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ABSTRACT

The aim of the project is to evaluate the effectiveness of the 'frontline worker wellbeing project' being held by members of Mare and Foal sanctuary in collaboration with HETI(UK) in order to measure reduction in trauma, fatigue levels and poor mental health experienced by frontline workers during the covid-19 pandemic.

This study will explore the definitions of equine assisted therapy or EAT, themes of EAT in the current pandemic situation, connection between horses and humans, building strong and meaningful bonds and attachments, nurture, trust and safety, empathy and resilience. This study will also explore the clinical implications of equine assisted psychotherapy.

All participants in this study complete three psychological intervention questionnaires before and after they go through with the wellbeing sessions. The before and after results are then compared using a paired two sample t test.

Results show that statistically there is a significant change and improvement among participants after they attend the wellbeing sessions. Thus, this proves that this report is consistent with previous research findings which will be discussed.

INTRODUCTION

Equine assisted therapy or EAT refers to psychological interventions where groups of people like the practitioner, social workers, teacher and other professionals use horses to aid children and adults with a variety of psychosocial challenges on a therapeutic and/or educational level. There are various reports of improvements in behavioral modification, educational possibilities, and overall improvement in one's physical and mental health (Burgon, 2014). The inclusion of animals in psychotherapy and psychological treatment can be dated back to the eighteenth century. To encourage socialization and interaction among the patients, many institutions adopted the use of animals in therapy (Serpell, 2006). There are many theories offered by professionals in the eat/l field as to why the horse can bring a special dimension to the therapeutic setting, but (Karol, 2007) claims that the animal is particularly successful in psychotherapeutic work because it "is an animal of great power and grace: yet it is also one of inherent vulnerability."

This susceptibility results from the fact that horses are very appetizing herbivores that have had to refine their herd communication skills over centuries to survive (Budiansky, 1998; McGreevy, 2004; Rashid, 2004; Rees, 1984). It all stems from the comprehension of dominance ideas and herd structure. According to many horse trainers and ethologists working in the field of natural horsemanship, horses are thought to be naturally cooperative and sociable in nature and animals that are tuned in to both human and equine body language and emotions. Horses are able to provide a precise and objective feed which is why equine assisted therapy can be a resourceful and non-confrontational tool for therapists to examine a client's behavior. Horses are able to mirror client's emotional and physical stressors during their activities which allow the clients to be aware of their own emotions and state of being which then allows them to focus on being consistent with their attitudes and actions (Klontz et al., 2007).

With equine assisted activities participants receive a sense of companionship, reduce symptoms of depression like feelings of apathy, increase their self esteem, help tackle boundary issues as well as improve issues of attachment (Selby & Smith-Osborne, 2013).

EAT has numerous biological and other psychosocial effects on the clients. A network of neurons that carry the peptide hormone oxytocin, also commonly known as OT, is created in the hypothalamus and released into the bloodstream and brain in response to sensory stimuli (Landgraf and Neumann, 2004; Ross et al., 2009). This release is often experienced during activities with the horse such as stroking, touch, warmth as they create a trusting bond among themselves. There are various psychosocial effects of Equine assisted therapy such as increased self worth, self esteem, self confidence, emotions of freedom and overall independence (Tan and Simmonds, 2018) because horses tend to be very sensitive beings and they are conscious and responsive to the human emotions. In both qualitative and quantitative study, there are accounts of volunteers developing bonds with horses (Carriker, 2013; Johnson et al., 2018).

According to (Bachi, 2013) this tie is comparable to a mother-child bond that is described by attachment theory. This paper will explore all the above mentioned characteristics of the meaningful relationship among the horses and humans and their positive effects to treat various psychological symptoms. Themes of nurture,

trust and safety, attachment, building empathy and resilience will also be examined.

Now this study will examine how the covid-19 pandemic has had an effect on the frontline workers and how the 'frontline worker project' has helped in improving their psychological and emotional functioning. On 31 December 2019, the world health organization (WHO) was made aware of a number of cases of pneumonia with no known cause that had been found in Wuhan City, Hubei Province, China. From patient samples, a new corona virus (SARS-CoV-2) was discovered (Liu, et al., 2020). The impact of the COVID 19 on the frontline workers was extremely challenging on a physical, mental and even a social aspect. This kind of long term stress can take a very negative toll and become a risk factor on the covid-19 frontline workers. They have a high percentage of experiencing burnout, vulnerable to common mental disorders like depression and anxiety or even post traumatic stress disorder (PTSD). People may even resort to substance abuse which is very harmful and there is also an extremely risk of self harm or suicide.

It becomes crucial that organizations know how to support employees' psychological health when they are subjected to stressful working situations such as these. This becomes even more essential when staff members don't receive much training on how to prepare for or manage the emotional effects of the present challenging workplace. During the pandemic it was apparent that the local government and healthcare sectors needed their staff members to carry on working throughout the chaos in order to manage the growing demand for their services and knowledge while also trying to manage their own personal circumstances and emotions. Naturally, this took an immense toll on the brave heroes and many still struggle to this day and find it hard to cope with situations. These essential employees, particularly those in social care roles, may be extremely stressed out due to having to provide more support to sad and bereaved residents and they may be concerned about their susceptibility to infection and spreading the virus to their families. Front-line workers stand in a position that exposes them to new or increased trauma that may consequently be more susceptible to mental health issues like sadness, anxiety, and post traumatic stress disorder (PTSD), which could cause long-term illnesses even after the pandemic is over.

