provided long foraging times. Levels of avoidance behavior was low and 75% of horses showed positive interest in humans. Areas of improvement are horse weight management, recognition of signs of negative affective states and risk management.

Session D – ID #: 11 A Content Analysis of Animal-Assisted Services with Indigenous Populations

Jason Lee, Spencer Heindel, Christy Syndergaard, William Reece
Idaho State University, Pocatello, Idaho, USA

Introduction:

The goal of this poster is to inform attendees about the cultural implications of therapeutic applications of the human-animal bond (HAB) with indigenous populations worldwide. This poster will explore relevant characteristics of the central focus animals have in indigenous life, particularly in spiritual significance, healing roles, and building connections, particularly with mental-healthcare professionals facilitating AAS.

Additionally, this poster explores the unique and powerful connections made through animal-assisted services with this specific population. The keys are building trust within indigenous communities, cultivating cultural awareness of historical significance of animals, and examining the benefits of AAS to counseling within indigenous communities.

Methodology:

Published findings from 2013–2024 from a variety of research journals were gathered and reviewed for evidence of factors related to the objective and self-reported measures associated with the connection between indigenous people and the mutually beneficial HAB. Study designs included self-report questionnaires, qualitative interviews, and individual case studies. The research questions are as follows; what themes and common messages can be found within the existing literature focused on AAS with indigenous people, and how often do the identified themes appear throughout the research. Key terms for the analysis included; human-animal bond, indigenous, counseling, animal cultural practices, and animal-assisted therapy in counseling.

Results:

The presenters found evidence of specific benefits regarding the mental health of indigenous people when AAS are utilized, common occurrence of articles written in Australia on this topic, and a major lack of articles on Indigenous people within both AAS and mental health overall.

There are several implications for the field of counseling and other allied health professions, particularly in AAS. A few are as follows; better understanding of AAS being mutually beneficial to indigenous people and animal partners, how cultural competency may change with indigenous people working with AAS, and the role of spirituality in AAS.

Session D – ID #: 14 Using Behavioural Indicators to Predict Hazardous Situations During Cattle Handling

Dr. Karen Thodberg¹, Marianne Norup², Dr. Kent Nielsen³, Dr. Janne W. Christensen¹
¹Aarhus University, Tjele, Denmark. ²SEGES Innovation, Aarhus, Denmark. ³Dept. of Occupational Medicine Gødstrup Hospital, Herning, Denmark

Farm work is one of the most hazardous occupations, and working with cattle leads to the most serious accidents. Accidents most often occur when moving animals, or during

handling in connection with milking, aversive procedures, and when treating sick or injured animals. This study aimed to investigate the frequency of hazardous situations when moving cows for milking and hoof trimming.

Four Danish dairy farms with 120–250 cows were included. On each farm, thirty randomly selected cows were tested for fearfulness, and video recordings were made of one hoof trimming event and during moving cows to milking morning and evening for 14 days. Duration of humans being within one cow's length of one or more cows was measured, and the frequencies of risky behaviour by both cows and humans were calculated.

During driving to milking and hoof trimming, humans were on average close to one or more cows 6–7% and 17% of the time, respectively. The frequency of cows' and humans' risky behaviour varied between farms, both morning and evening (all $p < 0.001$), as did the types of risky behaviour shown by both cows and persons. On the farm where the cows were least fearful, more cow-directed behaviour was observed during milking (both $p < 0.001$). The frequency of human behaviour directed at cows was similar in the two handling situations, but a higher proportion of rough handling was observed in connection to hoof trimming. The cows' frequency of risky behaviour was 1.2 per min during hoof trimming as opposed to 0.15 per min when driven to milking.

The results suggest that it is possible to identify behavioural indicators of potentially dangerous situations. Future studies should aim to optimize handling of cows, especially when subjecting them to aversive procedures through education of humans and training of the animals.

