Evaluating the effects of the Jing Method™ of Advanced Clinical Massage on lower back pain in horse riders

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A dissertation submitted in partial fulfilment of the requirements of Jing Advanced Massage Training for the Professional Diploma in Advanced Clinical Massage and Sports Massage

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"I certify that this work has not been accepted in substance for any degree, and is not concurrently being submitted for any degree other than that of the Diploma in Advanced Clinical Massage and Sports Massage being studied at Jing Advanced Massage Training. I also declare that this work is the result of my own investigations except where otherwise identified by references and that I have not plagiarised the work of others".

15.03.2026

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Finally, I would like to thank my study participants, for putting their trust and their sore bodies in my hands.

CREATIVITY PAGE

"Riding a horse is not a gentle hobby, to be picked up and laid down like a game of Solitaire. It is a grand passion." — **Ralph Waldo Emerson**

"The horse moves with the rhythm of the earth; the rider learns to move with the rhythm of the soul." – **Werner Erhard**

ABSTRACT

Background: The prevalence of lower back pain in an equestrian population has been established as higher than the general population and other athletes. This is due to factors including the typical length of a riding career, the physical nature of riding, and the associated heavy work of general yard duties. Despite this, treatments have been much less well researched, and massage specifically has received very little attention. This study aims to examine the effectiveness of the Jing Method™ massage protocol in reducing lower back pain in horse riders.

Method: Participants were selected to take part based on the criteria of riding three or more times per week and suffering from lower back pain for more than three months. The study used a within subjects design, with three participants completing a six week control phase followed by six weeks intervention and a four week follow up. All participants received the same treatment protocol and the same exercise regime.

Results: All three participants reported a decrease in lower back pain during the intervention phase, as measured by the Bournemouth Back Pain Scale. Mean total scores for all participants reduced by 15.67 points across the whole study period, with back pain rating specifically reducing by 1.67 points. The extent to which lower back pain interfered with everyday activities (including horse riding) reduced by 2.67 points during the study period, having increased by 1.0 point during the control.

Conclusion: The study provides indicative evidence that the Jing Method™ is an effective way to reduce lower back pain in horse riders. The study also demonstrates the importance of considering biopsychosocial factors when treating long term pain. Anecdotally, all participants articulated improvements in their day to day activities and riding. These finding suggest the

study should be repeated with a much larger participant group in order to provide a more definitive conclusion.

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ABBREVIATIONS

BBPS – Bournemouth Back Pain Scale

LBP – Lower Back Pain

MSK – Musculo-skeletal

NICE – National Institute for Health and Clinical Care

ONS – Office of National Statistics

ROM – Range of Motion

SOT – Special Orthopaedic test

LITERATURE REVIEW

Prevalence of Lower Back Pain (LBP) in the UK

Whilst we all know and treat many people with back pain, be that self-diagnosed or otherwise, obtaining a formal picture of the extent of the problem can be difficult. In part, this is because "backpain" covers a range of conditions, severities and durations, and official estimates vary between England and the UK.

The NHS estimates that 26% of adults in England report chronic pain most or every day, but this is not broken down into pain locations any further in public data (NHS Digital, 2026). However, the National Institute for Health and Care Evidence (NICE) estimates that up to 60% of the adult population will experience lower back pain (LBP) at some point in their life (NICE, nd), similar to estimates of 49-70% lifetime estimates by Koes et al. (2006). In addition, LBP is estimated to be the top cause of disability and 11% of the entire disability burden in the UK (Science Daily, 2018).

It has been estimated that back pain costs the UK £3.5 billion (2020 figure) in incremental primary healthcare costs (Zemedikun et al., 2024) and £1.4 billion (2022-2023 figure) in welfare benefit spending (Goodier & Gregory, 2024). In addition, Goodier & Gregory estimate that between January and March 2023, nearly 1 million (995,000) individuals were economically inactive due to back or neck problems.

Back Pain in horse riders

Prevalence

Research demonstrates that the prevalence of LBP in horse riders (both recreational and competitive) is higher than the general population. A systematic review of studies published

between 2004 and 2024 in English, Portuguese, Spanish and German, found the prevalence of LBP in equestrian athletes higher than the general population and other athletes, with a point prevalence ranging from 27.9% to 87.9%. (Duarte et al., 2024a). Point prevalence is the proportion of respondents reporting LBP at the specific time when the study was undertaken. Lifetime prevalence is the proportion of respondents reporting LBP at any point in their life. See https://www.nimh.nih.gov/health/statistics/what-is-prevalence. Individual studies are summarised in Table 1.

Table 1: Prevalence of LBP in horse riders by country

Country	Sample	Findings	Reference
South Africa	100 competitive showjumpers	Lifetime prevalence =81% Point prevalence =42%	Peens (2019)
Germany	508 competitive[1] horse riders	Incidence of 72.5%	Kraft et al. (2007)
Italy	886 members of the Italian Equestrian Sport Federation[2]	Life-time prevalence = 91.6% 1 year prevalence = 74.2%[3]	Ferrante et al. (2021)
Portugal	347 Federate equestrians	1 year prevalence = 61.7%	Duarte et al. (2024b)
UK	Riders over 35 years	85.4%	Lewis et al. (2023)

What is harder to determine from these studies, is whether different riding disciplines, e.g. dressage, show jumping, eventing, do or do not have an impact on levels of LBP.

[1] Dressage, show jumping or vaulting. No significant correlation between pain and discipline was found.
[2] The International Federation for Equestrian Sports is the international governing body of equestrian sports. Countries have their own Federations, which are the governing bodies for sport in that country. Horses and riders must be registered with either the national or international body as appropriate in order to compete.
[3] This study found pain was higher in showjumpers (61%), then dressage (13.6%), then eventers (6.3%)

Risk factors

In order to understand why horse riders have a higher than average rate of LBP, it is necessary to look at some of the risk factors involved.

- **Level of danger**

Lewis et al. (2023) state that horse riding is considered one of the most dangerous sports, with a horse rider having a fall once every two years, whilst Mayberry et al. (2007) conclude that one in five equestrians will be seriously injured during their riding career, with novice equestrians being the most at risk. However, this latter study was carried out in three American states, and given the different styles of riding and different safety requirements, it may not be replicable in the UK, although the study size (6790 equestrians), is significant. Lewis et al (2023) further highlight the fact that, compared to other sports, equestrians tend to have very long careers, competing from before age of 10, up to their 60s and 70s. This suggests that the incidence of falls and injuries will be naturally be higher within this population.

