



The Hierarchy of Evidence Professor Ann Hemingway

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Randomised **Studies**

https://www.resear chgate.net/publicati on/268188622 Exp erimental Trial De monstrates Positive Effects of Equine **Facilitated Learning** on Child Social C ompetence/referen ces

Randomised **Studies**

Cohort Studies

https://onlinelibrary.wiley.co m/doi/full/10.1111/famp.12

Before and After Measurement Studies

https://www.researchgate.net/publication/333882 Ittps://www.researchgate.net/publication/33388238 6 A Study Exploring the Implementation of an Eq uine Assisted Intervention for Young People with Mental Health and Behavioural Issues

Qualitative Studies Interviews/Observation

https://www.researchgate.net/publication/28344137 Facilitated Learning Intervention with Young Offen

Internal Evaluation, Case Studies, Expert Opinion https://www.verywellmind.om/equine-therapy-mental-

Hierarchy of **Evidence of Effectiveness**

Systematic Reviews

https://www.researchg ate.net/publication/273 912596 A systematic r eview of the efficacy of equineassisted interventions on psychological outco mes

2015/16

Qualitative &
Observational
Studies Level 2 on the
Hierarchy of Evidence

Hemingway, A.; Meek R. & Hill, C.E. An exploration of an equine facilitated learning intervention with young offenders. *Society & Animals.* **2015**, *23*, 1–25.

North, S.; <u>Hemingway, A.</u>; Maclean, A.; Laurie, H.; <u>Ellis-Hill, Caroline</u> 2016 Evaluating a natural horsemanship program in relation to the ISES first principles of horse training Journal of Veterinary Behavior: Clinical Applications and Research **Volume**15, **Issue**Sept/Oct, 87-87





What we found in these studies...

Through working in a non-judgemental way which was action based and experiential with offenders who usually find it difficult to engage we found they moved from being anxious and ineffectual, to calm assertive and confident. They reported feeling calmer and more in control of their emotions in other settings inside the young offenders institution.

12 month reoffending rates were found to have reduced by 27% (n=25) in comparison with the Offender Group Reconviction Scale prediction for these individuals. This was a small group but this reduction was found to be statistically significant.



2019

Before and After Measures Level 3 on the Hierarchy of Evidence

Hemingway, A.; Carter, S.; Callaway, A.; Kavanagh, E.; Ellis, S. An Exploration of the Mechanism of Action of an Equine-Assisted Intervention. Animals 2019, 9, 303.

https://www.mdpi.com/2076-2615/9/6/303/htm



Hemingway A. 2019 A Study Exploring the Implementation of an Equine Assisted Intervention for Young People with Mental Health and Behavioural Issues Journal of Multidisciplinary Research 2019, 27 June.

https://www.mdpi.com/2571-8800/2/2/17





What We Found...



Anxious Fearful Excited

Thirty Minutes

Happy
Proud
Calm
Accomplished

We found that humans experience emotional arousal while playing with horses which we can measure through the skin becoming temporarily a better conductor of electricity due to sweat we secrete when we are emotional which is different to when we run around or are hot. This study suggested that learning how to deal with becoming emotional and learning to be calm and assertive to achieve successful outcomes with the horses means that those positive responses to emotions can be learned and transferred into daily life.

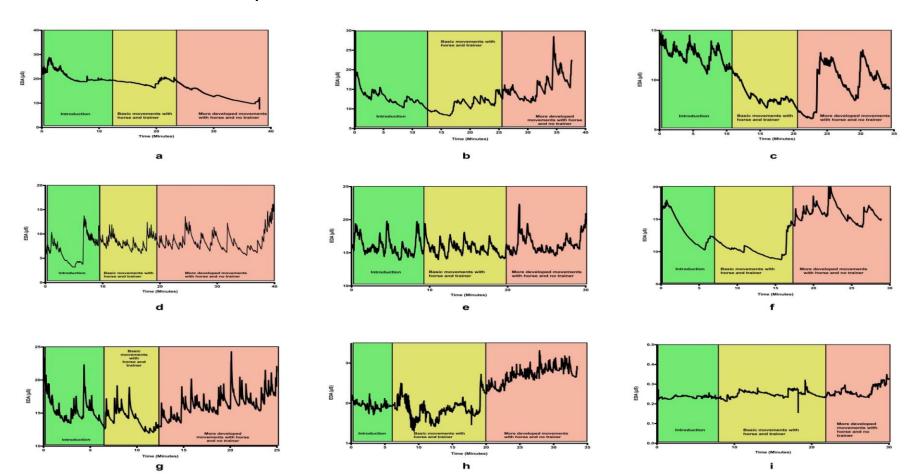
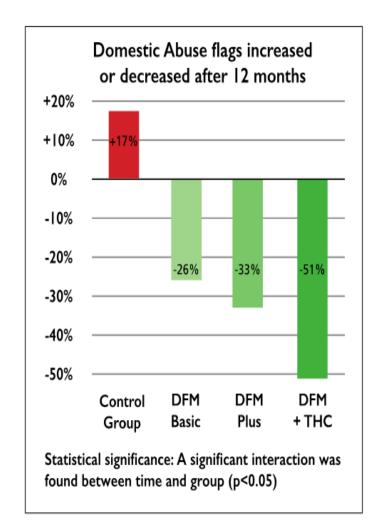


Table 2. Positive Negative and No Change Scores for all Participants Statistical Sig (p < 0.001).								
Star Chart Skills Positive	Total N Scores							
Realistic Planning	105	15	33	153				
Assertiveness	107	12	35	154				
Communication	102	25	27	154				
Calmness	111	15	28	154				
Engagement (as a learner)	103	13	32	154				
Focus and Perseverance	100	9	45	154				
Empathy	99	19	36	154				
Taking Responsibility	104	16	34	154				

2021

Level 4 in the Hierarchy of Evidence Cohort Studies

"TheHorseCourse is highly effective in reducing domestic violence and abuse, with 51% fewer DVA flags at follow up. This compares very favourably with other DVA interventions in the published research literature" Professor Ann Hemingway, **Bournemouth University**



	Total in group	DV flag pre-	DV flag post-	Increase / Decrease	
Control	10569	720	839	119	+17%
DFM Basic	2120	371	276	-95	-26%
DFM Plus	1119	193	130	-63	-33%
DFM + THC	268	49	24	-25	-51%

HETI POSTER-DV findings (1) (1).pdf