Session D - ID #: 15 Solution-Focused Animal-Assisted School Counseling

Dr. Elizabeth K Hartwig¹, Nicole Lozo², Amy Blasingame³

¹Texas State University, San Marcos, TX, USA. ²Austin ISD, Austin, TX, USA. ³Coppell ISD, Dallas, TX, USA

School counselors can create and deliver a range of dynamic services to meet students' social and emotional needs through solution-focused animal-assisted school counseling (SF-AASC). By applying strengths-based AASC in schools, practitioners can develop individual and small group AASC services that empower students to succeed in reaching social-emotional goals. This presentation will provide an introduction to key concepts and skills used in SF-AASC. We will introduce three strengths-based interventions so practitioners can learn hands on skills for involving animal partners in school settings. Join us as we explore how animals can impact the school community through strengths-based and goal-driven services to students.

DEIB Digital Posters (ongoing display throughout conference: 27–30 June)

197 Pets and Prams: Exploring Perceptions of Companion Animals in Relation to Maternal Wellbeing

Dr Roxanne D Hawkins, Kathryn Cyr

The University of Edinburgh, Edinburgh, United Kingdom

Introduction: Perinatal wellbeing is a critical area of mental health to address for the benefit of parents, infants, pets, and health services. Animals, and specifically pets, have been investigated as potential wellbeing supports in clinical and non-clinical populations, yet there has been limited exploration of their role in the perinatal period. To address this gap, this study aimed to examine the perceived risks and benefits of pet ownership on perinatal mental health through qualitative reports of lived experience from mothers with pets.

Methodology: An online survey with open-text questions was developed; thematic analysis was applied to data from 31 eligible UK participants.

Findings: The analysis identified five themes: (1) promoting wellbeing and grounding in a time of change, (2) pets as preparation for parenting, (3) caregiver burden, (4) joy and challenges of pet-baby interactions, and (5) perceptions of changing pet behavior in the perinatal period.

Principal conclusions and implications for the field: This study indicates that accessing emotional support from pets, second-hand joy from the pet-baby bond, and having “parenting practice” are perceived wellbeing benefits from pets. Further, parents expressed that increasing social support for pet and childcare, creating boundaries for pet-baby interactions, and managing perinatal expectations could help minimize risks identified by participants, including caregiver burden and pet-based distress and anxiety. These insights may allow practitioners supporting pet-owning new parents to begin exploring new ways for families to manage pets in the perinatal period in a way that enhances wellbeing for everyone involved, including pets.

200 Is pet ownership associated with superior well-being in the young and single?

Dr. Dorottya J Ujfalussy^{1,2,3}, Ádám L Daoud¹, Martin Sziráczky¹, Dr. Enikő Kubinyi^{1,3,4}

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Institute of Cognitive Neuroscience and Psychology, Budapest, Hungary. ³MTA-ELTE Lendület

“Momentum” Companion Animal Research Group, Budapest, Hungary. ⁴ELTE NAP Canine

Brain Research Group, Budapest, Hungary

Intro

The growing tendency of pet ownership in young single professionals has been extensively documented, with a special focus on the impact of this phenomenon on the pet industry. Conversely, there is a gap in scientific knowledge about the drivers of the “pet boom” and its effects on owners’ well-being and social skills. Although the positive effects of pet ownership, in general, are debated, we also have evidence that a growing trend in this cohort and social status may be driven by considerable positive effects, but this issue remains to be investigated.

Question/Hypothesis

Our objective was to study the effect of pet ownership on physical and mental health, addictions, stress, depressive tendencies, social isolation and loneliness in the 25–35 age group.

We hypothesized that pets contribute directly and indirectly to mental well-being, and general physical health, and may reduce loneliness and depression in the target cohort, outweighing the undoubtable costs of pet ownership.

Method

We conducted data collection from the target cohort using an anonym online survey (N=423) and principal component analysis of questionnaire data, developed mental and physical well-being scores for subjects and welfare scores of their pets. We investigated the relationship between pet ownership and mental and physical well-being scores, as well as assess the welfare status of pets belonging to members of the target cohort and possible correlations with owners’ well-being scores.