The participants in this study all consist of frontline workers who have all negatively experienced the covid-19 pandemic in different ways. They belong from different section and backgrounds of the healthcare sectors as well as essential workers and the effects of equine assisted activities on this margin of population will be examined. There are not many research work done on this specific topic as it is a fairly recent occurrence and this makes it an even more important topic of study. The aims/rationale of this study is presented below.

3. RATIONALE/AIMS

The aim of the project is to evaluate the effectiveness of the 'frontline worker wellbeing project' in reducing trauma, fatigue and poor mental health experienced by frontline workers during the covid-19 pandemic. This study is a service evaluation on this wellbeing project that involves collaborative work with the horses in order to improve psychological wellbeing. These sessions have been attended by a total of 18 frontline workers and sessions are provided by the Mare and Foal Sanctuary based near Totnes which is one of the largest registered equine welfare charities in the UK, in collaboration with the Federation of Horses in Education and Therapy International or HETI(UK).

The covid-19 pandemic came as a shock to the entire world and it presented a number of medical, psychological and social problems across the globe. During such challenging times frontline workers worked and fought day and night to help those who were exposed to the virus, suffering from its symptoms and those who were at a critical stage. However, these heroes were at the front face of being routinely exposed to unimaginable circumstances like death of patients as well as family members, stress related to the rapid spread of the disease and having to deal with difficult patients. The workers also become vulnerable by putting themselves and family members at home at a risk of exposure to the virus. All of this has led to high levels of stress, trauma and increase of depression among the workers and overall, it has played a series of decline in the psychological and physical health among the workers particularly among the participants in this study.

The 'front line worker wellbeing project' is specifically targeted to provide help for frontline workers who have been negatively affected during the Covid-19 pandemic. This project is a cross-country partnership or collaboration between a few UK members of the Federation of Horses in Education and Therapy or HETI. These sessions are organised at the Mare and Foal Sanctuary where equine assisted wellbeing sessions are provided with the rehabilitated horses and ponies. To help rehabilitation and enhance wellness, sessions provide a secure setting for processing emotions with horses in a natural setting. Four one-hour ground-based interactive wellbeing sessions with a rescued and rehabilitated horse or pony are provided to each of the frontline worker participants, while a member of staff from the Mare and Foal sanctuary guides and supports the participants on a one-on-one basis.

4. DESCRIPTION ABOUT MARE AND FOAL SANCTUARY

Mare and foal sanctuary is a safe space, rescue, rehome and a rehabilitation centre for horses and ponies (Mare and Foal Sanctuary, n.d.). They provide professional equine assisted wellbeing sessions following a person-centered as well as an equine-centered approach. The sanctuary operates with rescued horses and ponies at an 80-acre Coombe Park Equestrian and Education Centre located near Totnes. At the centre of the working yard they provide with an indoor and outdoor arena along with an indoor and outdoor classroom. The goal for Mare and Foal sanctuary is to foster a sense of refuge for people, through the equine assisted services located within the sanctuary for rescued horses and ponies. The sanctuary offers human-equine interaction to children, young people and adults in

the community through equine aided learning and equine assisted activities with the rehabilitated horses and ponies.

Along with this the sanctuary has other numerous facilities along with more in-dept programmes and activities to target specific participants and their problems. Through hands-on interaction with the rescued horses and ponies, participants that take part in these equine assisted learning and equine assisted activities have the chance to discover more about themselves.

Following are the programmes provided by the mare and foal sanctuary:

1. Equine assisted learning
2. Individual or group-led sessions
3. Frontline worker wellbeing project
4. Equine assisted activities
5. This girl can exercise with equines
6. Wellies for wellness
7. Happy hooves and horse wise holiday club

In this project a service evaluation of the frontline worker wellbeing project will be examined. Further information on the Mare and Foal sanctuary can be found on the official website online.

5. RESEARCH DESIGN

This study is a service evaluation which contains secondary, quantitative data provided by the members of the Mare and Foal sanctuary. Three psychological measuring tools/questionnaires are used in order to assess the psychological state and wellbeing of the participants. After which, the before and after results for each tool is compared using t test and a bar graph is presented to graphically compare the scores. This study seeks to find out whether the 'covid frontline worker project' has a significant impact on the psychological wellbeing among the frontline workers who have been negatively impacted during the covid-19 pandemic. Each participant gave their written consent to be a part of this study.

6. METHODOLOGY

Before the participants begin the sessions, they are assessed using three psychological measure tools: the PTSD Screening tool by anxiety and depression association of America, GAD 7 score and WHO five wellbeing questionnaire in order to assess their level of psychological wellbeing. After completing the first round of the questionnaires, the participants go through the wellness program. They engage in activities in the outdoors where they are offered a safe space for emotional processing with the equines in nature in order to support recovery and improve wellbeing. Each frontline worker receives four one-hour ground-based equine interactive wellbeing sessions with one of the rescued horses and ponies and individual support from a member of the dedicated team. Participant scores are obtained again after the wellbeing program using three different measure tools. The before and after intervention scores or pre and post intervention scores is then compared to measure the outcome.

GAD-7

The Generalised Anxiety Disorder Assessment (GAD-7) is a seven-item instrument that is used to measure or assess the severity of generalized anxiety disorder (GAD) (Spitzer et al., 2006). As a screening tool for generalized anxiety disorder (GAD) in primary care settings, the 7-item Generalized Anxiety Disorder Scale was created. There consists of seven questions that make up the GAD-7 (Spitzer et al., 2006) that measures worry and anxiety symptoms.

The total scores for each item range from 0 to 21, with higher numbers indicating more severe anxiety. Each item is assessed on a four-point Likert scale (0–3) and scores that are more than 10 are regarded as falling inside the clinical range. The GAD-7 has demonstrated strong reliability and construct good validity.