A retrospective study in the UK (Sandiford et al. 2013), examined all horse-riding related injuries to a county A&E department, and found that 68%, the largest category, were soft tissue injuries, and again that novice riders were at higher risk of injury. Meanwhile, Kraft et al. (2009) found that although their sample of 58 riders had a high prevalence of LBP, there was no conclusive MRI evidence to suggest that the cause lies in undue disk degeneration, spondylolysis, spondylolisthesis or pathological changes of the paraspinal muscles of the lumbar spine, meaning that other pain, e.g. muscular, must be a contributory factor.

Therefore, notwithstanding the number of injuries due to falls and handling horses (when leading, grooming, or giving minor first aid) likely to be encountered during the lifetime of an equestrian, this does not give us the full picture as to what contributes to such high rates of LBP in horse riders. For example, in the Sandiford et al. 2013 study, 137 subjects were injured

as a result of a fall, other recorded injuries included kicks (11), bites (5), trod on (2) and 2 cases where the horse fell on the rider, causing additional injuries to the original fall. Table 2 provides a breakdown of other researched contributory factors.

Table 2: Other risk factors for LBP in horse riders

Risk factor	**Reference**
Saddle (fit and type[4])	Lewis & Kennerley, (2017)
	Quinn S & Bird, (1996)
	Deckers et al. (2021)
Number of horses ridden	Lewis & Kennerley (2017)
Way the horse moves[5]	Lewis & Kennerley (2017)
Insufficient recovery	Hobbs et al. (2014)
Insufficient rehabilitation	Ekberg et al. (2011)
Posture & Asymmetry	Nevison & Timmis (2013)
Yard duties	Lewis et al. (2025)
	Duarte et al. (2024a)

- **Yard work/stable duties**

Of particular note from an anatomical/rehabilitation perspective, is the impact of yard duties on LBP in horse riders. Whilst the perception of horse riding tends to the glamourous (blame Jilly Cooper's "Riders") the reality is very different, in that the majority of riders spend more time carrying out yard duties than they do riding. Yard duties include: mucking out, sweeping, grooming and a considerable amount of lifting: tack and other equipment, water buckets, feed

[4] Different disciplines have different types of saddle, depending on whether the rider needs to be in a more upright position (dressage), or in a forward position off the horses back (jumping).
[5] Some horses have a "big" movement, which requires more flexibility from the rider through the hips and lower back to absorb.

bags, hay bales. Carrying and bending will feature predominately in these daily tasks, which are both repetitive and asymmetrical.

Lewis et al. (2025) specifically looked at the impact of yard tasks and found that as the daily hours spent on yard duties increase, so did reported pain. In fact, 89.1% of respondents reported pain when carrying out stable duties, with carrying causing the most pain.

How effective is massage in treating LBP?

Given that LBP is such a common and costly musculoskeletal (MSK) issue, one might imagine that extensive research has been carried out into whether massage can provide benefit for this condition, specifically in returning people to work. However, this is not the case, and those studies which do examine the issue, merely conclude that more research, and more importantly, better quality research, needs to be done.

Furlan et al. (2022) reviewed nine publications reporting on eight randomized trials. Their review found massage was superior to relaxation, acupuncture and self-care, equal to corsets and exercises and inferior to manipulation and electrical nerve stimulation. The authors specifically note the need for more research on the long-term cost effectiveness of massage as a treatment for LBP.

A more recent "systematic review of systematic reviews" carried out by Kumar, Beaton and Hughes (2013) concluded that there was:

"an emerging body of evidence, albeit small, that supports the effectiveness of massage therapy for the treatment of non-specific low back pain in the short term."

However, the authors point out that methodological flaws in the studies they reviewed (which they generally rated as methodologically weak), mean that any results must be interpreted with caution.

In terms of actual studies, Preyde (2000) found that a group receiving massage therapy (n=25) had improved function, less intense pain and a decrease in quality of pain compared with the other three groups[6]. Of particular note was that at one month follow up, 63% of the massage group reported no pain compared to 27% of the soft tissue group, 14% of the exercise group and 0% of the control. This study does therefore provide evidence of the longer term impact of massage as a means of reducing LBP.

Similar results have been shown by Hernandez-Reif et al. (2001) where the massage group (n=12) reported less pain, depression, anxiety and improved sleep after five weeks of twice weekly sessions compared to a group given muscle relaxation.

Massage as an effective remedy for LBP in horse riders

Despite the high levels of prevalence of LBP in horse riders, there are, again, very few research studies examining the effects of any treatment, and specifically MSK techniques, and those which do exist use very small numbers of subjects.

Duarte et al's 2024a systematic review examined the most prevalent ways horse riders dealt with their pain. The percentages of equestrians with pain who used medication varied from 37.2% to 96%, with between 3% and 23.9% of those having a medical prescription for pain relief. For those equestrian athletes who sought treatment, physical therapy was the most common treatment sought, and massage specifically varied from 12% to 29%. This is much

[6] Soft tissue manipulation only (n=25), remedial exercise and posture education only (n=22) or control (n=25)

lower than those taking pain relief, and therefore indicates that education as to the benefit of massage for pain conditions in this population is needed.

Nevison & Timmis (2013) found that seated postural asymmetry reduced following physiotherapy intervention of manipulation of the pelvis, although there were only three riders in each of the intervention and control groups, and the detail of the intervention was not reported.

A study carried out in Poland in 2024 (Škrečková et al. 2024) is one of few which examines the impact of a three-month physiotherapy intervention. This was not specifically focussed on LBP, although all participants had pain, most often localised in the lumbar, groin, hip and knee. Rather, their hypothesis was that improving postural insufficiency will reduce pain. The study group was small, only 15 participants, however the results provide for a more targeted approach to manual therapy. They found an improvement in the FABER test (hip), the Varus stress test (knee), the Time and Balance and the SEBT test (ankle). The Valgus test (knee) showed no improvement. The authors state that the most significant changes occurred after lumbar spine intervention, however there are no further details as to what that entailed. The results do demonstrate that improving postural stability, specifically in the abdomen and lower leg, did decrease the levels of pain in their participant group.

The Jing Method™ of Clinical Massage Protocol

A key feature of The Jing Method™ is that it incorporates the biopsychosocial (BPS) model of pain, first proposed by Engel (1977, 1980). This model suggests that pain is largely determined by biological (illness, injury, degeneration), psychological (emotional state, outlook on life) and sociological (poverty, work, age) factors. People do not live in a vacuum, therefore in order for a therapist to have a positive impact on pain, they must consider all the other factors that person is subject to – a catastrophising mindset, a stressful job, a lack of

support networks, which have been shown to have an impact on the amount of pain a person experiences (see Fairweather & Mari [2015: 34-46] for a full explanation). A second key feature is that the treatment approach is evidence based, and follows the format of Heat, Fascial work, Massage, Acupuncture, Stretches and Teaching (HFMAST).