Results

We found a significant positive correlation (corr. coeff: 0.388; $p=0.003$) between pet ownership and mental well-being in our target group, while no such correlation was found regarding physical well-being. Pet welfare was found to be above average as reported in the questionnaire, while no correlation between owner well-being scores and animal welfare scores was found.

Discussion/Conclusion

Our results are in line with previous findings that pet-keeping may have a positive effect on owners’ perceived mental well-being, which may explain the drive behind increasing pet ownership tendencies in young single professionals. Physical well-being scores are not affected by pet-keeping in this group, however, this may be considered a ceiling effect, as the general health of 25–35-year-olds is usually excellent. According to our data, the welfare of pets owned by members of our target group is not compromised.

201 Fostering rescue cats as health promotion in Aotearoa New Zealand

Ms Christine Roseveare

Massey University, Wellington, New Zealand

Introduction: Many animal rescue organisations have foster programmes for animals who are too young to be adopted or need time for healing or adjustment. While research has examined the health benefits of pet ownership and animal visitation programmes, little is known about the experiences and potential health benefits of fostering animals, particularly for older adults.

Aim: To explore the health promotion potential of feline companion animal fostering by older adults in Aotearoa New Zealand.

Methods: A national online survey of 106 animal rescue organizations identified those with cat fostering programmes. Semi-structured interviews were conducted with 14 foster programme coordinators and analysed through a health promotion lens, using thematic analysis.

Results: Seventy-five percent of cat rescue programmes in Aotearoa New Zealand have foster programmes. Coordinators value compassion, responsibility, and time availability in fosterers, qualities they believe older adults possess. They emphasize that fostering can provide emotional connection, companionship, and build social networks. Potential challenges and concerns about older fosterers include anxiety, physical frailty, property damage, and the use of social media and web-based communication methods. Opportunities exist for family collaboration, fostering programmes in retirement villages, and residential settings.

Conclusions: Companion animal fostering aligns with the Ottawa Charter principle that caring for others in everyday settings promotes health. Involving more older adults as animal fosterers has the potential to improve the health of both animals and the humans who care for them. These findings have implications for the development of targeted fostering programmes and policies that support older adults participation in interspecies relationships through fostering.

202 The Paradox of Presence: Owner Influence on Inter-Cat Conflict in Multi-Cat Households

Ms Nai Osepyan

International Society of Animal Professionals (ISAP), Stafford, Staffordshire, United Kingdom

Introduction: Indoor cats likely perceive owner attention as a valuable resource (Bradshaw et al., 2002). Owner observations often suggest reduced inter-cat aggression during owner

absence. This study investigates the influence of owner presence on the frequency and severity of inter-cat conflict in indoor multi-cat households.

Methodology: A retrospective analysis of feline behavior consultations conducted over a two-year period (n = 120) involving owner-reported inter-cat aggression was conducted. Inclusion criteria included: indoor multi-cat households with at least two resident cats and owners, owner reports of recent conflict, and availability of in-home video recordings. Data regarding the presence or absence of conflict were extracted from owner reports and video recordings categorized by owner absence, presence of any owner, and arrival of the primary caregiver.

Main Results: A distinct distribution of inter-cat aggression patterns emerged based on owner presence. No conflict was observed during owner absence in 10% (n = 12) of cases. Conflict was observed in 26% (n = 31) of cases with an owner present, and 73% (n = 87) of cases involved conflict initiated upon the primary caregiver's arrival (all video-confirmed). A chi-square test revealed a positive association (chi-square = 102.4, p < 0.001) between owner presence and inter-cat conflict.

Principal conclusions and implications for the field: This study provides preliminary evidence for a statistically significant association between owner presence and increased inter-cat conflict. Cats were more likely to display aggression when owners were present, particularly upon the primary caregiver's arrival. Further research is warranted to explore the underlying mechanisms of this association. Future studies could investigate the impact of various environmental factors, such as feeding regimens (e.g., ad libitum vs. scheduled feeding, BARF diets) and resource distribution on inter-cat conflict in these settings.

