

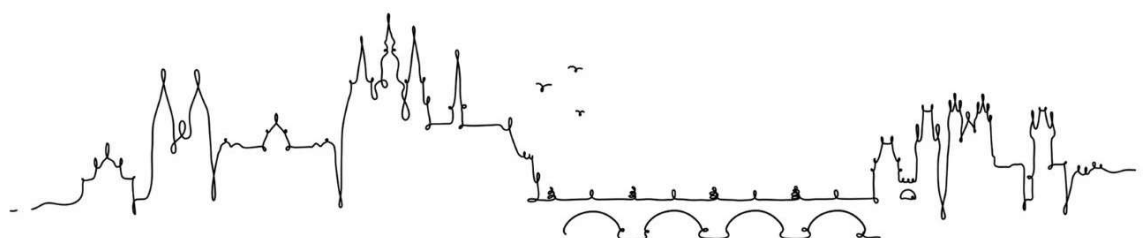
Czech University of Life Sciences Prague

Faculty of Agrobiological Sciences, Food and Natural Resources

**HHRF, HETI and CZU Prague International
Symposium**

Book of Abstracts

Author: Horses and Humans Research Foundation



Czech
University
of Life Sciences
Prague

19-20 September 2026 Prague, Czech Republic

Czech University of Life Sciences Prague

Faculty of Agrobiological Sciences, Food and Natural Resources

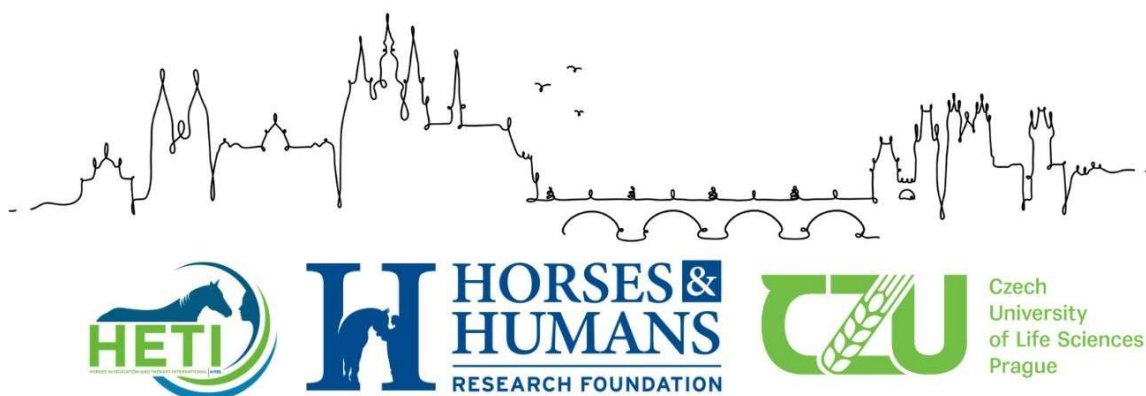
BOOK OF ABSTRACTS

1st HHRF - HETI - CZU Prague International Symposium

Author: Horses and Humans Research Foundation

19-20 September 2026

Prague, Czech Republic



19-20 September 2026 Prague, Czech Republic

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Organizing institutions

Horses and Humans Research Foundation (HHRF)

The Horses and Humans Research Foundation (HHRF) is an international non-profit organization dedicated to advancing knowledge of horse–human interactions through rigorous, ethical research and education. Through sustained investment in scientific research, HHRF supports the development of an evidence base examining the impact of horse–human interaction on the health and well-being of people, horses and other equines.



Since its establishment, HHRF has supported competitive research projects across a broad range of areas related to Equine Assisted Services and horse–human interaction. Its work promotes high standards of research methodology, human and equine welfare, interdisciplinary collaboration and the translation of research findings into evidence-informed practice. HHRF also provides educational resources, research guidance, webinars and opportunities for researchers and practitioners to connect with and share knowledge internationally.

<https://www.horsesandhumans.org/>

The Federation of Horses in Education and Therapy International (HETI)

The Federation of Horses in Education and Therapy International AISBL (HETI) is an international federation connecting organizations and individuals working across Equine Assisted Services. Founded in 1974, HETI has a long history of supporting the field's development and promoting international exchange, professional knowledge, ethical practice, and collaboration.



HETI's mission is to facilitate worldwide collaboration between organizations and individuals with philanthropic, scientific and educational objectives in Equine Assisted Services. Through international membership, congresses, professional networks, educational webinars, HETI Journal: International Research and Practice, ethical guidelines and specialist resources, the Federation provides a global platform for connecting research, education and practice. HETI encourages dialogue across professions and countries while supporting the continued development of professional and equine welfare standards within EAS.

<https://hetifederation.org/>

Czech University of Life Sciences Prague (CZU)

The Czech University of Life Sciences Prague (CZU) is a public university with a strong international profile in education and research related to agriculture, animal science, environmental sciences, forestry, sustainability, natural resources, economics and associated disciplines. The University comprises six faculties and one institute, combining teaching, research, and practical application across a broad range of life-science disciplines.



CZU is internationally recognized, particularly in fields connected with agriculture, forestry and environmental sciences. In the QS World University Rankings by Subject 2026, CZU ranked 58th worldwide in Agriculture & Forestry and was the highest-ranked Czech university in this field. The University also places strong emphasis on

sustainability, international cooperation and research addressing contemporary environmental and societal challenges. The Faculty of Agrobiological Sciences, Food and Natural Resources, involved in the Prague Symposium, includes specialist departments in areas such as Animal Science, Ethology and Companion Animal Science, Veterinary Sciences and related biological disciplines.

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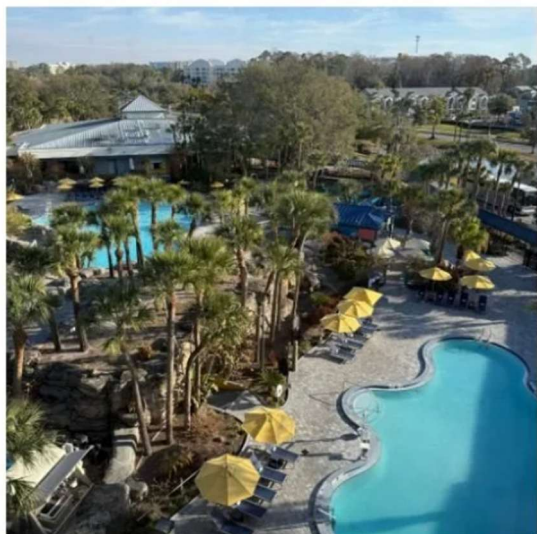


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Welcome To Prague

On behalf of the **Horses and Humans Research Foundation (HHRF)**, the **Federation of Horses in Education and Therapy International (HETI)**, and the **Czech University of Life Sciences Prague**, it is our great pleasure to welcome you to Prague for this special international symposium.

On **19–20 September 2026**, we come together with colleagues from around the world to share research, exchange ideas, build connections, and explore the ever-evolving relationship between horses and humans.

This symposium brings together researchers, practitioners, educators, equine professionals, and others who share a commitment to advancing knowledge in horses in education and therapy. It is a wonderful opportunity to hear the latest research, ask questions, challenge our thinking, and consider how evidence can be translated into meaningful practice.

At HHRF, we believe research has its greatest impact when it moves beyond the pages of a publication and into the hands of the people and programs who can use it. Through collaboration with organizations such as HETI and academic institutions such as the Czech University of Life Sciences Prague, we can help create stronger connections between **research, education, translation, and impact**.

We are particularly pleased to gather in Prague and are grateful to the Czech University of Life Sciences Prague for helping provide a setting for these important conversations. International collaboration is essential to the continued growth of our field, and we hope this symposium creates new partnerships, new questions, and new opportunities for research and learning.

Most importantly, we hope you enjoy the opportunity to connect with one another. Some of the most valuable conversations at a symposium happen outside the formal presentations—in the hallways, over coffee, and around the table.

Dr. Pebbles Turbeville

CEO, HHRF

Horses and Humans Research Foundation

A Special Thank You

This symposium would not be possible without the dedication and collaboration of our planning committee. We extend our sincere appreciation to **the organising committee**:

Věra Lantelme-Faisan

President, HETI

Federation of Horses in Education and Therapy
International

Alexandra Stergiou

Vice President, HETI

Federation of Horses in Education and Therapy
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Czech University of Life Sciences Prague

Prague, Czech Republic

John Kuntz

President, HHRF

Horses and Humans Research Foundation

Jo Anne Miller

Board Member, HHRF

Horses and Humans Research Foundation

Thank you for your leadership, time, expertise, and
commitment to bringing this international
community together.

Welcome to Prague. We are delighted to have you with us and look forward to the conversations, connections, and discoveries ahead.

Welcome To Prague

It is my great pleasure to welcome you to the scientific program of the HHRF, HETI, and CZU Symposium 2026. As a member of the organizing team and a representative of the host university, I would like to sincerely thank all authors who have contributed to this Book of Abstracts, as well as all members of the Scientific Committee who worked hard on reviews and abstract revisions.

As I went through the individual abstracts, I could see that we all share a common ideal: sustainable cooperation and meaningful mutual connection between humans and horses. While working with horses brings us much joy, it also comes with a great deal of responsibility. Our everyday work can be demanding, whether we run Equine-Assisted Services facilities or associations, work directly with clients, or care for horses. That is why I particularly value the extra time you have found beyond these responsibilities to collect data, engage with research methods, and share your experience with others.

As the field of Equine-Assisted Services is rapidly developing across many countries and professional settings, we do not always use the same terminology or methods. This can make comparison and discussion more difficult, but it also gives us an opportunity to learn from one another and gradually build a clearer picture of the field. I believe that sharing our experience in a clear and objective way will help us make our diverse field more professional. Carefully described methods, data, and outcomes can help demonstrate the value of these services and strengthen the case for their support, including financial support for projects and for the people who need them.

I hope you will find these abstracts interesting and useful, and that the work presented here will contribute to good discussions throughout the symposium. I look forward to meeting you and to sharing these discussions with you in Prague.

With sincere thanks to all contributors,

Štěpán Zítek

Chair of the Scientific Committee

HHRF, HETI and CZU Prague International Symposium

Czech University of Life Sciences Prague

Scientific Committee

Emily Kieson

Kristýna Machová

Alexandra Stergiou

Štěpán Zítek

Program at a Glance



Prague International Symposium

SATURDAY 19th Sep 2026:

7:30-8:45	Registration
8:45 - 9:00 AM	Welcome Welcome and Opening Remarks Pebbles Turbeville, CEO, HHRF John M. Kundtz, President, HHRF Board of Directors Véra Lantelme-Faisan, President, HETI Lukáš Kalous, Full Professor and Vice-Dean for Quality Assurance, FAFNR, CZU
9:00 - 9:45 AM	Keynote Address Sanna Mattila-Rautiainen - The Quality of Movement as Therapeutic Language: Observing and Documenting Patient Change in Equine-Facilitated Rehabilitation of Chronic Low Back Pain
9:45 - 10:00	Para Vaulting Demonstration on the Barrel Athletes from TJ Orion Praha
10:00 - 10:30	Tea and Coffee Break
10:30 - 12:00 AM	EAS Lightning Round 10:30 - 11:00 AM Beth Macauley - Research Evidence for Speech Therapy Incorporating Horses 11:00 - 11:30 AM Štěpán Zítek - The Influence of Equine-Assisted Psychotherapy on the Psychological State of Patients with Addiction 11:30 - 12:00 AM Jo Anne Miller Reading, Riding, and Arithmetic: Applying Equine-Assisted Learning: A Program for At-Risk Youth
12:00 AM - 13:00 PM	EAS Expert Panel Panelists Selcuk Akpinar Audrey Darby Alexandra Stergiou Jitka Bartosova Sanna Mattila-Rautiainen Hentrika Jormfeld
1:00 - 2:00 PM	Lunch Break
2:00 - 3:30 PM	Equine Wellbeing Lightning Round 2:00 - 2:30 PM Helen Sharp - Therapeutic Ecology: Towards a One Health Perspective on How Horses, Nature and Place Shape Therapeutic Change 2:30 - 3:00 PM Sara Jean Reega - Equipment Use on Therapeutic Riding Horses' Heads: Exploring Trends in the United States 3:00 - 3:30 PM Kristýna Machová - Hair cortisol concentration as an indicator of long-term welfare in equine-assisted therapy horses: a cross-country comparison between the Czech Republic and Slovakia
3:30 - 4:30 PM	Equine Wellbeing Panel Panelists Reeta Seery Arnau Goma Font Anita Shkedi Mike C.Tomlinson Tim Jobe Ann Hemingway
4:30 - 5:00 PM	Tea and Coffee Break
5:00 - 6:00 PM	Hot Topics Panel Panelists Bettina Shultz Alexandra Stergiou Vera Lantelme-Faisan Arnau Goma Font Sara Jean Reega Mike Tomlinson Sanna Mattila-Rautiainen



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Prague International Symposium

SUNDAY 20 Sep 2026

8:30 - 8:40 AM

- Welcome Back and Day Two Opening

8:40 - 10:10 AM

Horse and Human Interaction Lightning Round

8:40 - 9:10 AM

Jitka Bartošová -Horse-Human Bond: Quantum of Cooperation - or The Horse Who Loved Me?