In terms of the Jing Method™ specifically, studies have shown positive results in treating back pain. For example, Dovey (2025) demonstrated a 48% decrease in pain as measured by the Bournemouth Back Pain Scale (BBPS), but also showed significant decreases in anxiety and depression. The study additionally found increases in the ability to perform daily activities and the ability to take part in social and recreational activity.

Even when using purely on-line methods of teaching and stretching, a study by Wall (2025) demonstrated a significant decrease in pain score of 15.4 points as measured by the BBPS. This replicated a study by Percival (2021), which was carried out during Covid, but also showed a reduction in pain during the intervention period.

In addition, the Jing Method™ has also been shown to be effective in treating lower back pain in a variety of sports people, for example: Benson (2019), who demonstrated an improvement in back pain in horse riders, although this study also used biomechanics coaching and is therefore not comparable; Burns (2019) showed an improvement in back pain in cyclists, and Wigmore (2023) demonstrated an improvement in lumbopelvic pain in postpartum runners.

This study will evaluate a bespoke protocol specifically designed to address the key issues faced by horse riders, based on the lower back pain protocol (Fairweather & Mari [2015: 201-224]) and the hip and pelvis protocol (Fairweather & Mari [2015: 291-316])

METHOD

Ethics approval (see Appendix A) was received from Jing Advanced Massage Training to evaluate the effects of the Jing Method™ massage protocol on lower back pain in horse riders. This study used a within subjects design, with each participant providing their own control.

Recruitment

Participants were recruited via social media and hard copy advertisements. Social Media posts were promoted on: researchers own site and pages of other equine professionals, local business, local horse and existing client's pages. Adverts were displayed at: local riding schools and livery yards; local outdoor, equine and feed stores; other local businesses. A number of posters were used, see Appendix B for an example.

Recruitment was challenging, despite initial interest in the study being received from 12 people, only three actually took part after three months. This is characteristic of a lack of engagement with massage therapy in the local area. Participants were started at staggered times in order that they did not have to wait for their treatment sessions. Participants were all white females, again indicative of the horse riding population in this area.

Once a participant had expressed an interest, they were sent an information leaflet (Appendix C), and invited to a 20 minute zoom call to cover the exclusion and inclusion criteria, explain the Bournemouth Back Pain Scale (Bolton & Breen, 1999, Appendix D) and answer any questions. This scale was chosen due to it being short, only seven questions, and therefore easy for participants to fill in. It is also well validated in terms of measuring back pain. A checklist (Appendix E) was used to ensure consistency of information covered and questions to be asked.

If at this point the participant agreed to continue, they were sent the formal participant letter (Appendix F) to gain their written consent, and dates were set for them to begin. The

information leaflet was updated to provide all relevant dates in hard copy. The aim was to have all participants complete their questionnaire on a Monday, not only for easier diary management, but because horse riders are busiest at the weekend, and therefore likely to be feeling their worst levels of pain.

Control Phase – weeks 1 to 6

In advance of their first Monday, participants were sent the BBPS. They were sent a reminder on their first Monday before 8.30am to return the questionnaire that day. This pattern was repeated for the whole 12 weeks, with all subjects returning all questionnaires.

Participants were advised to carry on their activities and their pain management as normal and not change anything for the course of the whole 12 weeks. No participant was receiving any other treatment, and any use of medication was self-reported at each session.

Intervention Phase – weeks 7 to 12

The intervention phase began on the participants 7th week. They were again reminded to fill in their BBPS on the Monday morning in advance of their treatment session, seven days after their previous session. Automatic appointment reminders were sent out via the booking system. This was repeated until the end of week 12. The reason for choosing six weeks is in line with the Jing Method™ "fix in six" approach (Fairweather & Mari, 2021, 6-7).

Participants received a bespoke combination of the Jing Method™ lower back and hip and pelvis protocols (see Appendix G), designed to be the most effective in addressing the specific problems likely to be present across the whole group. The same protocol was used each week. Details of how environmental factors were controlled during the session are in Appendix H.

Session 1

A full consultation took place on the first session, including Range of Motion testing (ROM) and Special Orthopaedic Testing (SOT). This took 30 minutes. The participant had their 50 minute massage session, and were shown the self-care routine (10 minutes of exercises three times per week), which they also had to demonstrate. This took 10 minutes. Any questions or feedback were captured.

Session 2

After checking in with the participant, they were asked to demonstrate the self-care routine to ensure they were doing it correctly. This took 20 minutes for check in and demonstration. They then had the same 50 minute massage session. The self-care routine remained the same this week.

Session 3

After checking in with the participant, ROM and SOT were re-tested, and a quick demonstration of the self-care routine to ensure they were still on track. This took 30 minutes. They then had the same 50 minute massage session, but new self-care routine was shown and demonstrated back.

Sessions 4 and 5

As Session 2, but with self-care continuing from session 3.

Session 6

As session 6, but with no further self-care routine. Participant was thanked for their involvement.

Follow Up Phase – week 16

All participants were asked to fill in a final BPPS after four weeks, to examine the longevity of any effects. Two of the three subjects returned their follow up questionnaires.

RESULTS

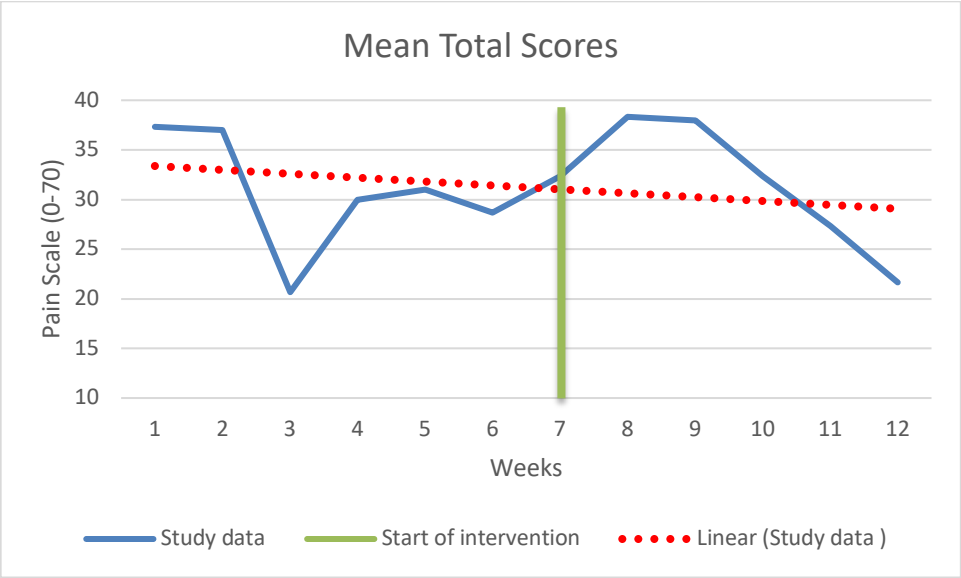

Figure 1: BBPS mean total scores across control and intervention period.