203 Historical Hierarchies Amongst the Sundarban Wild Animals

Ms Camellia Biswas, Prof Sharada Visweswara Channarayapatna, Prof Chhavi Nath Pandey
IIT Gandhinagar, Gandhinagar, Gujarat, India

Human and animal interactions (HAI) have shaped the planet for countless generations. However, studies of their interactions forming long-term relationships are now emerging, especially with wild animals. In this poster, we will look into human relations with wild animals and intra-actions within animals as defining socio-cultural experiences of the Sundarban landscape with a focus on the Tiger (*Panthera tigris tigris*), snake (*Serpentes*), and wild boar/pig (*Sus*). It discusses the paradox of conflict and coexistence of HAI through the multispecies entanglement lens. The study undertakes a multiple-method approach, blending ethnography with community participation and surveys to have an all-encompassing understanding of this dyadic relation. It gauges HAI's spatial and temporal juxtapositions through archaeological, historical/mythological, and ethnographic evidence. It shows three HAI interactions- the most prominent human-tiger interaction that has been gaining global attention for its conflict. Second is the human-snakes, which are

undermined due to their commonness and lack of recognition. Lastly, there is a relationship between 'humans and wild boar/pig', having the lowest rank in the human world and in Animal species hierarchy. Historical traces of these connections are further analysed through their relevance in the folklores, mythologies, and customary rituals, Like the sacred text of Bonbibir Johurnama, ensuring mutual forest management and respect between humans and tigers. Similarly, the importance of snakes is recognized in the Manasa Mangal Kavya, a myth based on the Serpent Goddess, so that the natural order can be preserved. Each relation further illustrates the dominant-repressed or positive-negative effect that has influenced the recognition of animals and its hierarchy in the region's socio-cultural and ecological aspects. The paper/poster builds its conclusion on community efforts to preserve the ecosystem and its balance aligning. The principles of SDG 15 focuses on protecting, restoring, and promoting sustainable use of terrestrial ecosystems, ensuring biodiversity, and combating conflict. This research always offers a promising framework for rethinking and revitalizing the field of law, governance, and sustainability, considering the pressing global challenges of climate change impact.

204 The Effectiveness of An Attachment Informed Curriculum Incorporating Equines for Veteran and First Responder Families

CEO Kate Nicoll, Equine Specialist Elisabeth Caplan¹, Dr Sajed Ali²

¹Soul Friends, Inc, Wallingford, CT, USA. ²University of Punjab, Punjab, Pakistan

This study investigates the impact of the Horses Inspire program an Equine Facilitated Therapy (EFT) curriculum on child-parent relationships, focusing on key metrics of conflict, closeness, dependence, and behavioral changes across multiple sessions. The study involves a sample size of 12 child-parent pairs of veterans and first responder families, with detailed observation and measurement of their interactions and behavioral dynamics during EFT sessions. Descriptive statistics reveal consistent scores across conflict, closeness, and dependence, indicating the influence of EFT on fostering emotional bonds and communication between children and their parents. Specifically, the Mean Score was significant with a mean of 3.54, indicating strong therapeutic effects. Moreover, the Mean variable demonstrated significant variability, suggesting that individual responses to EFT are diverse and influenced by unique participant characteristics. Inferential statistics reinforced these observations, with t-tests showing highly significant results for Mean Score ($t = 17.300, p < .000$), and similarly significant outcomes for Mean ($t = 3.189, p = .009$) and Total Behavior ($t = 10.175, p < .000$). These results suggest that EFT not only significantly impacts specific behavioral metrics but also influences overall behavior positively. The findings highlight the efficacy of an attachment informed 6 session psychotherapy curriculum incorporating horses in enhancing child-parent relationships through improved communication, increased emotional closeness, and reduced conflicts. The variability in individual responses underscores the need for personalized therapeutic approaches. Future research should aim to explore these individual differences further and examine the long-term effects of EFT in diverse settings. This study provides a compelling case for integrating

the Horses Inspire, attachment informed psychotherapy curriculum into therapeutic and educational curricula to foster healthier and more resilient family dynamics.