PTSD SCREENING TOOL

The PTSD screening tool is a screening measure that helps determine and detect post-traumatic stress disorder (PTSD) in an individual and to find out whether they require clinical attention (American Psychiatric Association, 2013). This screening tool is however not intended to diagnose PTSD itself; rather, it is a self report which can be used as a tool to discuss the possibilities of it with your primary care provider or a mental health expert. It can help guide further discussions regarding the condition's diagnosis and possible treatments. The scale consists of a series of 17 'yes' and 'no' questions. One may likely have PTSD if they receive a score of 13 or above.

WHO FIVE WELLBEING QUESTIONNAIRE

The WHO wellbeing questionnaire is an uncomplicated and short self report where individuals can measure the current state of their mental health and the quality of life (WHO, 1998). The questionnaire consists of five statements and each of the questions indicates how the respondent has been feeling during the past two weeks respectively. It consists of five items and each of it is assessed on a 6-point Likert scale.

The raw scores for each item range from 0 to 25, in which 0 represents the lowest score and 25 represents the best quality of life. After which the percentage is calculated and a percentage score of 0 represents worst possible quality of life, whereas a score of 100 represents the best possible quality of life. A score below 13 indicates poor wellbeing and it is an indication for testing for depression under ICD-10.

7. PARTICIPANT CHARACTERISTICS AND SAMPLE

This service evaluation project is based on a secondary data which has been generously provided by members of the Mare and Foal sanctuary. Originally, the data consisted of 20 participants however 2 participants have dropped out mid study.

A sample size of 18 frontline workers who have experienced significant burn out and trauma during the pandemic were referred to the programme. 7 of the participants have been directly referred by the Mare and Foal sanctuary which means that 11 have been referred through the members of the HETI project.

Among them, there consists of 16 female participants and 2 male participants. The participants range from ages 26-62.

All of the participants consist of frontline workers who have been directly affected by the Covid-19 pandemic. The reasons for the participants' referral have a diverse range of diagnosis and reasons for referral like anxiety, intrusive thoughts, inability to relax, depression and trauma (from work), work related stress, low mood, and insomnia. The most common theme among the participants is depression and stress and related symptoms. The participant characteristics table is presented in table 1 below.

Table 1: Participant characteristics

Number of participants	Employed status	Reasons for referral
1.	Teacher	Anxiety
2.	HCA	Intrusive thoughts
3.	Macmiller worker admin	Anxiety
4.	NP	Inability to relax
5.	MH nurse	Depression and trauma
6.	Phys asst.	Trauma from work
7.	GP	Depression
8.	Snr Nurse on SCBU	Work related stress
9.	GP practice manager	Stress
10.	Priest	Stress across life
11.	Tesco worker	Stress
12.	Cancer care nurse	Depression, stress and anxiety
13.	Jnr Cardinol sister	Low mood and anxiety
14.	Snr HCA	Depression and low mood
15.	Covid RRT	Depression and loss/ grief due to covid
16.	HCA	Anxiety and depression
17.	ODP	Depression and traumatic relationship breakdown
18.	PWP	Stress, anxiety and insomnia
Participant characteristics	Population in percentage (%)	Age (Mean)
Female	88.9%	45.81
Male	11.1%	38.5

8. DATA ANALYSIS

This study aims to evaluate the effectiveness of the 'frontline worker wellbeing project' in measuring reduction in trauma, fatigue levels and poor mental health experienced by frontline workers during the covid-19 pandemic. This study consists of secondary quantitative data which is generously provided by the members of the Mare and Foal Sanctuary. A sample size of 18 participants is taken for this study. Among them 11 participants have been referred by the members of the HETI project and 7 participants have been directly referred by the Mare and Foal sanctuary. The participants consist of frontline workers who were adversely affected by the covid-19 pandemic. The 'covid frontline worker wellbeing project' is project collaboration between members of the HETI(UK) project and members of the Mare and Foal sanctuary.

Before beginning with the sessions, i.e., prior to session 1, each participant completes three psychological measure tools which are the GAD-7, PTSD screening tool and the WHO five wellbeing questionnaires. This is done so in order to assess the success rate of the project or sessions that the participants went through. After completing the sessions, i.e., at the end of session 4 the participants again complete the three psychological measuring tools.

After successfully gathering this data, they are organised in a table with the pre and post score for each of the measuring tools. After which, a paired two sample t test is used to calculate and compare the scores for the three measuring tools individually. The t and p values will then determine whether there is a significant change in the participants' score and wellbeing. Finally, after identifying these values and significant changes, a bar graph is created to display the overall differences in order to assess the efficacy of the project provided by the sanctuary.

9. ETHICS

The secondary data is provided by the Mare and Foal Sanctuary to the University of Plymouth. Participants gave their written consent to participate in this study by signing on a consent form. If any of the participants' name and personal information is mentioned, it is removed or disguised in order to protect their privacy and to ensure utmost confidentiality. All the secondary data that is provided is stored on an encrypted laptop or on a file space that is encrypted and protected by a password. Ethical application has been reviewed and approved by the ethics committee of University of Plymouth.

10. RESULTS AND FINDINGS

To analyse the efficacy of the 'covid frontline worker wellbeing project' among frontline workers during the covid-19 pandemic which is conducted by Mare and foal sanctuary in collaboration with HETI project, a paired two sample t test is performed.

Based on the data available, the pre and post scores for the GAD scale among the participants are tabulated on table 2 below.