9:10 - 9:40 AM

- Emily Kieson - Beyond Stress Signals: Recognizing Affiliative Behaviors as Indicators of Relational Health in EAS

9:40 - 10:10 AM

- Sara Jean Reega - Horsemanship-focused equine-assisted learning for veterans: a preliminary thematic analysis

10:10 - 10:30

Tea and Coffee break

10:30 - 11:30 AM

Horse and Human Interaction Panel

Panelists:

Pebbles Turbeville
Ann Hemingway
Bettina Shultz
Tamara Merritt
Beth Lanning
Marketa Pišová

11:30 AM - 12:30 PM

- Conference Wrap-Up and Closing Session

Speaker:

Tamara Merritt - Looking Back to Move Forward: The Next Chapter of Equine-Assisted Services

12:30 PM

Conference Adjournment

Speaker:

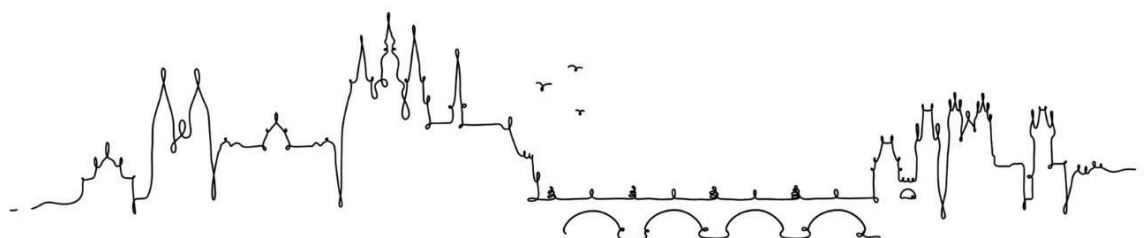
Pebbles Turbeville

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Invited Presentation Abstracts



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19-20 September 2026 Prague, Czech Republic

Keynote

The Quality of Movement as Therapeutic Language: Observing and Documenting Patient Change in Equine-Facilitated Rehabilitation of Chronic Low Back Pain

Sanna Mattila-Rautiainen (Dr., Physical therapist, EAT cert)

University of Eastern Finland, Finland

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Chronic low back pain (CLBP) is among the most prevalent and disabling musculoskeletal conditions worldwide, and its burden extends well beyond pain. Movement in CLBP is characterized by protective reorganization: reduced axial rotation, disrupted trunk–pelvis coordination, altered timing of muscle activation, and avoidance strategies that may persist independently of pain intensity. Voluntary rehabilitation approaches must contend with the fundamental problem that individuals with persistent pain often cannot reliably modify maladaptive motor patterns through active effort alone, even when motivation and instruction are adequate. This creates a clinical need for interventions capable of delivering controlled, meaningful movement exposure without requiring the client to initiate complex motor strategies in the presence of fear.

Equine-facilitated physical therapy (EFPT) offers a mechanistically distinct approach. During the horse's walk, the rider's pelvis receives continuous multidimensional oscillations generated at a rate of 58–66 steps per minute. These oscillations transmit three-dimensional movement impulses through the horse's back in a pattern that closely resembles the kinematic demands of human gait. The client responds to these externally generated perturbations rather than producing voluntary movement, thereby continuously engaging postural control systems while reducing the cognitive and emotional load associated with active motor initiation. The therapeutic parameters of this process -symmetry, rhythm, three-dimensional mobility, and repeatability- are not incidental properties of the horse; they are clinically selectable and adjustable variables that the therapist actively manages through horse selection, gait quality, and session design.

This keynote address argues that movement quality in EFPT functions as a form of therapeutic language: a structured, adjustable, and observable medium through which rehabilitation communicates with the patient's sensorimotor system. It presents evidence from three complementary methodological approaches-structured observational outcome measurements validated against ICF-based functional criteria, field-based markerless gait analysis using waveform-level statistical methods, and patient-reported biopsychosocial outcomes across a 12-week intervention. Together, these approaches demonstrate that clinically meaningful change in CLBP can be identified, differentiated, and documented across multiple levels of assessment. A central finding across all three approaches is that functional recovery in CLBP does not necessarily follow pain reduction; improvements in movement coordination, occupational performance, and engagement in daily life may occur independently of the pain trajectory, and documentation frameworks must be designed to capture this dissociation. Practical guidance on observing patient-relevant movement changes and integrating structured documentation into clinical EFPT practice will be discussed.

EAS Lightning Round

Reading, Riding, and Arithmetic (Applying Equine-Assisted Learning: A Program for At-Risk Youth)

Professor Jo Anne Miller

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The high school dropout rate among at-risk youth is higher than that among other student populations, prompting the development of nontraditional approaches. Brook Hill Farm developed a program for at-risk youth that combines equine-assisted learning with conventional education to reduce the dropout rate among participants. The program began in 2002, and by 2008, staff had observed that all participating at-risk youth graduated from high school. In the program, students partner with rescue horses, which are theorized to help them develop resilience, social-emotional skills, and academic strategies through deliberate practice. The goal is to transfer these skills and concepts successfully to the classroom, where students work with a licensed teacher. Academic concepts are integrated into mounted learning activities to improve comprehension, engagement, and mastery of educational content. Between 2008 and 2022, all 86 at-risk youth who participated in the equine-assisted learning program graduated from their traditional high school on time. In addition, all members of this cohort entered postsecondary education or technical job training. The program remains active, and as of 2026, 143 students have completed it. All participants have graduated from high school, maintaining a 100% graduation rate throughout the program's history. These outcomes are particularly noteworthy given the elevated risk of school disengagement and dropout among similar youth populations.

Research Evidence for Speech Therapy Incorporating Horses

Beth Macauley, PhD, CCC-SLP, HPCS, FNAP, ASHA Fellow

Grand Valley State University, USA

Correspondence: macauleb@gvsu.edu

This presentation reviews current research demonstrating how the horse's rhythmic, repetitive, multidimensional movement can influence the neuromotor, sensory, respiratory, and postural systems that underlie speech, language, and communication. Emphasis will be placed on integrating evidence-based SLP interventions with equine movement to maximize functional communication outcomes. First, results will be presented from a large study comparing three equine-assisted service models—horse-only/no-intervention, therapeutic or adapted riding, and speech therapy incorporating hippotherapy—among individuals with motor speech disorders. Findings demonstrated significant improvements in speech motor coordination across all three conditions, with the greatest gains observed when skilled speech-language intervention was integrated with equine movement, supporting a synergistic effect between equine movement and targeted speech therapy. Research examining equine-assisted speech-language intervention for autistic children will also be reviewed, illustrating improvements in communication, social interaction, and participation when therapy is delivered within the motivating, multisensory equine environment. Finally, the study design and preliminary findings from an ongoing randomized clinical trial investigating equine-assisted speech therapy for individuals with Parkinson's disease will be presented. This study compares traditional speech therapy with speech therapy incorporating hippotherapy to examine effects on vocal loudness, vocal range, articulation, intelligibility, and functional communication. Collectively, these studies contribute to the growing evidence that incorporating horses into speech-language pathology is a scientifically grounded and clinically meaningful approach that extends beyond recreation to address neurological mechanisms underlying communication disorders.

The Influence of Equine-Assisted Psychotherapy on the Psychological State of Patients with Addiction

Assoc. Prof. Kristýna Machová, PhD; Štěpán Zítek, PhD; Radka Procházková, PhD; Kamila Petrová; Barbora Sládková; Věra Flagarová; Ivona Svobodová, PhD

Czech University of Life Sciences Prague, Czech Republic

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Background: Equine-assisted psychotherapy (EAP), a specialized discipline within equine-assisted services (EAS), is gaining international recognition as a complementary approach to mental health care. In the Czech Republic, which has a high prevalence of substance use disorders, addressing addiction remains a critical public health and societal priority. Although hospitalized patients undergoing treatment may experience severe negative affective states, robust clinical evidence supporting the therapeutic efficacy of EAS in this vulnerable population remains limited.

Objective: This controlled study aimed to evaluate the impact of a structured four-week EAP program on core psychological dimensions—specifically, state and trait anxiety, anxiety and depressive symptoms, perceived stress, and somatic manifestations of anxiety—among hospitalized adults receiving treatment for addiction.

Methods: This study was conducted at Kosmonosy Psychiatric Hospital in the Czech Republic. The sample comprised 68 hospitalized patients (EAP intervention group: $n = 32$; conventional treatment control group: $n = 36$). The intervention group participated in weekly 120-minute EAP sessions focused on therapeutic horse-human interactions. Outcomes were measured at baseline and after the intervention using validated psychometric scales, including the STAI-Y1, STAI-Y2, DASS-21, PSS, and BAI.

Results: Baseline tests confirmed homogeneity between the groups. Post-intervention between-group comparisons demonstrated a statistically significant difference only in trait anxiety (STAI-Y2, $p = 0.002$), with the EAP group showing significantly lower levels. However, within-group analysis of the EAP cohort revealed statistically significant improvements ($p < 0.001$) across all evaluated psychological parameters. In contrast, the control group showed significant improvement only in trait anxiety ($p = 0.003$).

Discussion: These findings suggest that even a brief, four-week EAP intervention may contribute to positive psychological changes among patients receiving treatment for addiction. The lack of broader significant between-group differences (except for STAI-Y2) may reflect the intensity of the standard comprehensive inpatient program completed by both groups. Nevertheless, the within-group improvements in the EAP group suggest that equine-assisted interventions may support psychological stabilization, particularly by helping patients manage somatic anxiety and perceived stress. Furthermore, these sessions may provide a unique nonverbal relational experience that conventional psychotherapy may not replicate.

Conclusion: EAP may represent a promising experiential modality that complements traditional psychiatric care. By enhancing emotional regulation and mitigating anxiety, EAP may foster better adaptation to the recovery process.

Equine Wellbeing Lightning Round

Therapeutic Ecology: Towards a One Health Perspective on How Horses, Nature and Place Shape Therapeutic Change

Helen Sharp, PhD, MACCPH

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Equine-assisted services are increasingly supported by evidence of positive effects on mental health and well-being. However, research has largely examined horses, psychotherapy, and the natural environment as separate therapeutic influences, with comparatively little attention to how the ecological conditions surrounding therapy may shape the therapeutic process. Existing studies have tended to ask whether equine-assisted interventions are effective rather than how therapeutic change emerges through dynamic interactions among the client, practitioner, horse, and environment.