Across the 12 week control and intervention period, the mean total scores on the BBPS reduced by 15.67 points. Intervention began at week 7.

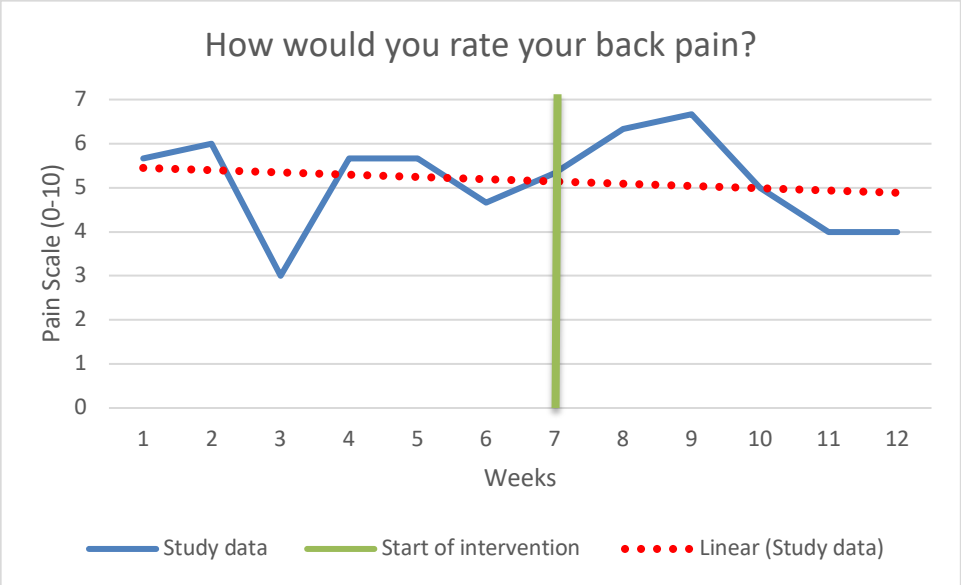

Figure 2: Change in mean lower back pain over control and intervention period.

As a group, the mean score for lower back pain specifically decreased by 1.67 points across the 12 weeks. Intervention commenced at week 7.

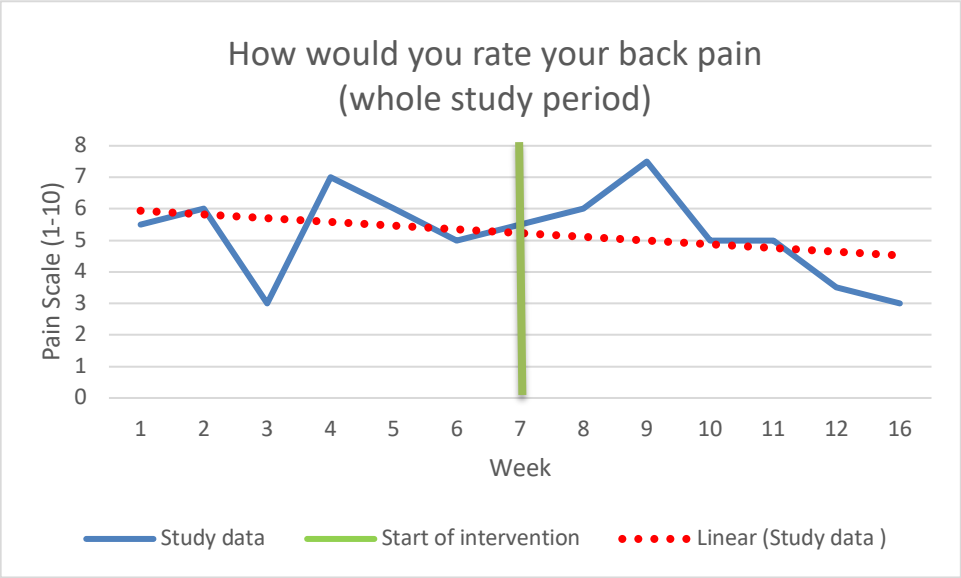

Figure 3: Change in mean lower back pain over whole study period (16 weeks).

For the two subjects who returned a form at the four-week follow up, over the whole 16 week period, mean scores for lower back pain reduced by 2.5 points from 5.5 to 3.

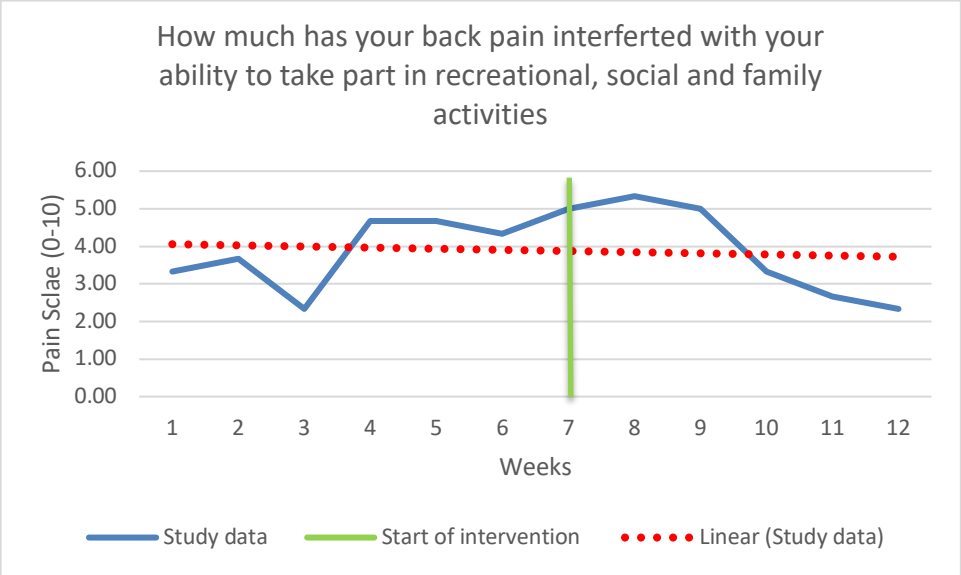

Figure 4: Change in mean score for how much back pain interfered with ability to take part in recreational, social and family activities over control and intervention period.