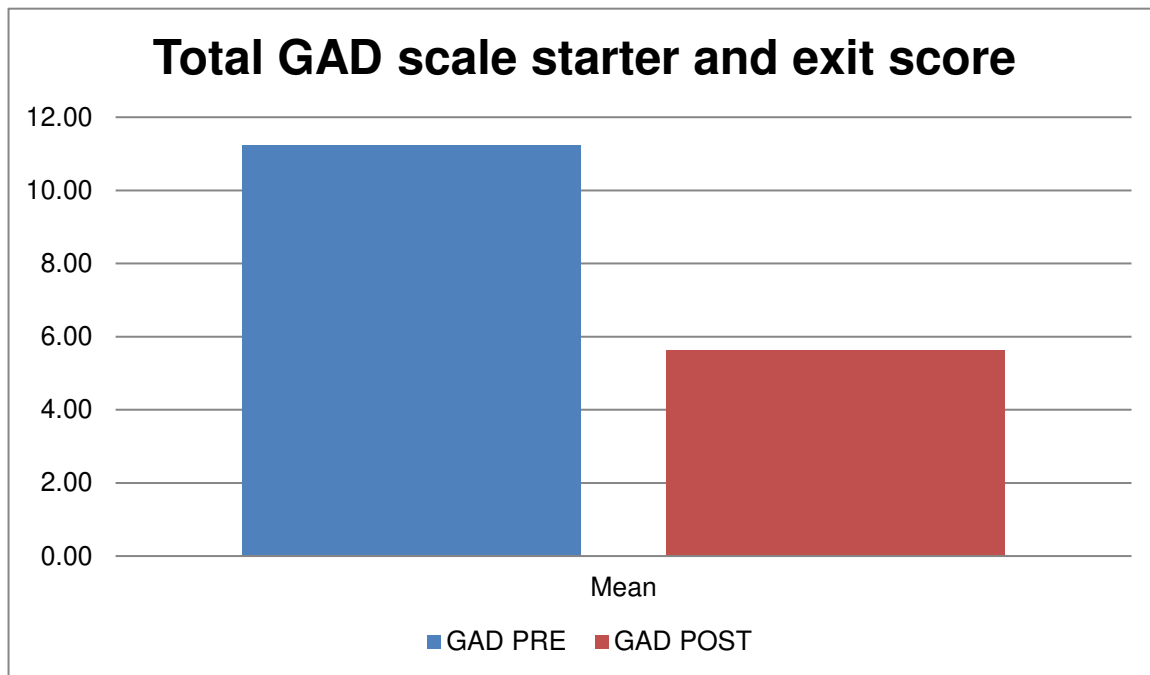
Table 2: showing the tabulated scores for GAD scale

	<i>GAD PRE</i>	<i>GAD POST</i>
Mean	11.22	5.61
Variance	21.71	23.55
Observations	18.00	18.00
Pearson Correlation	0.43	
Hypothesized Mean Difference	0.00	
df	17.00	
t Stat	4.68	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.74	
P(T<=t) two-tail	0.00	
t Critical two-tail	2.11	

The table above shows that in a small sample ($N = 18$), GAD pre $M = 11.22$ ($SD = 4.65$) to $M = 5.61$ ($SD = 4.85$). This shows a significant change, $t(17) = 4.68$, $p = 0.00$. In other words, in a sample size of 18 participants, the pre mean score is found to be 11.22 with a standard deviation of 4.65 and the post mean score is found to be 5.61 with a standard deviation of 4.85. The t value here is 4.68 and p value is 0.00 which makes it significant as the p value has to be less than 0.5. Thus, this highlights a significant change and clearly shows an average decrease in anxiety levels among the participants after they took part in the wellbeing sessions.

The starter and exit scores for the GAD scale of the participants are graphically represented in table 3 below to show the significant difference and decrease in the levels of anxiety.

Table 3: Graphical representation of the GAD scale scores



Based on the data available, the pre and post scores for the PTSD scale of the participants are tabulated in table 4 below.

Table 4: showing the tabulated scores for PTSD scale

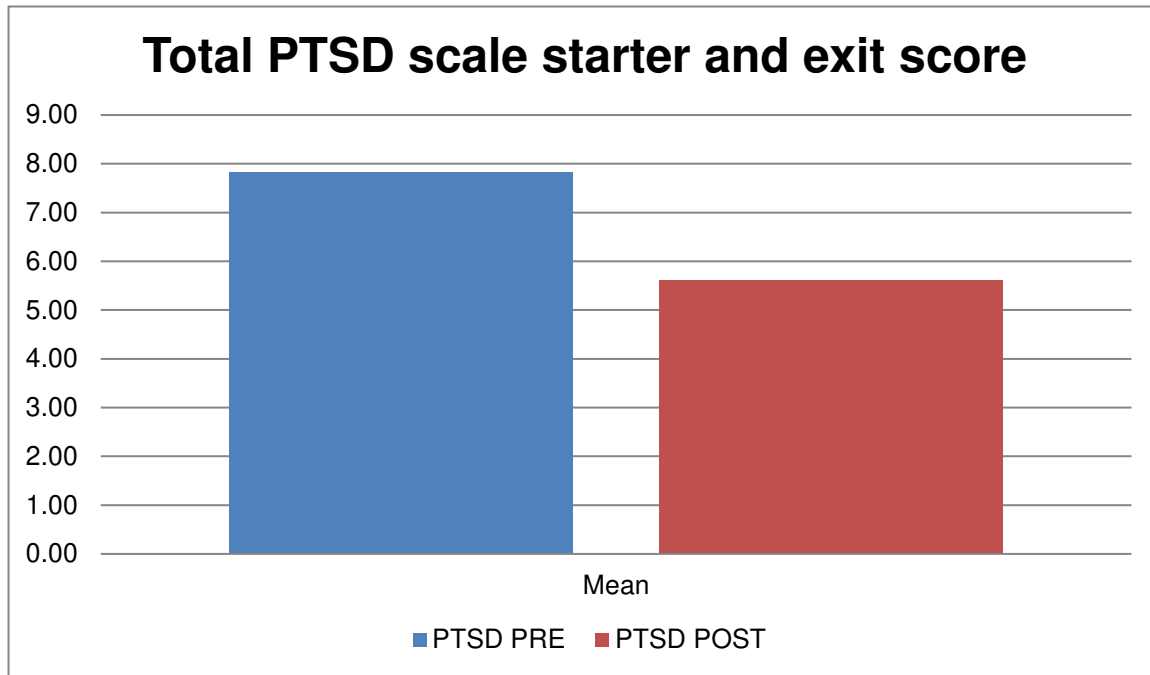
	<i>PTSD PRE</i>	<i>PTSD POST</i>
Mean	7.83	5.61
Variance	16.26	21.08
Observations	18.00	18.00
Pearson Correlation	0.42	
Hypothesized Mean Difference	0.00	
df	17.00	
t Stat	2.02	
P(T<=t) one-tail	0.03	
t Critical one-tail	1.74	
P(T<=t) two-tail	0.06	
t Critical two-tail	2.11	