This presentation introduces Therapeutic Ecology, an emerging conceptual model that views equine-assisted mental health practice through a One Health lens. Rather than treating context as the passive setting in which therapy occurs, Therapeutic Ecology proposes that ecological conditions form an active part of the therapeutic system. Therapeutic change is understood not as the product of a single therapeutic ingredient but as an emergent process arising from reciprocal interactions among the client, practitioner, horse, and wider living environment.

Drawing on systems thinking, environmental psychology, and ecological theory, the model proposes that ecological conditions do not directly produce therapeutic change. Instead, they shape the conditions under which therapeutic processes become possible.

Equipment Use on Therapeutic Riding Horses' Heads: Exploring Trends in the United States

Sarah J Reega, MSc, PhD (Presenting); Sarah Matlock, PhD; Sharon Butler, DVM; Caiti Peters, PhD, OTL/R

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Therapeutic riding aims to teach adaptive horsemanship skills to individuals with a wide range of disabilities. In the United States, therapeutic riding horses are often simultaneously ridden by participants and led by horse leaders. This practice creates unique circumstances when considering the structure and function of equipment used on these horses' heads. This ridden-while-led phenomenon may have implications for equine welfare because it creates the potential for simultaneous, conflicting pressure on the horse's head if the rider pulls backward on the reins while the horse leader pulls on the lead rope. Given the growing body of literature indicating that various equipment-use practices can negatively affect horse behavior, learning, and well-being, it is important to understand how equipment is used in therapeutic riding. Therefore, this study aimed to describe equipment-use practices involving the heads of therapeutic riding horses in the United States. An anonymous online survey was distributed nationally to Professional Association of Therapeutic Horsemanship International (PATH Intl.) therapeutic riding instructors. A total of 403 complete responses were retained for analysis. Summary statistics were calculated in Excel, and open-ended responses were coded using inductive content analysis (Excel; NVivo).

The most commonly used equipment included bitted bridles (76%), traditional halters (75%), and side-pull bitless bridles (55%). Respondents used halters alone (66%), under bridles (44%), or over bridles (11%). Lead ropes were typically attached to the halter's bottom ring (76%) or to a tie ring under the noseband (24%). Reins were attached to halter side buckles (60%), bits (57%), bitless bridle rings (54%), or halter jowl rings (32%). The findings suggest that equipment practices largely deviate from the intended uses of such equipment, which may negatively affect its functionality. This is of particular concern because most respondents (76%) reported that conflicting pressure on the horse's head from the rider and leader occurred at least some of the time during lessons.

Future work should investigate how therapeutic riding equipment practices apply pressure to horses' heads and how such pressure may affect horse behavior, learning, and welfare. Furthermore, to better understand and represent the global population of therapeutic riding horses, equipment-use practices should be characterized beyond the United States.

Hair Cortisol Concentration as an Indicator of Long-Term Welfare in Equine-Assisted Therapy Horses: A Cross-Country Comparison Between the Czech Republic and Slovakia

doc. Ing. Kristýna Machová, Ph.D.

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Background: Ensuring the welfare of horses participating in equine-assisted therapy (EAT) is fundamental to the sustainability and ethical practice of equine-assisted interventions. Findings from international practice and research suggest that welfare outcomes may vary considerably across facilities, countries, and management systems. For example, reports presented at the 2024 HETI conference in Budapest described therapy horses displaying defensive behaviors, including kicking and biting during sessions, raising concerns about chronic stress and welfare. We previously evaluated hair cortisol concentration (HCC) as an indicator of long-term stress in Czech EAT horses. To determine whether these findings were consistent beyond a single national population, we subsequently compared the Czech data with data collected from therapy horses in Slovakia using the same methodological approach.

Methods: The first Czech study included 102 horses: 69 horses regularly involved in EAT and 33 recreational riding horses serving as controls. The second study included 66 EAT horses (38 Slovak and 28 Czech horses), together with 38 Slovak recreational horses. Mane hair samples representing approximately six weeks of cortisol deposition were collected and analyzed using an enzyme-linked immunosorbent assay (ELISA). The influence of horse- and management-related variables on HCC was evaluated using appropriate statistical analyses, allowing comparison of welfare-related factors across the two national populations.

Results: In the first Czech study, no significant difference in HCC was detected between EAT horses and recreational horses, indicating that participation in EAT per se was not associated with increased chronic stress. Geldings exhibited significantly higher HCC than mares. Horses involved in less physically demanding activities, such as equine-facilitated learning and social care, had significantly lower HCC than those involved in more intensive interventions, including equine-facilitated physiotherapy and occupational therapy. Time spent with individual clients was also associated with HCC, whereas the number of clients per day had no significant effect. Management practices were identified as key determinants of long-term stress; a greater number of regular rest days was associated with lower HCC, highlighting the importance of adequate recovery. Results of the international comparison between Czech and Slovak therapy horses will be presented.

Conclusions: The Czech findings indicate that appropriately managed equine-assisted therapy does not compromise the long-term welfare of therapy horses. Instead, management factors, particularly workload composition and adequate recovery periods, appear to be stronger determinants of chronic stress than participation in EAT itself. The ongoing international comparison aims to determine whether these relationships are consistent across different management systems and national settings, thereby strengthening the evidence base for welfare-oriented management of therapy horses. Hair cortisol concentration represents a valuable objective biomarker for evidence-based welfare assessment in equine-assisted interventions.

Horse and Human Interaction Lightning Round

Horse-Human Bond: Quantum of Cooperation-or the Horse Who Loved Me?

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The horse–human relationship has become a central topic in equitation science, reflecting a broader shift toward an evidence-based understanding of how horses perceive, respond to, and cooperate with humans. In scientific terms, the horse–human relationship can be defined as a dynamic, reciprocal interaction between horses and people, shaped by the horses' behavioral ecology, learning histories, and emotional states, as well as by humans' handling styles, predictability, and ability to meet the animals' biological needs. This conceptualization moves beyond viewing the relationship primarily as an affective state and frames it as a measurable construct that influences welfare, training outcomes, and the reliability of horses in tasks requiring voluntary cooperation.

Across our behavioral studies of horses, we repeatedly observed substantial variation in their motivation and willingness to participate in a range of experimental tests. A consistent pattern emerged: horses whose owners provided management and training aligned with the species' biological needs—such as adequate social contact, free movement, predictable handling, or low-conflict training—showed a markedly greater willingness to engage with the tasks. This finding supports the growing body of evidence that welfare-compatible management enhances horses' readiness to cooperate with humans, thereby strengthening the functional quality of the horse–human relationship.

The subjective quality of the horse–human relationship, as described by owners, did not always correlate with the horses' actual performance in cooperation-based tests. Horses sometimes performed better with an unfamiliar experimenter than with their own owner, even when the owner reported a positive and trusting relationship. These findings highlight that perceived relationship quality may not reliably reflect a horse's behavioral readiness to cooperate and that human interpretations of relational closeness can diverge from measurable behavioral indicators.

Overall, our experience reinforces the need for objective, welfare-based assessment of horse–human interactions. Our findings further indicate that owners' subjective perceptions of relationship quality may be influenced by a limited understanding of equine biological needs and affective states, as well as by misinterpretations of horses' responses to and relationships with familiar people and with men in general. These findings have important implications for training, welfare evaluation, and the design of future behavioral studies.

Beyond Stress Signals: Recognizing Affiliative Behaviors as Indicators of Relational Health in EAS

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Affiliative behaviors are an important but often underused source of information in equine-assisted services (EAS). Although practitioners are commonly trained to recognize signs of stress, avoidance, or unsafe behavior, less attention is given to the subtle behaviors through which horses express social interest, comfort, connection, and willingness to engage. This presentation focuses on observable affiliative behaviors that can help EAS practitioners better understand horse–human interactions during both mounted and unmounted activities.

Drawing on findings from an affiliative behavior study, this presentation will identify practical behavioral indicators such as proximity seeking, relaxed approach, mutual orientation, soft or sustained attention, affiliative touch, following, co-regulation, and relaxed shared presence. These behaviors can provide meaningful information about how horses experience and participate in interactions with humans. Rather than viewing the horse as a passive participant or therapeutic tool, attention to affiliative behavior allows practitioners to recognize the horse as an active social partner whose behavior communicates comfort, interest, boundaries, and relational availability.

The importance of these behaviors is supported by research on equine social behavior, welfare, and horse–human interaction, as well as by broader frameworks such as One Welfare and Interspecies Relational Theory. Together, these perspectives emphasize that equine well-being and human well-being are interconnected and that the quality of the relationship itself matters. In EAS, affiliative behaviors may also support human learning by creating opportunities to practice attunement, emotional regulation, consent awareness, boundary recognition, communication, and reciprocal engagement.

The Equine–Human Ethogram will be introduced as a practical tool for observing, recording, and evaluating these interactions in applied settings. By documenting affiliative and related behaviors during EAS sessions, practitioners and researchers can better identify patterns of engagement, reciprocity, choice, and possible relational strain. This type of structured observation can support more informed decision-making around session design, horse participation, activity pacing, and welfare monitoring.

This presentation offers a practice-oriented approach to recognizing affiliative behavior as a meaningful component of relational health in EAS. By learning to notice and respond to the affiliative behaviors horses already display, practitioners can strengthen ethical, responsive, and mutually beneficial interactions that support both equine and human well-being.

Horsemanship-Focused Equine-Assisted Learning for Veterans: A Preliminary Thematic Analysis

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The mental health of military veterans is a global concern. In the United States, an average of 17.5 veterans die by suicide every day, illustrating the urgent need for more comprehensive care to address the high rates of post-traumatic stress disorder (PTSD), depression, and other mental health diagnoses in this population. Although research on equine-assisted services for veterans is increasing, most of the literature focuses on psychotherapy incorporating horses. Few studies explore the lived experiences of participants in non-therapy-oriented programs such as equine-assisted learning. Therefore, this study aimed to understand the perceived psychosocial effects of an eight-week, horsemanship-focused equine-assisted learning program (Horsemanship for Heroes) among U.S. military veterans. At the completion of the eight-week program, we conducted semi-structured virtual interviews. This presentation reports a preliminary qualitative content analysis of 15 veterans lived experiences.

Findings highlight the critical roles of military culture, horses, and community in creating an environment for veterans' wellness and growth. The findings suggest that military culture, including a structured curriculum for systematic horsemanship skill progression, was an important aspect of the program. Furthermore, the role of military culture was inherently tied to that of community. Specifically, the findings revealed that veteran leadership and volunteers created a "by-veteran, for-veteran" atmosphere that fostered community and camaraderie. Participants expressed a desire to give back to the program and reported that program leaders provided clear opportunities for continued involvement in the program's community. The findings also suggest that horses played various unique roles in participants' growth. Participants described the process of bonding with their horses and how specific horsemanship skills and equine-assisted learning activities provided opportunities for perceived therapeutic gains, such as emotional awareness, emotional regulation, and shifts in perspective. Overall, the findings suggest that the horsemanship-based equine-assisted learning program studied provided a safe and supportive environment in which veterans could develop a sense of community, bond with horses, and improve their psychological well-being.

This study provides valuable veteran perspectives on what makes a horsemanship-focused equine-assisted learning program effective. Participant voices are essential to advancing equine-assisted services because participants are most affected by program development and improvement.