205 Two-months of trainer-guided treatment for resource guarding behaviour in 11 domestic dog puppies: a case-series

Dr. Quinn Rausch, Dr. Lee Niel

University of Guelph, Guelph, Ontario, Canada

Threatening and aggressive forms of resource guarding behaviour in young companion dogs is common and threatens canine welfare, human safety, and the human-canine relationship. Dog trainers are often employed to reduce the severity of such behaviours through caretaker education, environmental management, and behaviour modification. Although resource guarding typically develops by 16 weeks of age, no research exists to evaluate the efficacy of early treatments for this behaviour. This study follows 11 dogs, six months of age or younger at time of enrollment, displaying threatening or aggressive forms of resource guarding, for two months of trainer led treatment. Data collection consisted of four surveys including trainer and caretaker surveys before and after treatment. The most common outcomes were reduction in severity of resource guarding behaviour (improvement) and loss to follow-up by caretaker, trainer, or both. Overall, the most widely used and successful methods of treatment included counterconditioning and teaching operant tasks like “drop-it” using positive reinforcement. Prognostic factors influencing treatment success were whether triggers for resource guarding were known, dogs with slow progression to aggression and an inhibited bite, caretaker compliance to treatment programs and caretaker follow-up with the trainer. This study informs a need for and the development of future research on the efficacy of these treatments when compared with controls and the causes of loss to follow up in studies and with trainers.

206 Activities for Children on Autism Spectrum Disorder in Canine-Assisted Therapy

PhD. MIRELA DE OLIVEIRA FIGUEIREDO, Ms. Roberta Giampá Roiz

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Introduction: The literature reports beneficial effects of canine-assisted occupational therapy for children on autism spectrum disorder (ASD). Despite the significant literature on such benefits, examples of activities that can be carried out with the intentional incorporation of dogs are incipient. This research aimed to present activities carried out in therapeutic sessions that promoted engagement, performance and positive social and emotional behaviors. Methodology: Collective case study with nine children aged 3 to 5 years old on ASD. Each child was evaluated pre- and post-intervention using a checklist that measured frequency of demonstration of performance and engagement components and social and emotional behaviors. The sessions were video recorded, two researchers separately filled out the checklist with subsequent qualitative descriptive analysis of each

child. Main results: Twenty activities were identified in which children demonstrated engagement and that were focused on sensorimotor components (e.g. fine and global motor coordination, balance, visual and tactile response) and cognitive components (e.g. attention, resolution problems) and social and emotional behaviors (e.g. looking at the dog, smiling at the dog, voluntarily touching the dog, communicating with the dog, frequency of approach and time spent near the dog). In all activities, the dog was intentionally incorporated and had active or indirect participation, for example: brushing and petting the dog, walking with the dog, hiding treats for the dog to find, fishing treats for the dog, paint dog drawing, memory game and puzzle with a dog image, psychomotor circuit involving going up and down a ramp with the dog, jumping hopscotch with the dog waiting at the end, finding treats in a ball pit, hunting for treats on climbing walls, basketball and bowling with the dog, among others. Principal conclusions and implications for the field: The activities demonstrated potential for promoting children's engagement and stimulating performance components and social and emotional behaviors. Future research is needed to validate a protocol.

207 Experiences of the menopausal journeys of female equestrian athletes

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Introduction

The menopausal journey is a female life stage that has recently become a topical research subject. Equestrianism is lifespan/ female-dominated, which means that understanding the role of Equestrian lives (EL) in the menopausal journey warrants investigation. The aim of this study is to determine whether the menopausal journeys of female equestrian athletes affect their EL and whether their EL impacts their menopausal journeys.

Methodology

Following ethical approval, a 48-question mixed-methods survey was shared via social media. The data was analysed using Excel and Minitab. Principal component analysis (PCA) and thematic analysis were used, and percentages detailed the effect sizes in the main findings.

Results

There were 147 respondents who had or were experiencing their own menopausal journey. PCA identified PC1(mental/emotional symptoms 32.6% of the variation), which was compared to Q30(have your menopause symptoms affected the way you approach your EL?). This relationship showed that as the PC1 symptoms became more severe, the

respondents were more likely to change their approach to their EL. A two-sample T-test $p < 0.02$ rejected the null hypothesis that the menopausal journey did not impact the respondent's EL.