Table 4 shows that in a small sample ($N = 18$), PTSD pre $M = 7.83$ ($SD = 4.03$) to $M = 5.61$ ($SD = 4.59$). This shows a significant change, $t(17) = 2.02$, $p = 0.03$. Here, the pre mean score is found to be 7.83 with a standard deviation of 4.03 and the post mean score is found to be 5.61 with a standard deviation of 4.59. The t value here is 2.02 and p value is 0.03 which is less than 0.5 and this makes it significant. Thus, this highlights a significant change and clearly shows an

average decrease in levels of PTSD symptoms among the participants after they took part in the wellbeing sessions.

The starter and exit scores for the PTSD scale of the participants are graphically represented in table 5 below to show the significant difference and decrease in the levels of PTSD symptoms.

Table 5: Graphical representation of the PTSD scale scores



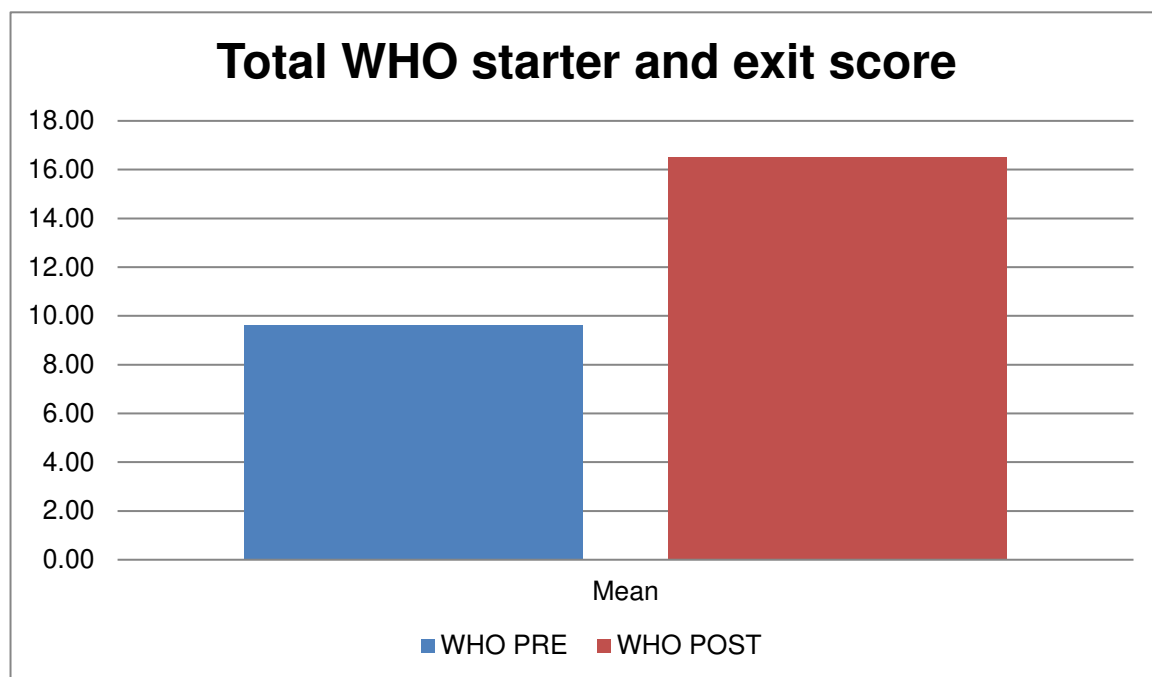
Based on the data available, the pre and post WHO score of the participants are tabulated in table 6 below.