Wrap-Up

Looking Back to Move Forward: The Next Chapter of Equine-Assisted Services

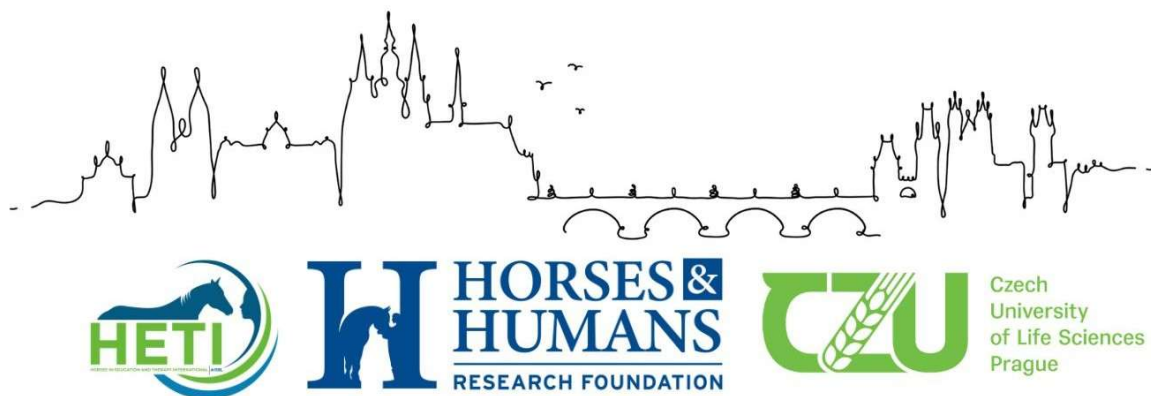
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This presentation reflects on the evolution of the equine-assisted services profession while challenging attendees to imagine what comes next. Through stories, lessons learned, and themes emerging throughout the symposium, attendees will explore how research, education, collaboration, innovation, and horse well-being have reshaped the field over the past several decades. The session will celebrate the progress made while encouraging the global equine-assisted services community to embrace curiosity, partnership, and continual learning as we work together to build an even stronger future. The presentation concludes with a call to action, reminding attendees that the future of the profession will be shaped not by any one organization or country but by the collective efforts of people committed to improving the lives of both humans and horses.

Poster Abstracts



19-20 September 2026 Prague, Czech Republic

What Does the Horse Add? A Case Comparison of Equine-Assisted Physiotherapy Based on Neuroproprioceptive Facilitation and Inhibition Principles and Physiotherapy in a Child with Spinal Muscular Atrophy Type II Following Gene Therapy

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Background: The development of gene therapy has fundamentally changed the prognosis of children with spinal muscular atrophy (SMA). Despite stabilization of the disease and improvement of motor functions, many children continue to use compensatory movement strategies that can negatively affect the quality of movement and the development of structural deformities. Equine-Assisted Physiotherapy Based on Neuroproprioceptive Facilitation and Inhibition Principles (NEUROEQUIP-SMA) may be one of the promising therapeutic concepts.

Methods: A four-year-old girl with SMA type II following treatment with onasemnogene abeparvovec completed two six-day NEUROEQUIP-SMA programs and one intensive block of individual physiotherapy (SMA-SoC) over 11 months. Both programs monitored changes using standardized clinical motor scales, spirometry, 3D video analysis, psychomotor video analysis, quality-of-life questionnaires, and long non-coding RNA profiling. NEUROEQUIP-SMA targeted horses with different dominant motor characteristics according to therapeutic goal. ClinicalTrials.gov Identifier: NCT05341453.

Key findings: No deterioration in any of the evaluated parameters was noted during the 11-month follow-up. Both NEUROEQUIP-SMA and SMA- SoC resulted in improvements in endurance of deep cervical flexors and extensors. The greatest increase was observed after the second NEUROEQUIP-SMA (deep flexor endurance +14.23 s; extensor endurance +30.41 s), the qualitative scaling test score increased from 42 to 67 (+25 points) and from 49 to 67 (+18 points) after both NEUROEQUIP-SMA programs, while it increased from 54 to 62 (+8 points) after outpatient physiotherapy. NEUROEQUIP-SMA was also associated with an increase in spontaneous motor activity in the home environment (+6 and +2 new motor manifestations), while an increase of one manifestation was observed after outpatient physiotherapy. Spirometric parameters improved after the first NEUROEQUIP-SMA intervention (FEV₁ 0→56.3%, PEF 0→0.6 l/s) and after outpatient physiotherapy (FEV₁ 0→62%, PEF 0→0.6 l/s), while no change was noted after the second NEUROEQUIP-SMA program. 3D video analysis captured the largest changes after both NEUROEQUIP-SMA programs, with the nature of the changes corresponding to the therapeutic goal and the dominant movement of the chosen horse.

Practical Implications for the field: The results indicate that NEUROEQUIP-SMA can bring specific therapeutic stimuli that is difficult to achieve with conventional physiotherapy. It seems that the purposefully guided motor response of the child's musculoskeletal system to the movement of the horse's back can significantly influence the reorganization of muscle chains so that the newly acquired motor skills are spontaneously used in the usual environment. At the same time, it appears that 3D video analysis represents a promising tool for a more objective assessment of the effect of equine-assisted interventions and can help to better understand the mechanisms by which the horse influences human movement.

Equine Well-Being in Active Service: Applying the Positive Association Methodology and EvaSE Protocol in Non-Conditioned Equestrian Sessions

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HETI Ethics Taskforce member

Background: Contemporary equestrian practice frequently relies on conditioning-based training paradigms that, while effective for performance outcomes, raise significant questions regarding equine well-being, agency, and quality of life. At iPoney Outdoor Spaces, we have developed a daily practice grounded in two complementary frameworks: the Positive Association methodology, included as part of the EvaSE protocol, a validated assessment tool developed through the Erasmus+ EvaSE project for evaluating equine well-being in the context of Equine-Assisted Services (EAS). This poster presents findings from our operational experience delivering equestrian sessions in which horses engage without traditional conditioning, coercion, or restraint-based techniques

Methods: Equestrian sessions were designed and delivered following Positive Association principles:

- Horse participation is voluntary,
- Interaction is initiated and sustained through genuine relational engagement,
- And the horse retains agency throughout.

Well-being was assessed using the EvaSE protocol, which integrates the Five Domains framework and behavioral indicators relevant to the EAS context.

Observations were conducted across varied session types, participant profiles, and environmental conditions at our facility in the Basque Country, Spain.

Key findings: Horses participating in non-conditioned sessions consistently demonstrated behavioral indicators associated with positive affective states; including approach behaviors, relaxed posture, and sustained voluntary engagement as assessed through the EvaSE protocol. The absence of traditional conditioning did not compromise session quality or participant safety. Rather, it appeared to foster more authentic horse-human relational dynamics, with horses expressing greater behavioral variability and apparent choice. Equine well-being indicators remained stable or improved across the observation period, suggesting that Positive Association methodology is not only ethically coherent but operationally sustainable.

Practical Implications for the field: These findings challenge assumptions embedded in mainstream equestrian and EAS practice that conditioning is a prerequisite for safe, effective human-horse engagement. The integration of Positive Association methodology with a rigorous welfare assessment tool like EvaSE offers practitioners a replicable, evidence-informed model for delivering equestrian services that genuinely center equine well-being. This work invites a broader conversation within the EAS field about the ethical and practical value of shifting from compliance-based to relationship-based practice.

Valuing the Horse: An Interdisciplinary Mixed-Methods Study of Human-Horse Relationships and Their Implications for Equine Welfare Across Diverse Equine Communities

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Background: The human-horse relationship is central to equine welfare, with human perceptions, attitudes, and motivations significantly influencing how horses are handled, trained and managed (Hemsworth et al., 2015; Hemsworth, 2017; Hemsworth et al., 2021; Wolframm et al., 2023). As such, the quality of human-horse interactions plays a critical role in shaping equine behavioral responses, affective experiences and overall welfare outcomes (McGreevy and McLean, 2010). Consequently, a growing body of literature argues that efforts to improve equine welfare must move beyond horse-centred assessments to more explicitly consider the human factors underpinning care, training, and management practices (Furtado and Rendle, 2022; Wolframm et al., 2023; Cheung et al., 2025). Furthermore, within the One Welfare framework equine welfare outcomes are embedded within complex human-animal systems in which beliefs, practices, material realities and contextual constraints shape both human behavior and animal experience (Lindenmayer and Kaufmann, 2021; Pinillos et al., 2016, 2015).

Existing literature has made important contributions to understanding both equine behavioral indicators of welfare and human attitudes toward animals. However, these areas have largely been investigated in isolation. Studies focusing on equine welfare often prioritise behavioral or physiological measures without explicitly accounting for the perceptual frameworks of the humans involved (Minero and Canali, 2009; Mellor et al., 2020). Conversely, research on human attitudes and perceptions frequently lacks direct linkage to observed interaction patterns and measurable welfare outcomes in animals (Hemsworth & Coleman, 2011).

The central gap can be summarised as a missing link between human meaning-making, human behavior, and equine welfare outcomes. Addressing this gap requires an approach that can account for the complexity and co-construction of human-horse relationships without imposing a predetermined explanatory framework. Rather than applying a single existing theory of welfare or human-animal interaction, this study will draw on insights from One Welfare, relational theory, and constructivist grounded theory (CGT) to develop a new, empirically grounded understanding of how welfare is perceived, negotiated, and enacted within human-horse relationships.

Methods: This study adopts a pragmatist mixed-methods approach to investigate how human perceptions, values, and relational dynamics shape equine welfare across diverse South African contexts. Grounded in constructivist grounded theory (CGT), the qualitative component will explore how individuals construct meanings around horses and equine welfare. Behavioral and physiological measures will provide complementary empirical insight into how these meanings are enacted within human-horse interactions and reflected in equine responses.

A mixed-methods study will be conducted over 3 years with 20–30 human-horse dyads from two South African equine communities: working cart horse communities and horses working in equine-assisted services. Semi-structured interviews will explore participants' understandings of horse welfare, wellbeing, care, and relational value. Equine welfare assessment will include behavioral observation, Qualitative Behavior Assessment (QBA), standardised human-horse interaction tests, and hair cortisol concentration (HCC) analysis. QBA will assess affective state and emotional expression (Minero et al., 2018; Rowland et al., 2022), while HCC will provide a non-invasive measure of chronic stress physiology (Meyer and Novak, 2012).

Qualitative data will be analyzed using constructivist grounded theory (Khan, 2014), while quantitative data will be analyzed using mixed-effects models and correlational analyses to examine relationships between behavioral and physiological measures. Triangulation will integrate findings across data types (Hall et al., 2018).

Key findings: The study is expected to produce a novel theoretical framework linking human perceptions to equine welfare, provide empirical evidence of how relational dynamics influence behavioral and physiological outcomes, and contribute to improved welfare assessment practices.

The final output of this research will be a multi-layered conceptual theory of human-horse relationships that integrates experiential meaning systems (CGT qualitative findings), behavioral expression and interaction dynamics, and physiological stress regulation (HCC).

This framework will synthesise how relational meanings are constructed, enacted in behavior, and reflected in biological stress indicators over time. It reflects the pragmatist aim of producing actionable, context-sensitive

knowledge that bridges subjective experience, observable behavior, and biological processes within a coherent longitudinal interpretation."

Practical Implications for the field: This study will make a significant contribution towards the better understanding of how the human–horse relationship unfolds within various equine settings, how horses are viewed and how that view affects their welfare and wellbeing and how this wellbeing is intertwined with the wellbeing of their human carers.

Such an approach has the potential to inform evidence-based interventions, education, and training strategies aimed at improving both human–horse interactions and equine welfare specifically within South African contexts. More broadly, it contributes to animal welfare science by positioning human cognition, perception, and decision-making as integral components of welfare systems, while demonstrating how biological and behavioral indicators can be meaningfully integrated within an interpretive, theory-generating framework.

Ultimately, the goal is to contribute to a more nuanced and context-sensitive understanding of human–horse wellbeing that supports better welfare outcomes for horses while also recognising the needs, realities, and wellbeing of the people who care for them.

Exploring the Process of Using Equine-Assisted Psychotherapy to Treat Anxiety in Adolescents and Young Adults

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Background: Anxiety is the most rapidly growing mental health problem globally, particularly among adolescents and young adults. Mental health clinicians need effective somatic treatment strategies to address the anxiety epidemic. The purpose of this qualitative generic study was to explore the perspectives of clinicians on the process of using equine-assisted psychotherapy (EAP) to treat adolescents and young adults with anxiety through the lens of a somatic theory, bioenergetics.