Of particular note were the responses to the question on how much back pain interfered with ability to take part in recreational, social and family activities. Over the control and study period, the total mean score decreased by 1.0. However, closer analysis showed that over the

control period, the mean total increased by 1.0, then reduced over the intervention period by 2.67.

DISCUSSION

The aim of this study was to evaluate the effectiveness of the Jing Method™ as a treatment for lower back pain in horse riders. This study shows that the mean total scores for LBP as measured by the BBPS decreased over the intervention phase. Specifically, the mean total scores for rating lower back pain decreased during the intervention phase and maintained or decreased for four weeks after the study. Additionally, the mean total scores for how much lower back pain interfered with the ability to take part in recreational, social and family activities (including horse riding) decreased over the intervention period, having increased during the control period.

Effectiveness of the Jing Method™

This study provides indicative evidence of the effectiveness of the Jing Method™ in a horse rider population. This population has so far only been researched by Benson (2019), although as that study compared a biomechanics coaching approach to massage, it is not comparable.

Not only did this study demonstrate the effectiveness of the Jing Method™ in reducing LBP, but given some of the events which happened during the intervention phase, it highlights that the importance of biopsychosocial factors when working with pain cannot be over-estimated, and must be as integral to the session as the massage itself (see Fairweather & Mari, 2015: 34-39). Two of the three subjects suffered bereavements during the intervention phase. Bereavement has been shown to relate to decrements in physical health (Stroebe et al. 2007) and to an increase in somatic symptoms (Sills et al. 2022; Thege et al. [2012]). Therefore, this would have had an impact on the overall results.

Importance of biopsychosocial factors

Understanding how events such as bereavement will affect someone's pain (or perception of pain) is important in terms of planning massage interventions. Anecdotally, participants stated they were less motivated to continue their exercises, again this will have had an impact on the results. This is a key addition to our knowledge of the Jing Method™ as both subjects managed their attendance at sessions despite going through bereavement (both of which were expected), stating they appreciated and understood the importance of looking after themselves particularly during this time, and also appreciated the independent support offered. This demonstrates they were getting much more than just massage therapy from the sessions, for example, time for themselves, an objective listening ear, something to look forward to.

In addition, the biggest improvement in scores was in relation to the question "How much has your back pain interfered with your ability to take part in recreational, social and family activities", which subjects were told to include horse riding. Not only does this show that LBP can affect someone's ability to take part in the sports they enjoy, and that the Jing Method™ of Advanced Clinical Massage improves this, but it also demonstrates how improvement in pain improves life generally.

Complexity of pain in horse riders

This study also supports the work of Lewis et al. (2025) on the impact of yard duties on perception of back pain. Comments from participants included:

"Loading/unloading around 200 bales of hay and being on my feet most days"

"I have been working much longer hours at the riding stables which has affected my whole body and pain levels"

"On Monday I had a fall onto concrete landing on my knees and hands."

"I rode five different horses cross country over two days"

This adds a further dimension of complexity to treating LBP in horse riders – the sheer physical nature of horse riding and the work (and hours) associated with it needs to be factored into any treatment and exercise plan. In addition, as was shown in the Sandiford et al. 2013 study, horse riders are prone to other horse related injuries.

A study by Hallt (2025) with surfers similarly demonstrated an outlier result in the intervention phase due to a further injury, but also found that the individual experienced a rapid recovery and greater reduction in pain. Given that this study and the Hallt study also showed positive effects on pain levels at the four week follow up, the benefit of the Jing Method™ on reduced recovery time and long term maintenance in sports people is worth further exploration.

Limitations of study

The key limitation of this study is the small number of subjects which prevents any firm conclusions being reached. As can be seen, one individual had a good week within the control period, which has significantly affected the results overall. In addition, two subjects suffered bereavements during the intervention period and two had falls. This demonstrates why a much larger group is needed in order to control some of the effects of everyday life. For these reasons, the questions asking how back pain affected mood were not considered as part of this study.

A further limitation is that although all subjects worked on yards full-time, the extent, type and level of their riding varied. The inclusion criteria was three times per week, however one subject was three times hacking and gentle schooling, and one was six-seven intensive dressage and cross country. Whilst a larger subject base would have allowed better control over these variables, the data supports the findings of Kraft et al. (2007), where no significant correlation between intensity of riding or riding discipline and frequency of pain was found. It should,

however be noted that Deckers et al. (2021) and Ferrante et al. (2021) found show jumpers to have a higher prevalence of LBP, although this may be due to saddle type. In any event, it is worth further research to establish whether it is the **discipline** which affects back pain, or the **position/type of saddle**. This is the type of study where a biomechanical horse may be of benefit, in order to not cause welfare issues for horses being asked to undertake activities in the wrong type of saddle.

A further point relates to the exercise plan. For the purposes of the study, everyone was given the same plan, which was suitable for those who did not do much other exercise, or did not do much exercise specifically for the back pain. However the plan, starting from a low base as it did, was less suitable for those who were more advanced in their knowledge or fitness, which many horse riders are these days.

A key point to note, although it has not affected the results, is that due to the recruitment difficulties, the subjects were seen consecutively rather than simultaneously.

CONCLUSION

This study provides some indicative evidence of the effectiveness of the Jing Method™ of Advanced Clinical Massage on lower back pain in horse riders. It showed an overall decrease in LBP as measured by the BBPS, and specifically a decrease in how much LBP was affecting the subjects ability to engage in recreational, social and family activities, which included horse riding. Verbally, all participants reported an increase in the ease and flexibility with which they could go about their daily activities, and specifically more flexibility when riding.

This study supports the emerging evidence that massage is effective for treating LBP in horse riders. It specifically supports the incorporation and understanding of biopsychosocial factors when treating chronic pain, and the impact of external factors such as yard work.

To expand this study further, firstly a much bigger sample is needed to control for some of the factors identified in the discussion, and once the impact of biopsychosocial factors, yard duties and falls are taken into account, it can be seen that pain in horse riders is a complex picture which needs a significant study size to control for all other factors.

Thus far, no randomised control trials or controlled studies have tested whether massage therapy for riders themselves (rather than horses) provides a measurable reduction in lower back pain, and what evidence there is comes from rider surveys indicating usage of massage rather than studying the benefit, or from studies of the effect of horse massage. Therefore, to expand this study, it could be repeated using four groups: rider massage only, horse massage only, horse and rider both massaged and control. This would not only contribute to our knowledge of the effectiveness of massage for horse riders, but also the impact that these improvements will have on their horse. This could be done in collaboration with a relevant academic institution such as Hartpury University, who specialise in researching horse and rider biomechanics using multi-disciplinary research teams and cutting edge biomechanics

equipment. The International Society for Equine Science looks to be the main body that could potentially fund such research.