Table 6: showing the tabulated scores for WHO scale

	WHO PRE	WHO POST
Mean	9.61	16.50
Variance	20.72	15.91
Observations	18.00	18.00
Pearson		
Correlation	0.36	
Hypothesized		
Mean Difference	0.00	
df	17.00	
t Stat	-6.03	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.74	
P(T<=t) two-tail	0.00	
t Critical two-tail	2.11	

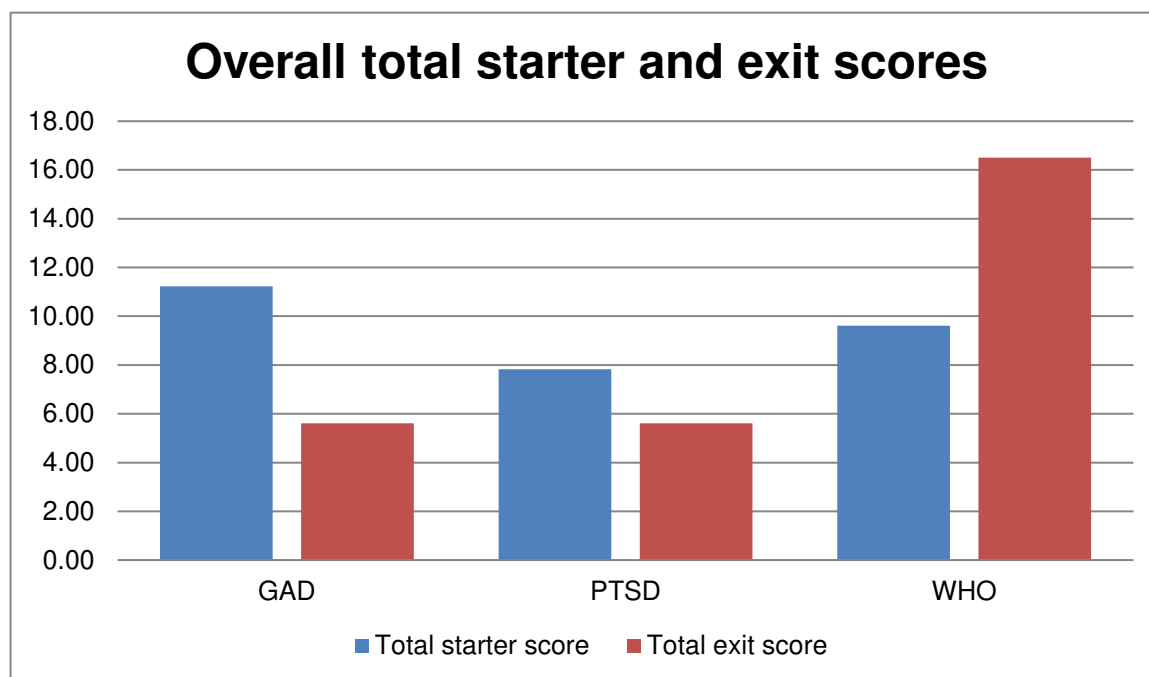
Table 6 shows that in a small sample ($N = 18$), PTSD pre $M = 9.61$ ($SD = 4.55$) to $M = 16.50$ ($SD = 3.98$). This shows a significant change, $t(17) = -6.03$, $p = 0.00$. Here, the pre mean score is found to be 9.61 with a standard deviation of 4.55 and the post mean score is found to be 16.50 with a standard deviation of 3.98. The t value here is 6.03 and p value is 0.00 which is less than 0.5 and this makes it significant. Thus, this highlights a significant change and clearly shows an average increase in the quality of life among the participants after they took part in the wellbeing sessions. The starter and exit scores for the WHO scale of the participants are graphically represented in table 7 below to show the significant difference and increase in the quality of life.

Table 7: Graphical representation of the WHO scale scores



Finally, in table 8 below are the overall total starter and exit score to graphically represent and display the average mean differences among participants in all three of the intervention tools side by side.

Table 8: Graphical representation of the overall scale scores



11. DISCUSSION

The aim of the study is to evaluate the effectiveness of the 'frontline worker wellbeing project' in measuring reduction in trauma, fatigue levels and poor mental health experienced by frontline workers during the covid-19 pandemic. As we see from the previous literature in the introduction section, (Klontz et al., 2007) discusses how horses are able to provide a precise and objective feed and this makes EAT a non-confrontational tool for therapists to examine clients behaviour as they mirror their own anxieties and stressors during the activities. We find this very true among the participants here. From the data presented in the results section above, the participants show immense improvement in their psychosocial skills which must mean that they have been able to mirror their own stressors that they have felt at the workplace and have been able to regulate their own emotions. The most distinct feature among all the participants is the element or theme of a strong relational bond that they had with the horses.

The improvement in the psychosocial wellbeing in the participants can be seen in the participant feedback forms where there are many positive notes about the thoughts and feelings of the participants on their sessions with the horses. Participants have noted feeling "more calm" immediately after sessions. One participant mentions that they feel like they were given a purpose and that the time spent with the horse made them realize that it was okay to take themselves away but also know and be reassured that people were there for them when they wanted them. The participant seems to have developed self confidence and a sense of confidence. These themes of self worth, building resilience and independence are exactly what (Tan & Simmonds, 2018) meant about the psychosocial effects of EAT in the literature section of this study. Other themes

such as emotions of freedom, increase self esteem and self confidence are also evident among the participants, for example, many participants record feeling “less anxious and fear about facing such a large animal(overcoming their fear), they felt relaxed, more at peace and more calm” after sessions. Some have even noted that they feel like they “understand themselves more” after exercises like stroking the horse. These feelings and emotions of the participants have resulted from mirroring their own stressors and anxiety and this has enabled them to face their own emotions and regulate them. Another important theme discussed in the literature above is about being able to create a trusting relationship and bond with the horses. This is pretty evident in one of the participants with symptoms of stress, anxiety and insomnia who reported that they felt significantly “relaxed and at peace” and reported that “gaining the pony’s trust was like a magical experience”. This response may also have the biological factors tied to it. As it is discussed in the literature, the oxytocin system creates such a reaction to the sensory stimuli in participants during activities such as stroking, feeling the warmth whilst creating a trusting bond or relationship (Landgraf and Neumann, 2004; Ross et al., 2009).

This next section will contain information about the background and history of the HETI(UK) federation, their goals as a federation as well as the objectives of the ‘frontline worker wellbeing project’.