Methods: A qualitative procedure with an exploratory generic design was used for this study. Data was collected using semi-structured interviews with 12 EAP clinicians in the USA and analyzed using Braun and Clarke's thematic analysis. A deductive, theoretical approach was used, taking into account and expanding on past themes developed in the current literature on EAP and somatic treatments. Analysis was performed at the latent level, with themes developed to describe the underlying ideologies of clinicians, and from a constructionist framework, focusing on the structural conditions within which EAP clinicians practice. Patterns identified in the data were examined to illuminate the theory that frames the inquiry by analyzing how clinicians' processes are influenced by somatic or other lenses.

Key findings: Three themes were identified: 1. The process of EAP is highly effective because energetic connection with horses creates therapeutic change, 2. The process of EAP creates embodied experiences for adolescents and young adults with anxiety to learn and practice coping skills, and 3. EAP clinicians perceive discrepancies in processes, limitations in funding and certification, and ethical concerns in the modality. The findings show that connecting with horses and developing congruence through experientially learning embodied coping skills helps clients heal from the pathology caused by disconnection.

Practical Implications for the field: Improving understanding of how EAP works strengthens the modality to help meet the urgent need for effective anxiety treatments. The EAP mechanisms of change, connection and congruence help adolescents and young adults heal from anxiety through developing resilience against internal dissonance and fear fueled by a screen-based culture. Exploring the processes that clinicians use in treatment increases understanding of the underlying mechanisms of change, frameworks, and interventions in EAP, which may lead to the development of evidence-based best practices, improved practitioner training protocols, and increased effectiveness of the treatment modality.

Equine-Assisted Service practitioners' perceptions and understanding of horse behavior

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Background: Equine-assisted services (EAS) comprise a range of interventions aimed at enhancing human wellbeing through horses. Since a link exists between equine behavior, welfare and human safety, providers of EASs must be fluent in understanding equine effects from safety as well as a relational perspective. Practitioners' ability to do so, however, remains relatively underexplored.

Methods: An online survey was conducted to investigate practitioners' understanding of equine behavioral effects. Participants (n=326) were exposed to 16 expert-rated visuals (9 videos, 7 photographs) of horses showing behaviors suggestive of stress (negative stimuli), or absence of stress (positive stimuli). Practitioners were required to indicate i) whether they believed the horse was showing signs of negative affect/stress, ii) the intensity of any stress and iii) the type of emotion/s displayed by the animal (open-ended) as well as provide additional commentary regarding the stimulus material should they so wish.

Key findings: Descriptive statistics, chi-square, binomial statistics, and multiple linear regression were used to explore the data, with open-ended questions examined through basic content analysis. Most practitioners were female, over 50 years of age, and resided in the UK, Ireland, and North America. In addition, almost half of those who responded had accrued at least 16 hours of specific equine behavior education. The mean number of correct answers was 12/16, with a range between 6 and 16. Only 1.5% of respondents correctly answered all questions. A regression analysis showed that practitioners from a non-therapy background and those who received equine behavior training from an ethology expert or educational institution identified more of the visuals correctly. Practitioners frequently described the horses' emotional state in the positive stimuli as 'curious' or 'relaxed', whilst descriptors for negative visuals included 'fear', 'pain' and 'stress'. Content analysis from open ended questions explored how practitioners appraised the visuals, providing insights as to where misunderstandings or variance may originate. Overall, findings highlight gaps in EAS practitioners' ability to accurately recognise and interpret behavioral indicators of stress in horses. The impact of education, as well as other possible influences on scores, such as attitudes and beliefs, are also discussed.

Practical Implications for the field: This study provides an industry-wide look at practitioner perceptions and understanding of equine effect, as well as some of the influencing factors that may be at play, such attitudes and education delivery. Going forward, there is a need to create educational material geared towards developing the knowledge, skills, and attitudes necessary to ensure a high level of competency in this area.

Equine Assisted Occupational Therapy: Supporting Families Affected by Domestic Abuse – A Pilot Program Evaluation

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Background: Domestic abuse (DA) has profound and long-lasting effects on the physical, emotional, and relational wellbeing of adults and children. Trauma-informed and family-centred interventions are increasingly recognized as essential in supporting recovery and preventing long-term psychological harm. Equine Assisted Occupational Therapy (EAOT) provides a sensory rich, non-threatening therapeutic environment that may support emotional regulation, confidence, and relational repair. This pilot program evaluated the effectiveness of the GAITS (Give, Be Active, Interconnect, Take Notice and Service Learn) intervention and the complementary Nature to Nurture parent program for families affected by domestic abuse in Northern Ireland.

Methods: A mixed-methods service evaluation was conducted between September 2024 and June 2025. Families were referred to through the local Trust and a supporting charity. Two intervention strands were delivered by an Occupational Therapist alongside equine specialists: (1) a four-week family-centred GAITS program and (2) a six-week parent-focused Nature to Nurture program. Quantitative feedback questionnaires, reflective journals, and clinical observations were used to explore emotional wellbeing, confidence, regulation, and family interaction.

Key findings: Eight families were referred to the family intervention, with six families completing the program. Five mothers completed the parent program. Families reported increased emotional regulation, improved confidence, strengthened family relationships, and reduced anxiety following engagement with horses and nature-based activities. Children particularly identified feelings of calmness, safety, and increased confidence during mounted equine activities. Mothers described the intervention as therapeutic, empowering, and less intimidating than traditional services. Peer support, connection with nature, and the therapeutic relationship were highlighted as central to positive outcomes.

Practical Implications for the field: The findings suggest that trauma-informed EAOT may offer a valuable early intervention pathway for families affected by DA. Integrating occupational therapy principles with equine-assisted approaches may improve engagement for families who find conventional therapeutic environments challenging. The study supports the development of wider trauma-informed equine programs and specialist training pathways across Northern Ireland.

Evaluating the Impact of an Equine-Assisted Occupational Therapy Program for Children with Autism Spectrum Disorder: A Pilot Program Evaluation.

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Background: Autism Spectrum Disorder (ASD) can impact participation in daily occupations, social interaction, sensory processing, and adaptive functioning. Equine assisted occupational therapy offers a unique intervention approach that combines meaningful activity, sensory-rich experiences, and opportunities for social engagement within a natural environment. While emerging evidence supports the use of equine-assisted interventions for children with ASD, further program evaluations are needed to demonstrate outcomes and inform practice. This program evaluation aimed to explore the impact of a tailored equine assisted occupational therapy program on occupational participation and functioning in two children with ASD.

Methods: A 12-week equine assisted occupational therapy program was delivered at Gortilea Social Farm to two children diagnosed with ASD: a 10-year-old female and an 11-year-old male. Participants attended one joint session per week. Intervention activities were individually tailored to address each child's occupational goals and included both hippotherapy and groundwork tasks involving horse care and handling. Sessions incorporated individual goal-directed activities alongside collaborative group-based tasks designed to promote social connectedness, communication, and peer interaction. Outcomes were evaluated using the Short Child Occupational Profile (SCOPE), completed by the occupational therapist before and after program participation.

Key findings: Post program SCOPE evaluations demonstrated notable improvements for both participants across all assessed domains. Gains were observed in volition, habituation, communication and interaction skills, process skills, motor skills, and environmental participation. Improvements were particularly evident in social engagement, confidence, task participation, and the ability to interact within a shared activity context. The combination of individualized therapeutic activities and structured opportunities for peer interaction appeared to support positive occupational outcomes.

Practical Implications for the field: Findings from this small-scale program evaluation suggest that equine assisted occupational therapy may be an effective intervention approach for supporting occupational performance and social participation in children with ASD. Social farming environments such as Gortilea Social Farm provide meaningful and motivating contexts for occupation-based interventions. Further research with larger participant groups and additional outcome measures is recommended to strengthen the evidence base and inform best practice in equine-assisted occupational therapy.

An Integrated Equine-Assisted Services Model for the Psychosocial Rehabilitation of Military Personnel and Veterans During an Ongoing War: Development and Practice-Based Experience from Ukraine

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Background: The war in Ukraine has created unprecedented challenges for the psychosocial rehabilitation of military personnel and veterans, including combat-related trauma, captivity, physical injuries, prolonged stress, hypervigilance, emotional dysregulation, and difficulties with reintegration into civilian life. These challenges highlight the urgent need for multidisciplinary rehabilitation models.

Equine-Assisted Services (EAS) are increasingly recognized as a valuable component of psychosocial rehabilitation; however, limited published experience exists on integrating EAS into multidisciplinary programs delivered during an ongoing armed conflict.

In response, SHINE Centre for Psychology and Self-Development developed and implemented an integrated EAS model. This abstract presents its development and practice-based implementation to contribute to international dialogue on psychosocial rehabilitation in war-affected populations.

Methods: An integrated EAS model was implemented through a structured program comprising a minimum of 10 sessions, with the option of extension based on individual needs and participants' progress. The program was delivered by a multidisciplinary team of SHINE specialists for military personnel and veterans of the Ukrainian Navy.

The model integrated EAS with psychological assessment, individual and group psychotherapy, psychoeducation, and creative therapeutic approaches. It was organized into three phases: (1) assessment and goal setting; (2) integrated therapeutic intervention; and (3) evaluation, reflection, and transition to the independent use of acquired coping strategies.

Assessment, multidisciplinary observations, and participants' feedback were used to individualize support and evaluate the implementation of the model.

Key findings: Practice-based observations indicated positive changes in participants' psychosocial functioning throughout the program. Assessment suggested improved emotional stability in the majority of participants, while multidisciplinary observations and participants' feedback indicated enhanced emotional regulation, increased trust, improved group interaction, greater engagement in rehabilitation, and reduced psychological distress.

A notable observation was that meaningful communication and group participation most frequently emerged after the second or third session, suggesting that repeated interaction with horses within a structured program may facilitate trust, psychological safety, and readiness for therapeutic engagement.

The model also demonstrated flexibility by allowing individualized rehabilitation pathways, including additional sessions for participants requiring extended psychological support.

Practical Implications for the field: This practice-based model demonstrates how Equine-Assisted Services can be integrated into multidisciplinary psychosocial rehabilitation during an ongoing war. The Ukrainian experience highlights the importance of combining EAS with psychological support within a structured yet flexible rehabilitation pathway.

The model provides a practical framework for international collaboration and may serve as a foundation for future multicentre practice-based evaluation and clinical research exploring the contribution of Equine-Assisted Services to multidisciplinary rehabilitation for military personnel, veterans, and other populations affected by armed conflict.

Experiences of an Equine-Assisted Group Intervention for People with Schizophrenia

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Background: Treatment for people diagnosed with psychotic conditions is mainly medical while psychosocial interventions are limited. Holistic health interventions are needed to facilitate health, recovery and quality of life among individuals diagnosed with schizophrenia or schizophrenia like conditions.

Methods: The project was approved by the regional Ethics Committee of Lund in Sweden Dnr 2017/709 and comprises six publications starting with a literature review. Twenty people with psychoses participated in an equine-assisted group intervention on 20 occasions. Self-rated questionnaires were completed, and individual interviews were conducted with eight participants and ten relatives. Quantitative data were analyzed using SPSS 25.0 and qualitative data were analyzed following conventional qualitative content analysis (Hsieh & Shannon, 2005). The whole project was finally summarized.

Key findings: The results from questionnaires and interviews with participants and relatives show that the equine-assisted intervention has the potential to contribute to general health, well-being, and strengthened efficacy among people diagnosed with psychosis.

Practical Implications for the field: Equine-assisted interventions would be useful in future development of mental health care. Further research needs to address long term effects of equine assisted interventions and methods for establishment of EAI as a complement to the traditional clinical approach in mental health care and support for people diagnosed with schizophrenia or schizophrenia like conditions.