Further analysis found that 88% of respondents' equestrian lives helped their mental health, and 90% felt their EL helped them to keep fit and strong during their menopausal journey. Thematic analysis backed up these findings. The respondents' comments about whether their EL had helped their menopausal journey showed the positive themes of improved social life, mental health, and fitness. The negative themes, tiredness, lack of motivation and low mood, were often worked through; "Their horses needed to be looked after regardless of how the respondent was feeling".

Conclusions

Horses help the respondents with their menopausal journeys, which in turn affect their equestrian lives. We need to use this knowledge to improve the female equestrian athlete's lifespan in equestrianism.

210 Assessing the Effects of Community-Based Characteristics and Reasoning behind Animal Shelter and Rescue Perceived Changes in Animal Population Size during the Coronavirus Pandemic

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The COVID-19 pandemic had a wide array of negative effects on human health and well-being. However, notably, impacts on the animal care industry surprisingly occurred as well. Specifically, many anecdotal reports and studies have assessed pet-ownership changes (e.g., adoption and relinquishment) during the pandemic. However, sparse have evaluated these outcomes in conjunction with local community characteristics or owner reasoning. From July 12, 2021 to March 2, 2022, an online survey assessed animal care worker (N=132) perspectives on changes in their animal shelter population before (2019) and during (2020) the pandemic, and the potential association of different community characteristics or owner reasons with these phenomena. It was found that workers in urban environments were more likely to perceive and report frequent adoptions by first-time owners compared to their suburban counterparts, before ($p=0.002$) and during the pandemic ($p=0.041$). Urban workers also reported more frequent adoptions by owners seeking companionship during the pandemic ($p=0.003$) and stress alleviation before the pandemic ($p=0.050$). Urban workers likely had a greater odds in reporting more frequent relinquishments due to financial difficulties compared to suburban workers, both before ($p=0.051$) and during the pandemic ($p=0.052$). Workers who interacted frequently with people from racial and ethnic

backgrounds also were more likely to report frequent relinquishments due to financial difficulties before ($p=0.036$) and during the pandemic ($p=0.002$), and housing difficulties during the pandemic ($p<0.001$). These findings highlight the desire for pet ownership within urban communities, despite their facing adversity. Given the disproportionate COVID-19 hospitalizations and deaths experienced by urban communities and communities of color, these findings may highlight a desire for social support, in the form of pet-ownership. Lastly, the observed disparity in relinquishments underscores the need for targeted crisis interventions, with potential value through shelter settings, to support individuals and pets facing crises. Overall, these findings highlight the need for policies and practices that improve pet-ownership access for marginalized communities.

127 Companion Animal Loss in India: Addressing and Filling the Gap

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Companion animals are an integral part of many households across India, but talking about their loss and subsequent bereavement is a big stigma. These companion animals are considered to be easily replaceable by many. That is where it hits hard those who have a profound attachment to these companion animals. The grief compounds in the absence of social validation. The loss of companion animals is the most disenfranchised form of grief, especially in India. With no system in place to address the burning issue of companion animal loss in India, a non-profit organization came up to fill this huge gap. The organization is the first and only non-profit in India that offers an umbrella of services to cater to all types of compassionates who need support to navigate through companion animal loss bereavement. There is a self help corner for those who may want to grieve privately that makes them introspect to put them on the path to healing. The second section is shine your light that opens the room to share inspirational stories of coping from the loss. The fond remembrance section is for recalling and celebrating the bond the guardians of companion animals shared with their pets. The support group, which is held every second and fourth Sunday of the month draws compassionates from India and abroad to the meet. The third Sunday of every month is dedicated to anticipatory grief. The biggest gap that the non-profit has filled is to provide a session with a certified pet loss grief specialist. The human-animal bond is timeless but the grief associated with the passing of companion animals is seldom addressed and the bereaved feel marginalized. There is tremendous scope for creating a conducive environment for the bereaved in India as well as abroad as the language of grief of loss of companion animals is universal.