HETI(UK) Project

The federation of horses in education and therapy international (HETI) is a Nationwide Provision of Funded Horse Based Interventions for Covid Affected Front Line Workers and this initiative is led by Dr Celia Grummitt (The federation of horses in education and therapy international AISBL, 2021). Before the birth of this project, an extensive procedure was followed in order to ensure safe and legal measures were taken into account. Firstly, a Project Initiation Document or PID was created, it was then approved by the Gul Trustees, and then circulated across the members of the HETI(UK) Federation to gain their consent to collectively participate and advertise.

Following this productive phase, a strategy outlining the anticipated time line was established on a page. The project plan is to incorporate aspects and principles of CBT but claim that it is still at an underdeveloped stage as they still require progress in their delivery. The goal of the strategy is to provide a clear and focused offer with enough structure and procedure so that it can be articulated by all HETI(UK) members and that everyone can be kept safe. Important information mentioned by the members at the HETI federation is that they do not accept individual applications with severe cases of psychological problems for the wellbeing sessions as they understand that these group of people may need more professional help.

The members of HETI(UK) believe that horses offer powerful emotional support and by spending time in nature with the horses, it can enhance one’s wellness. The goals of this federation are to take on a cohesive approach. They seek to expand and increase awareness of the horse based intervention on a national level. This in turn will help the welfare and prosperity of the covid frontline workers which will allow a sustainable outcome to take place as the member of this project will also have a steady source of income coming through.

Their main target beneficiaries include the front line workers who have been adversely affected during the covid pandemic. This demographic includes staff members in a healthcare setting, teachers and also individuals that keep essential services running like shopkeepers, delivery people, etc., during the pandemic. However, the majority of applicants are likely to be in the health-related areas, and they are likely to have faced with unusually difficult jobs while managing their own and their families' reactions to the pandemic. Those who have experienced more loss and sadness than usual are more likely to be included.

HETI(UK) has taken the initiative to run this project and they strive to be as inclusive as possible in order to assist those who need to absorb recent events. Over the course of the project's two years, it is intended that 4000 people would participate and over this 2 year period each participant will receive 4 free sessions, for a total of 16,000 sessions. The project members anticipate that with the data and information provided by the participants, it may be used in a future publication about the use of horse-based therapies to enhance emotional processing.

Further information on HETI(UK) can be found on the federation's official website online.

12. CLINICAL IMPLICATIONS

Equine-assisted therapy has a reputation for being a kind, organic, and healing component of the human-equine bond (Krause-Parello, 2018). With the literature's encouraging findings, the use of horses to treat physical, emotional, and psychological issues is just getting started. Clinicians in all healthcare sectors are now starting to recognize its benefits and they have started to incorporate EAT as a valid form of intervention.

There is evidence of various other equine facilities like 'The way of the horse' based in Leicestershire where they have initiated their own project for welfare of the covid frontline workers known as 'project pony (The Way of the Horse, Discovery Centre, 2022). They provide similar sessions or activities with the horses and ponies as the Mare and foal sanctuary but in their own unique style. Participants who have attended these sessions majorly have positive results and feedback and almost all have claimed that they feel more relaxed and at peace. One particular participant who is an NHS nurse was suffering from trauma, stress, strain from work felt like they were "on an emotional rollercoaster" as a result of working during the covid-19 pandemic. But after attending the sessions provided to them by the facility, they recorded that the horses helped them to start over with themselves and encouraged them to proceed in a serene and sympathetic manner. They claimed that the programme assisted them to recognize and control their feelings around the horses and overall, taught them how to comprehend their emotions.

In another study named as 'Equine Assisted Therapy for Patients with Post Traumatic Stress Disorder: A Case Series Study' (A. Shelef, et al.) also found similar positive results among the participants. The study concluded that EAT is a beneficial intervention for patients with PTSD and participants showed a decrease in the number of days spent inefficiently working and performing daily duties. At

one point in time, several trial and error methods for treating mental health issues, such as music therapy, theater therapy, and art therapy, were viewed with mistrust. However; these are all now accessible through the NHS. At the present time, alternate interventions like these are well received by clinicians and practitioners as a way to interact and treat their patients (A. Cantin, S.M. Lecette, 2011). Thus, looking into alternative forms of intervention might only improve and supplement the care that the NHS and other healthcare institutions provide.

13. STRENGTHS AND WEEKNESSES

This study is a service evaluation on the efficacy of the 'frontline worker wellbeing project' initiated as a collaborative effort by the members of the Mare and Foal Sanctuary and the members of the HETI(UK) federation. The paper presents itself with some good evidence of the improvement of the frontline workers' overall psychological wellbeing. It presents a good literature background to support its objectives of the 'frontline worker wellbeing project'.

However, this is conducted on a very small sample size which may make it difficult to generalise and accurately determine the effectiveness of equine assisted therapy as a successful way to help these challenged sections of the society.

Even though the incorporation of horses in therapeutic intervention has been around for centuries, the popularity and concept of EAT is fairly new which does not make it the most reliable form of intervention for stressors and other symptoms discussed in this study. It is also not considered the most robust in terms of gold standard.