What Is Better for a Patient with Cognitive Impairment — a Horse or Solving Crossword Puzzles

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Background: The authors tested the hypothesis that horse-assisted psychotherapy would be more effective in improving cognitive functions and reducing negative symptomatology in patients with chronic schizophrenia than conventional cognitive training.

The intervention was based on the methodology of psychotherapeutic riding for adult psychiatric patients published in 2024 (Holly & Hollá, 2024).

Methods: The study included 8 clients of a psychiatric rehabilitation center; all chronic patients diagnosed with paranoid schizophrenia in their fifth decade of life.

All participants attended cognitive training, occupational therapy, physiotherapy, and movement therapy.

Four clients additionally participated in horse-assisted psychotherapy twice a week.

Before the intervention, all participants were assessed by an independent psychologist using: MoCA – Montreal Cognitive Assessment

SNS – Self-Evaluation of Negative Symptoms

ROCF – Rey–Osterrieth Complex Figure

DSST – Digit Symbol Substitution Test

Key findings: Participants in the intervention group completed 23 horse-assisted psychotherapy sessions. After the intervention, all tests were re-administered.

MoCA assessed executive functions, visuospatial abilities, memory, learning, attention, language, abstraction, and orientation.

SNS assessed social withdrawal, anhedonia, hypobulia, alogia, and emotional blunting.

ROCF assessed visuospatial abilities, executive functions, visual memory, attention, and psychomotor speed.

DSST assessed information processing, attention, working memory, and psychomotor speed.

Statistical Results

Before the intervention, both groups were statistically comparable.

MoCA: No significant difference between the control and intervention groups at the end of the study.

SNS: Negative symptoms worsened in the control group and significantly improved in the intervention group.

ROCF: Results worsened in the control group and improved in the intervention group, with a statistically significant difference.

DSST: Both groups deteriorated, but the control group declined significantly more than the intervention group.

Conclusion

Despite the limitations typical of pilot studies, the results support the hypothesis that horse-assisted psychotherapy may have a beneficial impact on cognitive functions and negative symptomatology in chronic psychiatric patients.

Practical Implications for the field: Horse-assisted psychotherapy may serve as a meaningful adjunct to standard rehabilitation for patients with chronic schizophrenia, especially for those with persistent negative symptoms. The intervention shows potential to improve visuospatial abilities, executive functions, and psychomotor speed.

A Multi-Site Evaluation of the Eagala Model of Equine-Assisted Psychotherapy for Trauma-Exposed Military and Veteran Populations

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Background: Trauma-related mental health conditions remain a significant concern among military personnel and veterans, while treatment engagement and retention continue to challenge some conventional approaches. Equine-assisted services (EAS) have gained increasing attention as interventions with this population; however, rigorous empirical evidence remains limited. The Equine Assisted Growth and Learning Association (Eagala) model is a structured, ground-based psychotherapy framework that utilizes horse–human interaction, observation of equine behavior, metaphor, and experiential learning to support psychological growth. Through client-directed engagement with horses, facilitated by an Eagala team, participants explore patterns of relationship, emotional responses, personal challenges, and other aspects of their lived experience within a nonjudgmental environment that fosters insight, self-awareness, and self-discovery. This study, published in the *International Journal of Environmental Research and Public Health*, evaluated the feasibility, safety, and preliminary outcomes of the Eagala model among active-duty military personnel and veterans experiencing trauma-related symptoms.

Methods: This retrospective, multi-site observational study was conducted across 12 Eagala-designated programs, including 107 participants aged 22–78. Participants completed validated psychological measures of pre- and post-intervention, including the PTSD Checklist for DSM-5, Patient Health Questionnaire, Satisfaction with Life Scale, and Sheehan Disability Scale. Post-intervention satisfaction was measured using Client Satisfaction Questionnaire-8. Quantitative analyses used paired-sample t-tests to assess pre–post changes, while qualitative data were analyzed using a RAPID thematic approach to identify key experiential themes.

Key findings: Results demonstrated that the Eagala model can be implemented safely and effectively across multiple sites with this population. Participants showed significant reductions in PTSD symptoms, depression, and functional disability, alongside increases in life satisfaction. Engagement and completion rates appeared higher than those typically observed in conventional psychotherapy approaches. Qualitative findings highlighted themes of increased self-awareness, emotional regulation, and meaningful engagement facilitated through horse–human interaction.

Practical Implications for the field: These findings support the Eagala model as a promising, scalable intervention for trauma-exposed populations and contribute to the growing evidence base for equine-assisted psychotherapy. The study suggests that horse–human interaction within a structured, ground-based psychotherapy framework may offer a meaningful pathway for engagement, experiential learning, and trauma recovery. Further research, including randomized controlled trials, is recommended to strengthen the evidence base and better understand underlying mechanisms of change within Equine-assisted Services.

Eco-ICF: an ecological, ICF-based observation instrument for equine- and nature-assisted therapy

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Background: Outcomes in equine-assisted services (EAS) are frequently documented with discipline-specific or impairment-focused tools that fail to capture functioning across the real, multisensory contexts where change occurs. The WHO International Classification of Functioning, Disability and Health (ICF) offer a shared, function-centered language, yet few instruments operate it ecologically for EAS, and fewer treat the natural environment as an active facilitator alongside the horse. At Fundación Bayos (Pucón, Chile) we are developing Eco-ICF, a digital ecological observation scale that maps structured therapist observation onto the ICF across two contexts—interaction with the horse and natural settings—to complement conventional clinical information with the contextual data specific to equine-assisted therapy and to support conclusions about functional progress. This abstract reports a work on progress.

Methods: Eco-ICF is a single-file digital instrument: a 64-item ecological observation scale crossing four developmental domains (sensorimotor; communication and language; social-emotional; cognitive) with three ICF components (body functions, activity, participation) across two contexts (equine-assisted therapy and nature). Items are rated on a three-level achievement scale (always / sometimes / not achieved), with a non-applicable option excluded from scoring; the tool computes profiles by domain, ICF component and context, and contrasts the horse versus nature as facilitating environments. As a methodological innovation, an optional AI-assisted module synthesizes the structured ratings, free-text observations and inputs from multiple professionals into a coherent ICF-framed clinical narrative and a longitudinal read of functional change. It is applied at baseline and approximately every 12 sessions. Content and face validity are being examined through structured multidisciplinary clinician feedback (physiotherapy, speech-language therapy, occupational therapy, psychology, education).

Key findings: As work is in progress, we present the instrument's conceptual architecture, the AI-assisted synthesis workflow, and the first round of clinician evaluation. Anticipated outcomes include indices of item clarity and clinical relevance, the perceived added value over conventional observation, the usefulness of the horse-versus-nature contrast for clinical reasoning, and the quality and trustworthiness of the AI-generated summaries. We expect the ecological profile to surface ICF environmental facilitators and barriers that single-setting instruments typically miss.

Practical Implications for the field: Eco-ICF gives EAS practitioners a shared, ICF-anchored way to integrate observations from multiple professionals and developmental areas, communicate with families, and monitor functional progress across intervention cycles, with AI support reducing documentation burden. By positioning both the horse and the natural environment as co-therapeutic facilitators, it advances evidence-informed practice and lays a scalable foundation for multi-centre validation and dissemination.

Methodological Differentiation of Coaching Modalities in Equine-Assisted Services: Defining the Coach's Role and Ethical Boundaries

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Background: As Equine-Assisted Services (EAS) experience rapid global growth, and equine-facilitated coaching is increasingly utilized. However, as usual in new modalities, still, a significant gap remains between theoretical frameworks and everyday practice.

Practitioners often blend distinct coaching schools without methodological consistency, especially in the role of horse in assistance. This lack of clarity complicates the definition of the coach's professional boundaries and risks compromising both human and equine well-being.

To bring scientific rigor to EAS coaching, it is essential to systematically differentiate how various psychological modalities operate in the arena and precisely define what the coach should and should not do.

Methods: This contribution suggests a comparative methodological matrix analyzing four coaching modalities applied within EAS: the Person-Centered Approach (PCA), Gestalt coaching, Neuro-Linguistic Programming (NLP), and Systemic/Constellation coaching.

The matrix evaluates each modality based on its core focus, the specific role of the equine as a bio-feedback partner, and the operational boundaries of the coach. The theoretical framework is validated through three qualitative field case studies demonstrating how these modalities function during real-time human-horse interactions.

Key findings: The matrix successfully delineates the coach's operational boundaries across modalities. Crucially, it highlights ethical and functional limits; for instance, in PCA, the coach strictly refrains from interpreting the horse's behavior, serving solely as a facilitator of the client's self-discovery. Conversely, in Gestalt, the coach actively guides "here-and-now" body awareness, while in Systemic coaching, the horse physically externalizes relational dynamics.

The case studies confirm that maintaining these distinct boundaries prevents role confusion, enhances client psychological safety, and respects the horse's autonomy.

Practical Implications for the field: This methodological framework provides a practical tool for EAS professionals to elevate the scientific rigor of their practice. By clearly defining "what the coach does" versus "what the coach avoids," practitioners can deliver targeted, ethically sound interventions. Furthermore, this clear differentiation supports standardized practitioner training, improves risk management, and contributes to the global professionalization of coaching within human-horse interactions.

Being Good Enough Children's Experiences of Emotional Regulation Through Equine-Assisted Interventions

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Background: The prevalence of anxiety and other mental health problems among children and adolescents has increased significantly over the past decade, underscoring the need for complementary interventions that promote emotional well-being in addition to conventional mental health care. Equine-assisted interventions (EAI) have shown promising effects on psychological health; however, there is limited knowledge regarding the perspectives of children and adolescents who participate in these interventions and the specific therapeutic processes that facilitate recovery. Gaining insight into these lived experiences is crucial for the development of person-centered mental health services.

Methods: This qualitative study explored the experiences of six children and adolescents, aged 9 to 17, who took part in a 12-week equine-assisted intervention in southern Sweden. Each participant took part in a semi-structured interview, using the Photovoice method to help them reflect on their experiences. The interviews were then analyzed with reflexive thematic analysis to find common themes in their stories.

Key findings: Participants described the intervention as a gradual journey toward feeling "good enough." They experienced this through three main ways: feeling emotionally safe in a calm, low-pressure setting; finding inner balance and better emotional control by interacting with the horse; and building self-confidence by taking on new challenges and responsibilities. They saw the horse as accepting and nonjudgemental, which made it easier to express their feelings without worrying about criticism. Sensory experiences, meaningful time with the horse, and being in nature all helped them become more resilient, accept themselves, and believe in themselves again. Participants said these experiences carried over into their daily lives, helping them feel more confident in relationships, at school, and when dealing with anxiety.

Practical Implications for the field: These findings provide valuable insights into how equine-assisted interventions help children and adolescents with anxiety-related mental health issues. Emotional safety, hands-on interaction with horses, and supportive relationships with animals are key factors that help young people manage their emotions and build self-confidence. This study shows how equine-assisted interventions can work alongside current mental health services for young people and supports using recovery-focused, person-centered approaches in clinical practice.

Operant Conditioning as a Theoretical Framework for Behavior Change in Equine-Assisted Services: Implications for Substance Use Recovery and Desistance from Crime

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Background: Equine-assisted services (EAS) are increasingly used to support individuals recovering from substance use disorders and those seeking to desist from crime. Although positive outcomes have been reported, the behavioral mechanisms underlying these interventions remain insufficiently understood. Principles of operant conditioning—including reinforcement, extinction, shaping, and stimulus control—provide a well-established theoretical framework for understanding behavior change. These principles are widely applied in contemporary horse training, yet their potential as a theoretical framework for understanding behavior change in equine-assisted services has received limited attention. This review aims to explore how principles of operant conditioning may contribute to understanding behavior change in equine-assisted services, with particular attention to substance use recovery and desistance from crime.