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APPENDICES

Appendix A: Ethics approval

Appendix B: Recruitment Poster sample

Appendix C: Information Leaflet

Appendix D: BBPS

Appendix E: Checklist

Appendix F: Formal letter

Appendix G: Massage Protocol

Appendix H: Environmental Factors control

Appendix A: Ethics Approval

	CHECKLIST OF INSTRUCTIONS FOR STUDENTS	✓
1	Complete Section 1 to Section 13	✓
2	Electronically sign and date	✓
3	Participation information form (see separate form)	✓
4	Participation consent form (see separate form)	✓

Jing BTEC Research Ethics Form

BTEC Level 6: Professional diploma in Advanced Clinical and Sports Massage

Section 1: to be completed by student

Student's name:	Deborah McGovern
Student number:	NG89695
BTEC Year-group:	2024-2026
Date of application:	30.04.2025
Student e-mail address:	info@centaurharmony.co.uk
Title of research project:	Evaluation of the effectiveness of the Jing Method™ on lower back pain in horse riders

Section 2: Does your project involve any primary research using human subjects?

Please indicate as appropriate.

	YES	NO
Does your project involve any primary research using human subjects?	**X**	
If yes, does it involve children under 16?		X
If yes, does it involve children under 18?		X
Other vulnerable populations (i.e. mental illness, aged subjects)?		X
Does your project involve NHS patients, NHS staff or Local Authority Service Providers?		X

Are you planning to use deception?		X
Are you collecting sensitive personal data such as sexuality, mental health data, etc.?		X
Does your study involve paying participants or an alternative incentive to participate		**X**
Could the study put you or someone else at risk of injury?		X
Does your project make use of a validated questionnaire?	X	
If yes, please specify the name of the validated questionnaire you are using and attach a copy here. Bournemouth Back Pain Scale – Appendix 1		

Section 3: Research premises

Where is your research being undertaken? My home address: 7 Eden Crescent Chatteris Cambridgeshire PE16 6AN	
If your research is being undertaken outside of your own premises, do you have written confirmation from the establishment involved? If yes, please provide evidence.	Not applicable

Section 4: Recruitment

How will you recruit subjects for this research study?

- Existing horse rider contacts
- Other equine professionals
- Social Media, including Facebook groups
- Feed stores, clothes stores and yards

Section 5 Outline your project procedure

This is effectively a draft of your method, include information on when questionnaires will be used, what your intervention will involve, any stimuli used, etc.

This study aims to investigate the effect of the Jing Method™ of Advanced Clinical Massage on lower back pain in horse riders.

Participants will be recruited for this within group study design using a mixture of social media, hard media and existing contacts and professionals.

There will be a face-to-face / Zoom consultation with participants to ensure they meet the inclusion criteria, understand the research study, ask questions and provide consent to take part.

Weeks 1-6 of the study will form the control period and give a baseline of the client's pain. During this time participants will complete the Bournemouth Back Pain Scale once a week but there will be no intervention.

Weeks 7-12 will be the intervention period.

- During this time participants will receive a 50-minute clinical massage once a week.
- The session will be based on the Lower Back and Hip and Pelvis Jing Protocol. This includes components of heat, amma, myofascial, massage, stretching and teaching, see Appendix 2 for fuller details.
- There will be the same background music played at every treatment.
- After each session, the participants will be given the same 10 minute self-care routine to follow three times a week. Details of each weekly treatment plus self-care routine will be added as an appendix to the study.
- Six days after every treatment the Bournemouth Back Pain Scale questionnaire will be sent to participants to complete and return prior to their next treatment or within 24 hours.
- At the same time, participants will be asked to inform the researcher how many times they performed the self-care that week.

At week 16, a follow up of the Bournemouth Back Pain Scale will be sent to participants to assess if there were any longer term changes as a result of the intervention period.

Section 6: Describe what your participants need to do

- Participants are required to initially attend a face-to-face / online meeting to:
  - Check they meet the inclusion criteria.
  - Have the study explained to them so they can ask questions and give consent to take part in the study
  - Collect information required for the consultation process.
  - Participants are required to inform the researcher of any manual therapy, medication or any other relevant treatment, they are receiving for their back pain throughout the duration of the study.
- Weeks 1-6, Participants are required to fill in the Bournemouth Back Pain Scale questionnaire once a week for 6 weeks with no intervention.
- Weeks 7-12, participants will receive a standardised 50 minute Jing Method™ Advanced Clinical Massage treatment once per week for the duration of 6 weeks.
- Participants will have to perform a self-care routine 3 times per week. This should take 10 minutes. The self-care video will be sent each week, within 24 hours after a client has their intervention during weeks 7-12.
- Six days after each treatment and prior to the next treatment or within 24 hours each participant is required to fill in the Bournemouth Back Pain Scale questionnaire and return it to the researcher prior to the next treatment.
- The participant will also inform the researcher how many times they performed the self-care routine.
- Week 16 participants will complete a final BBPS to assess any longer-term results of the study.

Section 7: Respecting confidentiality and ethical issues for participants

How will you manage participant confidentiality? Ensure that the information refers to GDPR and is compliant with this legislation. What ethical considerations are there?

- Information will be held in line with (UK) GDPR and the Data Protection Act 2018. It will not be shared with any third party unless there is an immediate risk of harm.
- Names will be replaced with numbers.
- All information will be deleted or otherwise destroyed in line with GDPR requirements.
- Minimal risk of bruising if self-care performed too hard or transient muscle aches after a treatment.
- I am fully qualified, insured therapist and a Mental Health First Aider.

Section 8: Inclusion and exclusion criteria

What sort of people will the subjects be?
The study will include:

- People over 18
- People who horse ride more than three times a week
- People who have had back pain for more than three months

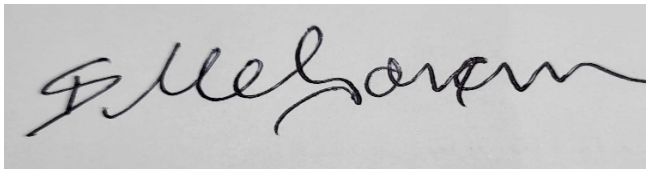
The study will exclude:

- People who ride less than three times a week
- People who have spinal or other back surgery
- People who are pregnant
- People who are not able to travel to my treatment room at the required days and times for six weeks
- People under 18
- Any new pain medication in the past two months

Section 9: Student declaration:

I understand that I can only start my project, once this ethical application has been approved. This applies to ALL projects, whether using human participants or not.	YES	

Student's handwritten signature:



_____

(To be completed, once ethical approval has been provided)

Print Name: Deborah McGovern **Date: 08/05/25**

ONCE YOU HAVE COMPLETED THE ABOVE ETHICS DETAILS, THEN YOU CAN PROCEED TO PARTICIPANT INFORMATION AND CONSENT FORMS, SO READ BELOW AS IT IS IMPORTANT TO BE CLEAR ABOUT WHAT YOUR PARTICIPANTS NEED TO DO.

