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

Feasibility Study Framework
(Bowen et al., 2009)
Ethical Issues...

- University ethics panel
- Anonymised data
- Risk assessments
- Supervision
- Equine stress monitoring (Young et al., 2012).
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).
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.
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)
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.
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.
<table>
<thead>
<tr>
<th>Anxiety/Depression</th>
<th>ADHD</th>
<th>Bullying/Angry/Aggressive/Violent</th>
<th>Lacks Confidence/Bullied/Lonely</th>
<th>Witness to Domestic Violence/Abuse</th>
<th>Not Attending School/Excluded From School</th>
<th>Self-Harm/Suicidal</th>
<th>Relationship Issues/Attachment Disorder</th>
</tr>
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<tbody>
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<td>18</td>
<td>15</td>
<td>53</td>
<td>27</td>
<td>11</td>
<td>10</td>
<td>13</td>
</tr>
</tbody>
</table>

**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

**Communication & Language**
Two way, respectful, assertive communications. Has language to talk about thinking and emotions

**Realistic Analysis & Planning**
Stops to think before acting, makes a realistic assessment of situations and plans accordingly

**Focus & Perseverance**
Works towards goals despite setbacks

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

**Relating to Others / Empathy**
Sees the needs of others, offers care and support, feels closely connected

**Assertiveness**
Able to be boundaried & assertive, without getting aggressive or upset
- needs less support
- trying to be assertive without aggression
- recognises problem

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

**SCORING**

4 Independence (needs little/no support)
3 gaining confidence, less support
2 trying, needs support
1 wants to make a change
0 STUCK

**STUCK**
refuses OR drops out
ineffectual OR aggressive
non starter
overly blames others or situation
gives up easily
needs less support

doesn't think
impulsive/anxious
wants to make a change
trying strategies, needs support

wants to communicate
listening well & trying to be clear

wants confidence
blocks teacher
needs less support
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)

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N. of Items on Star</th>
</tr>
</thead>
<tbody>
<tr>
<td>.889</td>
<td>8</td>
</tr>
</tbody>
</table>
### Star Chart Skills Pre and Post (p value 0.001)

<table>
<thead>
<tr>
<th>Star Chart Skills</th>
<th>Number of Participants with a Positive Score Change</th>
<th>Number of Participants with a Negative Score Change</th>
<th>Number of Participants with No Score Change</th>
<th>Total number of scores in analysis for each Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realistic Planning</td>
<td>105</td>
<td>15</td>
<td>33</td>
<td>153</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>107</td>
<td>12</td>
<td>35</td>
<td>154</td>
</tr>
<tr>
<td>Communication</td>
<td>102</td>
<td>25</td>
<td>27</td>
<td>154</td>
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<tr>
<td>Calmness</td>
<td>111</td>
<td>15</td>
<td>28</td>
<td>154</td>
</tr>
<tr>
<td>Engagement (as a learner)</td>
<td>103</td>
<td>13</td>
<td>38</td>
<td>154</td>
</tr>
<tr>
<td>Focus and Perseverance</td>
<td>100</td>
<td>9</td>
<td>45</td>
<td>154</td>
</tr>
<tr>
<td>Empathy</td>
<td>99</td>
<td>19</td>
<td>36</td>
<td>154</td>
</tr>
</tbody>
</table>
Intermediate Outcomes Assessed by Referrer two months post

<table>
<thead>
<tr>
<th></th>
<th>Engagement with Education</th>
<th>Problem Behaviours</th>
<th>Relationships</th>
<th>Sense of identity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Worse</strong></td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>No Change</strong></td>
<td>25</td>
<td>36</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td><strong>Positive Change</strong></td>
<td>122</td>
<td>112</td>
<td>119</td>
<td>112</td>
</tr>
<tr>
<td><strong>Number in analysis</strong></td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
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</tbody>
</table>

(p value 0.001)
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.

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