Methods: This study is an integrative literature review. A structured literature search will be conducted in Scopus, PsycINFO, PubMed, and Web of Science. Google Scholar will be used as a supplementary search tool to identify additional relevant publications. Search terms will combine concepts related to operant conditioning, behavior change, equine-assisted services, substance use recovery, and desistance from crime. Peer-reviewed studies published in English will be selected according to predefined inclusion and exclusion criteria. The studies included will be analyzed thematically to examine how principles of operant conditioning have been applied or discussed as a theoretical framework for behavior change in equine-assisted services.

Key findings: The review is expected to identify behavioral mechanisms described within equine-assisted services that are consistent with principles of operant conditioning, although these mechanisms may not always be explicitly recognized within the existing literature. The findings are anticipated to highlight theoretical gaps while identifying opportunities to strengthen the conceptual foundations of EAS, particularly in programs supporting recovery from substance use disorders and desistance from crime.

Practical Implications for the field: This review may contribute to a more theoretically grounded understanding of behavior change in equine-assisted services. Integrating principles of operant conditioning with equine-assisted practice may support the development of more transparent, evidence-informed interventions and provide a stronger theoretical foundation for practitioners, educators, and researchers working with individuals recovering from substance use disorders or seeking to desist from crime.

Making Room for Equine Dissent: The Power of 'No' in Human–Horse Relations

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Background: Partnership rhetoric pervades contemporary equestrianism, yet horses rarely control the conditions of their participation. When they resist, their refusals take recognizable forms: conflict-related behaviors such as stepping away or balking, alongside oral and facial indicators of discomfort such as mouth gaping and ear-pinching. In common practice these are frequently dismissed as evasion, disobedience, or technical training problems, and met with greater pressure. Equine welfare science identifies such indicators with growing accuracy but primarily categorizes them as quantifiable shortcomings. It therefore says nothing about when a horse's refusal ought to hold ethical significance rather than merely serving as data for welfare evaluation. This study addresses that gap.

Methods: The work is a literature-based normative analysis integrating philosophical conceptual analysis with equine ethology, welfare science, and human–animal studies. It proceeds in three stages: conceptual development, contextual analysis of equestrian history and culture, and theoretical synthesis. Relational theories of agency and autonomy are combined with frameworks of assent and dissent drawn from animal research ethics and anchored throughout in concrete cases.

Key findings: The analysis distinguishes general refusal from dissent, defined as a patterned refusal arising from a competent horse's evaluative stance toward a specific interaction. A refusal of this kind becomes ethically binding not wherever it occurs, but where it concerns something that genuinely matters to the horse, draws on the horse's own experience, and reflects a real choice rather than coercion or resignation. The central finding is that such dissent is rarely recognized, and that this failure is structural rather than individual. An inherited ideal of obedience, a vocabulary that pre-scripts refusal as naughtiness or evasion, and competitive and institutional pressures that make overriding the path of least resistance combine to foreclose recognition before it can occur. Consequently, “partnership” can describe control as readily as cooperation. What separates the two is whether a horse's refusal is allowed to change what happens next.

Practical Implications for the field: Reframing refusal as potential dissent shifts the central question from how to secure compliance to whether overriding a horse's “no” can ever be justified. This supports the turn toward assent-based interaction and cooperative care, while clarifying why positive reinforcement alone cannot guarantee that dissent is honored. The framework gives welfare scientists, trainers, coaches, and practitioners a concrete vocabulary for treating equine refusal as ethically meaningful communication rather than a fault to be corrected. By making structural barriers visible, the analysis opens concrete avenues for revising training protocols, professional standards, and terminology within the industry.

Physiological synchrony, psychotherapeutic alliance and psychological flexibility in equine-assisted psychotherapy (doctoral thesis)

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Background: The aim of this doctoral thesis is to investigate the simultaneity of physiological regulation and movement regulation in psychotherapeutic equine-assisted therapy and the effectiveness of the therapy. The effectiveness is measured by the clinical outcomes of the treatment, i.e. the alleviation of the client's symptoms and improvement in quality of life, psychotherapeutic alliance and increase in psychological flexibility.

Physiological regulation and movement regulation between the client and the horse in equine-assisted therapy have been increasingly studied in equine-assisted therapy research in recent years (Naber et al., 2025; Wienhold et al., 2025; Garcia-Gomez et al., 2020; Ferlazzo et al., 2021; Amado-Fuentes et al., 2023; Rigby, 2023; Gehrke et al., 2011). Studies support the hypothesis that there is simultaneity between the clients' and the horses' regulatory functions of the nervous system and their regulation of movement (Naber et al., 2025; Garcia-Gomez et al., 2020; Rigby, 2023).

In previous psychotherapy research this simultaneous physiological regulation (synchrony) has contributed to the client's adherence to therapy, the quality of the collaborative relationship, and the therapeutic effectiveness of equine-assisted therapy (Naber et al., 2025; Wienhold et al., 2025; Garcia-Gomez et al., 2020). Psychotherapeutic alliance and psychological flexibility have been extensively associated with treatment outcomes in the context of conventional psychotherapy (Wampold, 2015; Hayes & Hoffmann, 2018; Walser, 2019; Lisboa et al., 2025). To the best of the authors' knowledge, previous research on simultaneous regulation, alliance and psychological flexibility is not available and the relationship between these processes has received little research attention.

Methods: The aim of the study is to analyze the movement regulation and physiological regulation that occur in psychotherapeutic equine-assisted therapy between the dyads (client and the horse, the therapist and the horse, the client and the therapist) and in triads (all three) by measuring the simultaneity of heart rate (HR), heart rate variability (HRV), and simultaneity of movement acceleration (MA). The development and relationship between the clinical outcomes of the treatment, the psychotherapeutic alliance, and the client's psychological flexibility during the therapy will also be examined.

The study is a multi-method case study focusing on the effectiveness of the therapy. It combines self-assessment measures of psychological well-being, psychological flexibility and quality of life of clients and physiological measurements (HR, HRV, MA) at the individual level of the client, therapist and horse, therapy dyads (client and therapist; client and horse; horse and therapist) and therapy triads (all three). In addition, the qualitative interaction analysis is used to identify significant moments, where therapist or client interaction suggest therapeutic change occurring during the equine-assisted therapy session.

The research questions have been defined as follows: 1) How does physiological synchrony, i.e. the simultaneity of heart rate variability and movement regulation, manifest and develop in time between the therapist, client and horse in psychotherapeutic equine-assisted therapy? 2) How does the client's physiological regulation develop during treatment? 3) How does the therapeutic relationship (alliance) between the client, therapist and horse develop in psychotherapeutic equine-assisted therapy? 4) What treatment outcomes can be achieved in psychotherapeutic equine-assisted therapy in terms of alleviating the client's psychological symptoms and improving their psychological flexibility and quality of life? 5) How can the phenomena of physiological synchrony, i.e. the simultaneity of regulation, be related to the development of the therapeutic relationship and treatment outcomes in equine-assisted therapy?

Data collection and analysis

Study population: Five equine-assisted therapist-psychotherapists (cognitive behavioral psychotherapy, cognitive psychotherapy, integrative psychotherapy), 15 clients and five therapy horses.

Clients: Adolescents over 15 but under 25 years of age, patients in the southern, western and eastern wellbeing services counties in Finland that offer equine-assisted psychotherapy for their patients.

Intervention: The study will implement a psychotherapeutic equine-assisted therapy intervention. The client will participate in 20 structured therapy sessions, where psychotherapeutic equine-assisted therapy exercises will be performed. The therapy sessions will be videotaped from beginning to end.

Physiological measurement: HRV variability and movement synchrony that occur during riding and working on the ground are measured using accelerometers (Polar® V800). The heart rate (HR) and heart rate variability (HRV) of the client, therapist and horse serve as indicators of physiological synchrony.

Video recording: The therapy session is filmed using camera technology designed to accurately capture the movement of the horse and rider. The purpose of filming is to help monitor the simultaneity of gesture and movement interaction and to determine significant moments in terms of change in the therapy process in relation to other materials.

Questionnaires: During each individual treatment session, a Visual Analogue Scale (VAS) designed for this study is completed four times to measure the client's alertness and the experience of the collaborative relationship on a six-point scale.

In addition, the client completes the following forms during the study (1-3 weeks before treatment, as well as study sessions 2, 11 and 19, and the three-month follow-up): Clinical Outcomes in Routine Evaluation (CORE/YP-CORE), Session Rating Scale (SRS), Outcome Rating Scale (ORS), Acceptance and Fusion Questionnaire for Youth (AFQ-Y), Pet attachment questionnaire (PAQ), Depression, Anxiety and Stress Scales, Youth Version (DASS-Y), CompACT 15 and the P-BAT electronic questionnaire for the therapeutic alliance and psychological flexibility. At the end of each session, the therapist completes the Working Alliance Inventory (WAI) and Pet attachment questionnaire (PAQ) to assess the therapeutic alliance.

Qualitative measurement: Qualitative data collection is carried out in the form of video recordings and interviews.

Video recording: Each therapy session is video recorded. The videos are used to analyze the synchronicity or non-synchronicity of the rhythm of interaction with the horse and the therapist (situations in which these are strengthened or weakened) for the client and the compatibility of the reactions of the client and the horse. The therapist is used to analyze the synchronicity of the rhythm of interaction with the horse and the client, as well as the therapist's reactions, regulation and guidance style during the therapy session.

Interview: After each therapy session, the researcher conducts a 5–10-minute structured interview via video connection about the experienced therapy relationship and changes in therapy.

Analysis: Synchrony data and questionnaire data are analyzed together using correlation analysis and time series analysis methods. Interviews are analyzed thematically, and qualitative information from the interview and video material is utilized in relation to the information produced by quantitative measures.

Key findings: The doctoral thesis aims to provide novel empirical findings on the physiological regulation processes and the effectiveness of treatment in the context of equine-assisted therapy and psychotherapy research, and to explore the interdisciplinarity and applicability of the research in several different fields of science (psychotherapy research, equine-assisted therapy and animal-assisted therapies, human and animal physiological regulatory functions and movement regulation, veterinary medicine).

Practical Implications for the field: This doctoral thesis provides information that can be used to justify the practical benefits of equine-assisted psychotherapy for clients and to consider the individual effects and mechanisms of the therapeutic relationship in practical therapy work. The information it provides can also be applied when assessing the well-being of a therapy horse.

HOPE – Horses for Opportunity, Participation, and Empowerment: Advancing the International Development of Paravaulting Through Erasmus+ Collaboration

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Background: Paravaulting is an innovative and rapidly developing para-equestrian discipline that combines elements of gymnastics, vaulting, balance, coordination, and artistic movement performed on horseback. Beyond providing opportunities for physical activity, paravaulting promotes inclusive sport participation by enabling individuals with disabilities to engage in structured training, skill development, and competitive experiences alongside their peers.

Although the discipline has attracted increasing interest in several European countries, its international development remains limited by the absence of standardized competition rules, educational frameworks, coach and judge certification systems, and coordinated pathways for athlete development. These limitations restrict the wider dissemination of paravaulting and its recognition within the international para-sport community.

The purpose of this paper is to introduce the Erasmus+ Sport project HOPE (Horses for Opportunity, Participation, and Empowerment), which aims to promote paravaulting across Europe by developing common educational resources, strengthening international cooperation, and establishing the foundations for harmonized competition standards and sustainable sport development.

Methods: The HOPE project is implemented within the Erasmus+ Sport Program and coordinated by JK Fany Hostěnice (Czech Republic) in partnership with Nevşehir Hacı Bektaş Veli University (Türkiye) and Caprifolen Voltigeklubb (Sweden). The project adopts a collaborative and practice-oriented approach that combines international workshops, expert meetings, demonstration activities, and knowledge exchange among coaches, athletes, researchers, and equestrian professionals.