Informed consent must be obtained for **all** participants before they take part in your project. The Consent Form should clearly state the parameters and content of the research. It should explain what is expected of the participants and what they will be doing. It should draw specific attention to any elements that could conceivably cause subsequent objections, and the measures you are taking to ensure the confidentiality of their data. It should also state that the participants are free to withdraw from the study at any time.

Studies should not involve participants under 18 without express permission from your supervisor. Studies carried out in schools require the permission of the head-teacher, and of any responsible adults as per the head teachers' recommendation. Minors aged over 14 years should also sign an individual consent form themselves. If you are planning to carry out a project whereby you will be in contact with minors, you must establish from the head-teacher or other responsible adult whether the work proposed will require you to have the relevant DBS disclosure. Please seek advice from your Local Authority.

You must complete a consent form for every participant involved in your study.

Jing's assessment (to be signed by Jing after ethics and participant information details completed)

EITHER:
This project is not designed to include fieldwork with human participants. Insofar as secondary data are to be used, I am confident that appropriate procedures are in place for data protection and non-disclosure of any personal or confidential data.

Signature: .....date: .....

OR:
This project is designed to include fieldwork with human participants.
(please circle yes or no)

YES	All necessary statutory, legislative or other formal external approvals have been obtained (e.g., permissions, police checks, external research ethics and governance approvals in the case of research involving NHS staff or patients or Local Authority service providers or users).
YES	The design of this study ensures that the dignity, welfare and safety of the participants will be ensured and that if children or other vulnerable individuals are involved they will be afforded the necessary protection.
YES	I am confident that participants will be given all necessary information before the study, in the consent form, and after the study if necessary.
YES	I am confident the participants' confidentiality will be preserved.
YES	I consider that any risks involved to the student, the participants, and any third party are minimal.
YES	I consider that Departmental approval should be given, since ethical risks have been appropriately addressed in the proposal and I am confident that steps will be taken to minimise any risks.

Signature: .....Susan Harrison..... date: .....17/5/25.....

If a second opinion was sought from a research ethics expert, the advisor should also sign this form below:
Advisor's name (please print):

Advisor's signature: ..... date: .....
Once the Jing's signature has been obtained, the student must return the completed form to the Jing Office.

Appendix B: Sample Recruitment Poster

Lower Back Pain in horse riders

RESEARCH STUDY

CENTAUR HARMONY

HUMAN AND EQUINE MASSAGE THERAPIST

WHO?

You are:

- Someone who rides at least three times a week
- Have suffered from lower back pain for at least three months
- No history of spinal surgery
- Able to fit in with study timeframes
- Over 18

I am:

- Deborah McGovern, a human and equine massage therapist for 14 and 9 years respectively
- In the final year of the BTEC Level 6 Professional diploma in Advanced Clinical Massage and Sports Massage.

WHAT?

The effectiveness of the Jing Massage protocol on lower back pain in horse riders

- The Jing Massage protocol combines the best of East and West massage techniques, and is evidence based
- This study will assess the effectiveness of six weeks of treatment on lower back pain, as assessed by a standard questionnaire

Benefits to you:

- Clients regularly report increased movement and reduced pain after sessions
- Opportunity to contribute to understanding pain in horse riders
- Sessions discounted from £50 to £25, £5 from each treatment going to charity.

WHEN?

Stage 1

- Week 1- 6 pain diary: expected start date - 5th May and 16th June
- Week 7 - 12: weekly massage session in Chatteris
- Week 16: Follow up pain questionnaire

Need more Info?

- Contact: info@centaurharmony.co.uk
- Scan to access Facebook page

Appendix C: Information Leaflet

Lower Back Pain in horse riders

RESEARCH STUDY

CENTAUR HARMONY
HUMAN AND EQUINE MASSAGE THERAPIST

Evaluating the effectiveness of the Jing Massage Protocol for lower back pain in horse riders.

BTEC Level 6 Professional Diploma in Advanced Clinical Massage and Sports Massage

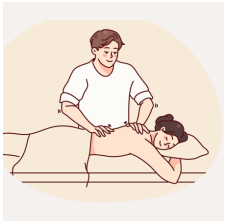
About me – Deborah McGovern Advanced Clinical Massage Therapist

A human and equine massage therapist for 14 and 9 years respectively, now in the final year of the highest human massage qualification in the UK & Europe, the BTEC Level 6 Professional diploma in Advanced Clinical Massage and Sports Massage. This study will look at whether the Jing Method of Clinical Massage can reduce lower back pain in horseriders.

What's involved?

- Initial zoom call so we can meet and discuss
- Weeks 1-6: filling out a pain diary (approx. 10 mins) every Monday morning
- Weeks 7-12: 1 hour every week Advanced Clinical Massage session in Chatteris, plus self-care to do at home 3x week and continuing with pain diary

- Week 16: Final pain diary questionnaire and optional feedback
- Anticipated start dates: May/June, with treatments to start mid June onwards



Useful Info

- Sessions are reduced from £50 to £25, which includes a £5 donation to charity (Fenland Riding for the Disabled)
- Reminders will be sent to return the pain diary and for appointments
- Self-care exercises will be shown at appointments, and followed up with a video and info sheet
- Appointments are 50 mins treatment, plus 15 mins check in and aftercare. First session will be longer for consultation and assessment.
- **Please be aware you can drop out of this study at any time, with no explanation needed.**

Contact Me:

- 0787 655 1264
- info@centaurharmony.co.uk
- Scan for Fb page and FB messenger:

Your Personal Timetable

Week	Pain Diary	Treatment Session
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
16		

Appendix D: Bournemouth Back Pain Scale

BOURNEMOUTH BACK PAIN QUESTIONNAIRE

Patient Name _____Date _____

Instructions: The following scales have been designed to find out about your back pain and how it is affecting you. Please answer ALL the scales, and mark typing X next to the ONE number on EACH scale that best describes how you feel.

