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A Feasibility Study of an Equine Assisted Intervention for Children and Young People with Mental Health and Behavioural Challenges

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This paper presents the findings from a feasibility study of an equine assisted intervention (EAI) which brings together young people (8-18 years) and horses to learn social and emotional skills in the context of natural horsemanship.



Click here to play a 4 minute video of the
intervention under study: TheHorseCourse (UK)

<https://vimeo.com/222624036>

Click here to visit TheHorseCourse.org

Feasibility Study Framework (Bowen et al., 2009)

1. acceptability
2. demand
3. implementation
4. practicality
5. adaptation
6. integration
7. expansion
8. efficacy testing

Ethical Issues...

- University ethics panel
- Anonymised data
- Risk assessments
- Supervision
- Equine stress monitoring (Young et al., 2012).

Methodology

The methods used to answer the questions posed by the elements of the feasibility study included:

- Analysis of referral data
- Qualitative interview with the charity CEO
- Analysis of referrer assessments before and two months post intervention (n=155)

1. Acceptability

- Referrers – 700 plus referrals to date from multiple agencies (social work, mental health and education).
- Participants - 97% completed the course during the recruitment period for this study (two years).
- Referrals are currently increasing with referrers reporting that 10-15% of their case loads do not respond to talk based interventions .

2. Referral Criteria

- The individual is not improving with talk based interventions
- Has severe social exclusion
- Is referred by a professional (for example social worker, teacher, psychologist, nurse, GP, psychiatrist).

3. Demand

Demand is outstripping supply with overall more than 650 people having completed the course and over 150 per year now being referred from one area.

Four further centres are now providing this course in the UK and one in the USA.

4. Implementation

This intervention has evidenced that it can implement successfully.

- The clearly defined programme TheHorseCourse ReStart forms the majority of the activity undertaken by this charity.
- This program has eight years of delivery with multiple horses multiple locations and multiple facilitators.
- There is a clearly defined training program for facilitators.

5. Practicality

Requirements already in place in multiple centres:

- An indoor arena
- Large pool of trained horses
- Pool of trained facilitators
- A significant volume of referrals

6. Adaptation

- Moving from offenders only to broader referral criteria
- Family Working
- Disability adaptation
- Early intervention adaptation (group work, lighter touch)

7. Integration

This intervention has demonstrated clear integration with local statutory and other support services.

- Well defined planned sequencing of treatment within overall care package.
- Good communications with front line professionals and local strategic leads.
- Detailed referral and handover protocol.

8. Expansion

Evidence of replication:

- London
- Surrey Kent border
- Dorset
- Gloucestershire
- Wiltshire
- Oregon

Additional facilitators have been trained by the charity to aid replication, recruited primarily from those who already hold instructor status with Parelli Natural Horsemanship.

Anxiety/ Depression	ADHD	Bullying/ Angry/ Aggressive/ Violent	Lacks Confidence /Bullied/ Lonely	Witness to Domestic Violence/ Abuse	Not Attending School/ Excluded From School	Self- Harm/ Suicidal	Relationship Issues/ Attachment Disorder
18	15	53	27	11	10	13	8

Main Reason for Referral N=155

Referral / Outcomes / Feedback Star

Name:
 Referred by:
 Star filled in by:
 Date:

Engagement (Confidence as a Learner)

Enthusiastically takes on new challenges, pushes limits whilst also taking care of own confidence

gaining confidence, with less support

trying to learn

blocks teacher

refuses / drops out

ineffectual OR aggressive

gives up easily

gets distracted, needs support

needs less support

wants to make a change

gaining confidence, less support

trying, needs support

STUCK

wants to make a change

gaining confidence, less support

trying strategies, needs support

Communication & Language

Two way, respectful, assertive communications. Has language to talk about thinking and emotions

getting confident

listening well & trying to be clear

wants to communicate

poor planning / unrealistic basis

doesn't think

impulsive / anxious

wants to make a change

gaining confidence, less support

trying strategies, needs support

Realistic Analysis & Planning

Stops to think before acting, makes a realistic assessment of situations and plans accordingly

Assertiveness

Able to be bounded & assertive, without getting aggressive or upset

needs less support

trying to be assertive without aggression

recognises problem

overly blames others or situation OR shut down

wants to make contact

noticing needs of others

responding appropriately sometimes

gaining confidence, less support

trying strategies, needs support

STUCK

wants to make a change

gaining confidence, less support

trying strategies, needs support

STUCK

wants to make a change

gaining confidence, less support

trying strategies, needs support

Focus & Perseverance

Works towards goals despite setbacks

needs less support

gives up easily

overly blames others or situation OR shut down

wants to make contact

noticing needs of others

responding appropriately sometimes

gaining confidence, less support

trying strategies, needs support

STUCK

wants to make a change

gaining confidence, less support

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STUCK

wants to make a change

gaining confidence, less support

trying strategies, needs support

SCORING

4 Independence (needs little/ no support)

3 gaining confidence, less support

2 trying, needs support

1 wants to make a change

0 STUCK

Taking Responsibility

getting confident
 Taking full responsibility for own thoughts, emotions and actions. Allowing others to make their own choices.

taking some responsibilities

thinking about it

overly blames others or situation OR shut down

wants to make contact

noticing needs of others

responding appropriately sometimes

gaining confidence, less support

trying strategies, needs support

STUCK

wants to make a change

gaining confidence, less support

trying strategies, needs support

Relating to Others / Empathy

Sees the needs of others, offers care and support, feels closely connected

Calmness

Has the habit of calmness and knows how to create it, even in difficult situations

**Measure of internal consistency for the `star chart`
measurement scale used**

(Cronbach's alpha will tell you if the test you have designed is
accurately measuring the variable/s of interest)

Cronbach's Alpha	N. of Items on Star
.889	8

Star Chart Skills Pre and Post (p value 0.001)	Number of Participants with a Positive Score Change	Number of Participants with a Negative Score Change	Number of Participants with No Score Change	Total number of scores in analysis for each Skill
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	38	154
Focus and Perseverance	100	9	45	154
Empathy	99	19	36	154



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(p value 0.001)

Intermediate Outcomes Assessed by Referrer two months post	Engagement with Education	Problem Behaviours	Relationships	Sense of identity
Worse	8	7	5	5
No Change	25	36	31	38
Positive Change	122	112	119	112
Number in analysis	155	155	155	155

Limitations

- *No randomisation*
- *No control group*
- *Convenience sample*
- *Measurement tool in test phase*

In conclusion...

- This intervention has a clearly defined methodology and facilitator training program and therefore lends itself to robust evaluation.
- More robust studies are needed on effectiveness using a randomised controlled trial or other experimental design using a validated tool and access to statutory data sets.

References

- Bowen D.J., Kreuter M., Spring B., Cofta-Woerpel L., Linnan L., Weiner D., Bakken S., Patrick Kaplan C., Squiers L., Fabrizio C. & Fernandez M. (2009) How we design feasibility studies. *American Journal of Preventive Medicine*. May; 36(5): 452-457.
- Young T., Creighton E., Smith T. & Hosie C. (2012) A novel scale of behavioural indicators of stress for use with domestic horses. *Applied Animal Behaviour Science*, 140, 33-43.



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