The project focuses on developing pilot educational materials for coaches and judges, exchanging best practices between partner countries, evaluating existing national approaches to paravaulting, and designing a common methodological framework that can be adapted across different European contexts. Special emphasis is placed on increasing opportunities for youth participation, improving coaching quality, and supporting inclusive sporting environments.

Key findings: The project is expected to establish a sustainable international collaboration network involving coaches, judges, sport scientists, equestrian organizations, and practitioners working in adaptive equestrian sport. Expected outcomes include the development of shared educational materials, pilot judge education programs, methodological recommendations for training and competition, and practical guidelines supporting the implementation of paravaulting activities in different countries.

Furthermore, the project will increase the visibility of paravaulting as an emerging para-sport, encourage the organization of international events and demonstration activities, and facilitate knowledge sharing among organizations interested in introducing or expanding paravaulting programs. These outputs will contribute to improving both participation opportunities and the overall quality of sport delivery.

Practical Implications for the field: The sustainable growth of paravaulting requires more than local initiatives; it depends on international cooperation, common educational standards, and harmonized competition structures. The HOPE project represents an important step toward building these foundations by connecting expertise from multiple European countries and promoting innovation in inclusive sport.

Through the development of shared methodologies, educational programs, and international partnerships, the project has the potential to accelerate the recognition and dissemination of paravaulting across Europe, creating new opportunities for athletes with disabilities to participate in high-quality, inclusive, and internationally connected sporting environments.

Cost of Entry: Comparing Requirements Across International Therapeutic Riding Certifications

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Background: Therapeutic riding consists of riding lessons and activities tailored to individuals with a wide range of disabilities and challenges. It aims to teach horsemanship skills while promoting independence, correct balance and movement, and self-efficacy. Internationally, there is no singular accrediting body which trains and certifies therapeutic riding instructors. Minimum knowledge requirements for entry-level therapeutic riding instructors differ across organizations. At present, there is no known resource comparing requirements for entry-level therapeutic riding instructors. This lack of knowledge ultimately limits our collective understanding of the international therapeutic riding industry.

Methods: Specifically, we will outline instructor certification requirements across four organizations: the Professional Association of Therapeutic Horsemanship, International (PATH, Intl.); the Canadian Therapeutic Riding Association (CanTRA); Riding for the Disabled Association (RDA UK); and Riding for the Disabled Association Australia (RDAA). We define entry-level certification as the lowest credential which allows an individual to independently teach at least one rider with a disability. In order to accurately represent each organization, we have partnered with at least one certification subject matter expert from each organization to obtain relevant information.

Key findings: We will compare applicable direct costs, including the price of any applications and tests, and indirect costs, including mentorship requirements and supervised teaching time. We will also consider horsemanship prerequisites, such as riding skills, teaching skills, and knowledge of equine management.

Practical Implications for the field: This practical poster presentation holds value for students, early-career professionals, and mentors of current and future therapeutic riding instructors. This project will identify consistency across entry-level instructor requirements while highlighting differences among certifications. Furthermore, gaining a comparative understanding of certification requirements will shed light on existing barriers to entering the profession. These include, but are not limited to financial, educational, practical, and time-related costs. The cost of entry can directly influence accessibility; that is, who is able to enter and remain in the field. Such findings ultimately influence workforce development and industry sustainability.

Satisfaction levels with a therapeutic horseback riding program for people with autism

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Background: This study analyzes the satisfaction of parents of children with autism regarding an Equine-Assisted Psycho-educational Intervention (EAPI) program, conducted in a natural setting structured according to the TEACCH (Structured Teaching) methodology and guided by a team of specialized psychologists.

Methods: We used two satisfaction questionnaires—each comprising five multiple-choice questions rated on a scale from 1 (negative) to 5 (positive)—created and analyzed using online customer satisfaction survey software; the 5-point Likert-type response scale ranged from "strongly disagree" to "strongly agree."

Following a total of 10 IAE sessions and two pre- and post-test assessments, the two questionnaires were administered anonymously online to the participants' parents to gauge their satisfaction with the intervention and the results observed in their children. A total of 38 parents (n=38) 19 from the experimental group and 19 from the control group—completed the questionnaires correctly.

Key findings: In the overall score from the statistical analysis (using the Mann-Whitney U test) of the questionnaires for the experimental and control groups, a difference approaching significance was observed—with a 95.0% confidence interval—between those who received the intervention involving live animals and those for whom mechanical animals were used.

The experimental group was overall more satisfied than the control group, with mean scores of 45.6 (SD = 8.0) and 40.4 (SD = 7.9) respectively, although the difference was only marginally significant: $W = 115.0$, $p = 0.057$.

Practical Implications for the field: Based on the foregoing,

Animal-Assisted Interventions (AAI) appear to be a valuable tool

for enhancing the capabilities of individuals and families living with autism.

Equiferal: A Socio-Ecological, Ethical, and Tech-Driven Model for the Long-Term Conservation of Feral Horses in Sierra Nevada National Park

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Background: In the high-mountain Mediterranean ecosystems of Sierra Nevada National Park (Spain), a permanent population of around one hundred feral horses interacts with both a fragile environment and local communities. Sustainable wildlife management requires continuous, long-term monitoring, which is often difficult to sustain within rigid academic timelines. To bridge this gap, Equiferal was founded: a scientific, collaborative non-profit association. Evolving from a Bachelor's and a Master's thesis completed at the University of Granada, Equiferal has transformed independent academic research into a permanent stakeholder network. This platform unifies scientific monitoring, technological innovation, international research stays, local governance, and high ethical standards in horse-human interactions.

Methods: Equiferal integrates robust ecological fieldwork with community-led conservation and technological tools. Over 4.5 years, the team conducted 162 field surveys, capturing extensive photographic records. To manage this data, the association developed a custom-built data management system based on a PostgreSQL architecture integrated with Artificial Intelligence (AI) to automate individual identification, track group-switching dynamics, and map genetic lineages. To study movement ecology, GPS devices were deployed on 4 individuals from different bands. Crucially safeguarding equine welfare, collars were fitted without restraint, sedation, or food conditioning, relying exclusively on progressive, non-invasive field habituation. This framework operates alongside a trained volunteer network and institutional protocols with National Park authorities, environmental agents, local municipalities, livestock farmers, and nature protection service.

Key findings: The underlying scientific framework yielded essential baseline demographic and spatial data. More importantly, Equiferal proved the viability of its socio-technological model. The custom AI database effectively automates population tracking and social structure shifts over time. Regionally, the association has become the primary reference for feral horse management; public institutions consult Equiferal for scientific data, and local actors rely on them to respond to field emergencies and accidents. Furthermore, Equiferal's international research program has consolidated its role as an open-air laboratory for global collaborative studies on equid behavior.

Practical Implications for the field: Equiferal demonstrates that scientific non-profit associations are highly efficient, ethically sound, and technologically advanced vehicles for managing feral equids. By combining non-invasive habituation, AI-driven data systems, and community engagement, this collaborative framework provides a replicable global model showing how citizen science can achieve academic rigor while actively promoting animal welfare and resolving socio-ecological conflicts.

Equiferal also provides training opportunities focused on natural equine behavior and collaborates with researchers and practitioners in applied equine behavior, including Equine-Assisted Services (EAS), promoting knowledge transfer between feral horse research and professional practice.

Developing Psychological Flexibility Through Horse-Human Interaction in Nature. An act-based Protocol for a Pilot Feasibility Study

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Background: Advances in pediatric oncology have significantly improved survival rates for children with cancer; however, many survivors continue to face long-term psychosocial challenges, including those related to adapting to daily life after the illness, coping with uncertainty and fear of relapses, and managing difficult emotions. These children's siblings also face challenges related to their new role in the family and to dealing with a complex mix of fear, guilt over being healthy, and isolation. Psychological interventions have proven useful in improving quality of life and reducing emotional distress in these patients. Specifically, Acceptance and Commitment Therapy (ACT) shows promising results in the treatment of children and adolescents with cancer and their caregivers, although current evidence is limited. Similarly, equine-assisted interventions have proven useful in addressing emotional difficulties in children with health challenges and disabilities. However, to date, no programs have been developed that use of ACT in conjunction with equine-assisted therapy to improve psychological flexibility and quality of life in children with cancer and their siblings.

Methods: This poster presents the protocol for an ongoing pilot feasibility study, which is scheduled to begin in October 2026. The study is designed to evaluate feasibility, safety, and acceptability of a group intervention that integrates ACT therapy, equine-assisted activities, and natural environments, targeting childhood cancer survivors and their siblings aged 7 to 16, recruited through the ALES Association in Jaén (Spain). The intervention consists of eight monthly sessions structured around the core processes of ACT. Through experiential exercises conducted with horses, the program addresses cognitive defusion, acceptance, mindfulness, the self as context, values clarification, and commitment to action. The program will specifically address difficulties related to identity, body image, grief, uncertainty, and fear of relapsing. All experimental procedures will be supervised and approved by the Provincial Research Ethics Committee of Jaén. The horses' well-being will be systematically monitored throughout the program using a structured behavioral observation protocol (ethogram by Kieson et al., 2025) to ensure that all activities are carried out with constant attention to the horses' well-being.

Key findings: The study will analyze the feasibility and acceptability of treatment. It will also examine the effects of the intervention on psychological flexibility, mindfulness skills, emotion regulation, and quality of life. Our goal is to develop a viable, acceptable, and safe treatment while obtaining preliminary data that will serve as the basis for designing future-controlled studies.

Practical Implications for the field: By integrating ACT with horse-assisted activities in natural settings, this project aims to

contribute to the development of ethically responsible, evidence-based horse-assisted services for an underserved pediatric population.

From Doing to Belonging: Relational Safety and Embodied Agency in Equine-Assisted Services

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Background: The Doing–Being–Becoming–Belonging perspective offers a useful occupational lens for understanding how meaningful participation contributes to health, identity, and social connection. Equine-assisted services (EAS) naturally involve embodied occupations, such as grooming, leading, riding, mounted exercises, and horse care. However, EAS is often described primarily through what participants do, while less attention is given to how these activities are relationally supported, embodied, graded, and integrated into participants' sense of agency and belonging. A conceptual framework may help clarify how EAS activities become meaningful experiences rather than isolated tasks.

Methods: This work-in-progress uses a practice-informed conceptual synthesis. Concepts from occupational therapy, rehabilitation, human–animal interaction, and equine-assisted services are integrated to develop a framework based on Doing–Being–Becoming–Belonging. Reflective practice and structured observations from mounted and unmounted equine-assisted activities are used to identify how activity participation, relational safety, graded challenge, participant agency, and equine welfare interact within EAS settings. The proposed framework will be refined through case-based reflection across different participant pathways, including children/adolescents and adults, with attention to power dynamics, communication, task grading, and horse–human reciprocity.

Key findings: The anticipated outcome is a four-dimensional framework describing how EAS may support participants' progression from Doing activities toward Being, Becoming, and Belonging. The framework proposes that meaningful change does not arise from activities alone, but from how activities are relationally held, embodied, graded, and integrated into participants' sense of agency. Key mechanisms include accurate attunement, non-shaming feedback, just-right challenges, embodied corrective experiences, and reciprocal regulation among participant, horse, and practitioner. The framework also identifies ethical risks: without attention to participant voice, power dynamics, task difficulty, and equine welfare, EAS may unintentionally reproduce experiences of control, invalidation, or failure.

Practical Implications for the field: This framework encourages EAS practitioners to evaluate not only what participants do, but also how participation is experienced. It may support more intentional activity grading, stronger integration of mounted and unmounted work, and clearer interdisciplinary communication among therapists, instructors, caregivers, and volunteers. The framework highlights the importance of relational safety, participant choice, embodied agency, and meaningful contribution, while also emphasizing that horse welfare must remain central to clinical and program decisions. For practice, this means documenting participant voice, emotional state, body engagement, recovery after challenge, and the horse's behavioral and physical responses, rather than focusing only on task completion.

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