1. **Over the past week, on average, how would you rate your back pain?**

No pain Worse pain possible

0 1 2 3 4 5 6 7 8 9 10

2. **Over the past week, how much has your back pain interfered with your daily activities (housework, washing, dressing, walking, climbing stairs, getting in/out of bed/chair)?**

No interference Unable to carry out activity

0 1 2 3 4 5 6 7 8 9 10

3. **Over the past week, how much has your back pain interfered with your ability to take part in recreational, social, and family activities?**

No interference Unable to carry out activity

0 1 2 3 4 5 6 7 8 9 10

4. **Over the past week, how anxious (tense, uptight, irritable, difficulty in concentrating/relaxing) have you been feeling?**

Not at all anxious Extremely anxious

0 1 2 3 4 5 6 7 8 9 10

5. **Over the past week, how depressed (down-in-the-dumps, sad, in low spirits, pessimistic, unhappy) have you been feeling?**

Not at all depressed — Extremely depressed

0 1 2 3 4 5 6 7 8 9 10

6. **Over the past week, how have you felt your work (both inside and outside the home) has affected (or would affect) your back pain?**

Have made it no worse — Have made it much worse

0 1 2 3 4 5 6 7 8 9 10

7. **Over the past week, how much have you been able to control (reduce/help) your back pain on your own?**

Completely control it — No control whatsoever

0 1 2 3 4 5 6 7 8 9 10

OTHER COMMENTS:

With Permission from: Bolton JE, Breen AC: The Bournemouth Questionnaire: A Short-form Comprehensive Outcome Measure. I. Psychometric Properties in Back Pain Patients. JMPT 1999; 22 (9): 503-510.

Appendix E: Checklist

Name	
Address	
Email	
Phone	
Over 18	
Ride 3x week	
Discipline	
Back pain 3 months	
No surgery	
Pregnant	
New pain medication last 2 months	
Questions:	
Dates:	

Appendix F: Formal Letter

Thank you for showing interest in my study, I appreciate you responding to my call for participants. This letter gives you all the information you need about what will be involved.

I have been a human and equine massage therapist for 14 and 8 years respectively. I specialise in the treatment of chronic pain, and in horse and rider issues. In my clinic, I work with horse riders, their horses and individuals suffering with a range of chronic pain such as migraines, frozen shoulder and fibromyalgia.

In 2021, I embarked on an advanced degree qualification in my field: the BTEC Level 6 in Advanced Clinical and Sports Massage offered by Jing Advanced Massage, the highest level of education a manual therapist can achieve in the UK. It is overseen by experts in the field of Musculoskeletal Pain, Education, Sports Science and Psychology.

As part of our course work, we are given an opportunity to design and carry out a study into the effects of a clinical massage wellness programme. I have chosen to investigate lower back pain in horse riders.

If you decide to participate the study, it will begin in early May.

The first 6 weeks is about understanding your pain. We will have an initial 20 minute 1to1 zoom meeting where we can talk through the study, I will gather your contact info, and introduce you to the back pain questionnaire.

Then for 6 weeks, every Monday, you will fill in the questionnaire and send it to me via email. It should take you approximately 10 minutes. I will send you an email prompt to remind you. At this stage, there is no treatment. Once all that data is gathered and we know what we are dealing with, we will then endeavour to make a difference.

For the next 6 weeks, Weeks 7-12, you will be receive a Jing Method massage protocol specifically for lower back pain. Sessions are 60 mins, including 45/50 mins treatment, including myofascial release, trigger points and acupressure points. Sessions will be held on a Monday and Tuesday from 3pm onwards. You will also be given some rehab exercises to carry out 3 times a week.

During these 6 weeks, you will continue to fill out the questionnaire on a Monday morning and return prior to your next treatment or within 24 hours. I will continue to send you an email prompt.

At the end of the study, I will ask for feedback covering what worked for you and what didn't. If the sessions are working for you there will be an opportunity to

continue. Four weeks after we finish our sessions, Week 16, I will send you a final questionnaire, so we can see whether the improvements have remained.

Once my research is published, I will share with you my findings and invite you to the conference, where my colleagues and I will be presenting all our findings.

I have to say that if you know others who are participating in the study, please don't have any communication with them for the course of the sessions. It is also important that you don't change any other pain-relieving activity including the use of pain medication, without letting me know.

All of your information will be kept confidential. The cost is £25 per session, (discounted from £50 and with a £5 donation from every treatment going to Fenland RDA). This is in recognition of your contribution to the study and to the topic area, and acknowledges the time you are providing to support the research.

Thank you again for considering this project, your participation will make a difference to your pain and the pain of many.

Your Sincerely,

Deborah McGovern, ACMT Advanced Clinical Massage Therapist

PARTICIPANT CONSENT FORM

Title of study: Evaluation of the effectiveness of the Jing Method™ on lower back pain in horse riders

Name of student: Deborah McGovern

	Yes	No
I have read the information letter about this study		
I have had an opportunity to ask questions and discuss this study		
I have received satisfactory answers to all my questions		
I have received sufficient information about this study		
I understand that I am free to withdraw from this study: • At any time (until such date as this will no longer be possible, which is once all anonymised data has been merged) • Without giving a reason for withdrawing • That I am free to refuse to answer any question without saying why • That the services I am receiving will not be affected whether I participate or not.		
I understand that my research data may be used for a further project in anonymous form, but I am able to opt out of this if I so wish, by ticking 'No' here.		
I understand that online sessions may not be recorded		
I understand the online sessions might involve other participants and I will respect the confidentiality of the group and not share information with others		
I agree to take part in this study		
Signature (participant) **Date:**		
Name: (BLOCK LETTERS)		
Deborah McGovern **07876551264** **Email:** Info@centaurharmony.co.uk		

Appendix G: Treatment Protocol

Treatment Protocol

Prone

Heat – sacrum and feet

Amma

Fascial work

- x hand stretch to lower back
- Finger work to sacrum
- Double fist down spine

Massage

- Double and single effleurage to back
- Strip to ES
- Strip to QLs
- Deep work to glutes
- Piriformis
- PNF hip rotators

Aps

- BL32
- BL36

Side-lying

Fascial:

- QL stretch with cross hand stretch
- Work to glute Med and Min
- Iliac crest

Prone:

- Psoas release

Stretches:

- Glutes
- Piriformis
- Spinal twist
- Fascial leg

Appendix H: Control of Environmental Factors

All treatments took place in my bespoke treatment room, which was heated to 21 degrees.

For 2 subjects, treatments took place at the same day and time each week. The other subject had less flexibility in terms of attending, so was seen at different times/dates.

Couch was made up of beige under sheet, white towels and cream headrest cover.

Same CD was played for every session (Koyasan by Deuter, via Spotify).