As this is a service evaluation, there is also very limited qualitative data. Although the participants in this study displayed great improvement in their psychological wellbeing, lasting effects of this result is questionable. This paper does not present with any follow up on the individuals and their results which makes it difficult to determine whether the project and the sessions provided a lasting change. Due to the limited studies and dearth of trials on equine assisted therapy, it is also challenging to determine whether one therapy strategy utilized within the EAT model is preferable to the other. EAT shows promise as an adjunctive method, but it shouldn't be used as the primary form of intervention for PTSD, depression and other severe mental illnesses (O'Haire, et al., 2015)

14. CONCLUSION

This study aims to evaluate the efficacy of equine assisted therapy on covid-19 frontline workers to determine changes in their overall psychological wellbeing through the 'frontline worker wellbeing project' initiated as a collaborative effort by the members of the Mare and Foal Sanctuary and the members of the HETI(UK) federation. This report has evaluated that EAT and equine assisted activities enhances positive behaviours like sense of independence, self esteem, self confidence and empathy and reduces negative ones like symptoms of anxiety, depression and post traumatic stress disorder.

The study has proven that the 'frontline worker wellbeing project' is successful in their goals to improve the psychological and social wellbeing of the frontline workers after being negatively impacted at their workplaces during the covid-19 pandemic. As a result, EAT's potential as an effective tool to enhance the wellbeing among targeted participants with concerns and with different kinds of psychological problems are acknowledged. By making EAT available through the NHS, additional equine therapists would be available to help make EAT as widely available in the UK as it is in different regions of the globe.

REFERENCES

- American Psychiatric Association. (2013). *Diagnostic statistical manual of mental disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.
- Bachi, K. (2013). Application of attachment theory to equine-facilitated psychotherapy. *Journal of Contemporary Psychotherapy*, 43(3), 187-196.
- Budiansky, S. (1998). *The nature of horses: Their evolution, intelligence and behavior*. London: Phoenix Press.
- Burgon, H., L. (2014). *Equine assisted therapy and learning with at-risk young people*. Palgrave Macmillan.
- Cantin, A, Lucette, S.M. (2011). *Examining the Literature on the Efficacy of Equine Assisted Therapy for People with Mental Health and Behavioural Disorders*. Mental Health and Learning Disabilities Research and Practice.
- Carriker, M. N. (2013). *Perceived satisfaction of equine-assisted therapy: A qualitative study of family narratives*. Liberty University.
<https://digitalcommons.liberty.edu/honors/398>
- Johnson, R. A., Albright, D. L., Marzolf, J. R., Bibbo, J. L., Yaglom, H. D., Crowder, S. M., & Harms, N. (2018). Effects of therapeutic horseback riding on post-traumatic stress disorder in military veterans. *Military Medical Research*, 5(1), 1-13.
- Karol, J. (2007). Applying a traditional individual psychotherapy model to equine-facilitated psychotherapy (EFP): Theory and method. *Clinical Child Psychology and Psychiatry*, 12(1), 77-90.
- Klontz, B., Bivens, A., Leinart, D, and Klontz, T. (2007). The effectiveness of equine assisted experiential therapy: results of an open clinical trial. *Society and Animals*.

- Krause-Parello, C. A. (2018). Human-Animal Connections and Nursing Science: What Is the Relationship. *Nursing Science Quarterly*, 31(3), 239-242.
- Landgraf, R., and Neumann, I. D. (2004). Vasopressin and oxytocin release within the brain: a dynamic concept of multiple and variable modes of neuropeptide communication. *Front. Neuroendocrinol*, 25, 150–176.
- Liu, Y. C., Kuo, R. L., Shih, S. R. (2020). COVID-19: The first documented coronavirus pandemic in history. *Biomedical Journal*, 43(4), 328-333.
- Mare and Foal Sanctuary. (n.d.). *About Us*. <https://www.mareandfoal.org/>
- MGreevy, P. (2004). *Horse behavior*. London: Elsevier Saunders.
- O'Haire, M.E., Guerin, N.A., Kirkam, A.C. (2015). Animal-Assisted Intervention for trauma: a systematic literature review. *Frontliners in Psychology*.
<https://doi.org/10.3389/fpsyg.2015.01121>
- Project Pony!* (2022). The Way of the Horse, Discovery Centre.
<https://www.thewayofthehorse.co.uk/>
- Rashid, M. (2004). *Horses never lie: The heart of passive Leadership*. Newton Abbot, Devon: David & Charles.
- Rees, L. (1984). *The horse's mind*. London: Stanley Paul.
- Ross, H. E., Cole, C. D., Smith, Y., Neumann, I. D., Landgraf, R., Murphy, A. Z., and Young, L. J. (2009). Characterization of the oxytocin system regulating affiliative behavior in female prairie voles. *Neuroscience*, 162, 892–903.
- Selby, A., & Smith-Osborne, A. (2013). A systematic review of effectiveness of complementary and adjunct therapies and interventions involving equines. *Health Psychology*, 32(4), 418.

Serpell, J. A. (2006). *Animal-assisted interventions in historical perspective.*

Handbook on Animal-assisted Therapy: Theoretical Foundations and
Guidelines for Practice, San Diego, CA, Academic Press.

Shelef, A., Brafman, A., Rosing, T., Weizman, A., Stryjer, R., Barak, Y. (2019).

*Equine Assisted Therapy for Patients with Post Traumatic Stress Disorder:
A Case Series Study.* Military Medicine.

<https://doi.org/10.1093/milmed/usz036>

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). *Generalized
Anxiety Disorder 7 (GAD-7.)*

Tan, V. X. L., & Simmonds, J. G. (2018). Parent perceptions of psychosocial
outcomes of equine-assisted interventions for children with autism spectrum
disorder. *Journal of autism and developmental disorders*, 48(3).

The Federation of Horses in Education and Therapy International AISBL. (2021).

About us. <https://hetifederation.org/>

The Way of the Horse, Discovery Centre. (2022). *Project Pony!*

<https://www.thewayofthehorse.co.uk/>

WHO (Five) Well-Being Index (1998). *Psychiatric Research Unit, WHO
Collaborating Centre in Mental Health.*