The effects of the Jing Method of Massage on the activity levels of women aged 40-70 with chronic hip pain.

Katrin Steed

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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 the Jing Institute of Massage and Complementary Medicine. 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."

Katrin Steed: 

Date: 31st March 2024

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Abstract

Objective

The purpose of the study is to assess the effectiveness of the Jing Method of Massage to help reduce pain and improve the activity levels of women aged 40 – 70 with chronic hip pain.

Method

Four participants with chronic hip pain monitored their pain levels over daily living activities and recreational activities, using the Non-Arthritic Hip Score Questionnaire over a six week control period. This was followed by a six week intervention period consisting of alternate massage treatments and exercise classes. A final assessment was made after a further four weeks.

Results

All participants recorded an average reduction in pain across a variety of daily living and recreational activities of 24.4%.

Conclusion

The results of this study show that the Jing Method of Massage can reduce pain in women aged forty – seventy with chronic hip pain, making daily living and recreational activities more

comfortable. The results suggest that further research is warranted to establish greater understanding of the effect of clinical massage on chronic hip pain and activity levels.

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Abbreviations

TJMoM – The Jing Method of Massage

BSP – biopsychosocial

CS – Central Sensitisation

NAHSQ – Non-Arthritic Hip Score Questionnaire

Introduction

A pain in the buttock really is a pain in the buttock!

The Issue of Chronic Pain

Chronic pain is rapidly becoming a chronic condition within the UK and can have an adverse impact on the daily lives of those suffering with it, and with maintaining an active lifestyle (Versus Arthritis, 2022). Women experience more instances of chronic pain than men, as well as experiencing a higher level of chronic pain (Mills, et al., 2019). Chronic pain is defined as pain that lasts for three months or longer (NHS Scotland, 2023). In 2021 it was thought 34% of the UK adult population suffered from chronic pain, with women suffering more than men: 38% of all women compared to 30% of men (NHS, 2021). In the report by Ellis, et al., (2017) which reviewed national statistics from Public Health England, of those in chronic pain, 55% stated the pain was situated in the hip or other joints such as the legs, feet, arms and hands.

According to a small qualitative study published in 2021 chronic pain creates a significant barrier to participating in physical activity (Vader, et al., 2021). This is despite the emerging evidence that exercise has a positive effect on pain and quality of life: an overview of Cochrane reviews concluded exercise would be beneficial, although the authors felt that the quality of the evidence was low and more research was needed (Geneen, et al., 2017). In a systematic review of older people that compared those with chronic pain and those without, those with pain had lower activity levels than those without (Stubbs, et al., 2013). According to a systematic review and meta-analysis, chronic pain prevents physical activity in older adults (Stubbs, et al., 2013), which in turn has a knock on effect on health in general (Izquierdo, et al., 2021). As the strain grows on the country's National Health Service both practically and economically (Phillips, 2009), the need increases to find a solution to help those with chronic

pain that does not rely on pain killers and improves their quality of life and health. This research project aims to show that massage is effective in reducing pain and improving activity levels by researching the effect of The Jing Method of Massage (TJMoM) on older women with chronic hip pain and their activity levels.

Massage as a form of treatment for chronic pain

Many suffering from chronic pain will seek private treatment, not only among the world of GP's and surgeons but also complimentary health practitioners (Breivik, et al., 2006). Although a study in 2009 found that disability in the hip was a far greater cause for people to seek help than pain in the hip (Thorstensson, et al., 2009), massage can have a positive impact on chronic pain (Skelly, et al., 2020). According to a review by Flynn (2020) massage is recommended as being used as part of a multi-therapy approach, as all nonpharmacological treatments were found to have only a small, or short term effect; and massage in particular in the case of low back pain, has a small effect on the pain levels. A clinical trial published by Hasanpour-Dehkordi, et al., (2021) investigating how aromatherapy and massage effects pain, quality of life and recreational activities in people with osteoarthritis found that the intervention groups improved in all areas when compared to the control group, although intervention should last for at least 6 months to have a greater effect. These results are echoed by a small study by Watson (2016) in which TJMoM improved the quality of life of people post hip replacement. When looking at systematic reviews of research on massage and chronic pain a common theme is that not only is more research needed but larger scale studies are also required (Tsao, 2007; Nelson & Churilla, 2017).

The biopsychosocial (BPS) model is now widely recognised as a model to use when working with chronic pain as it not only addresses the physical origin of pain, but also how psychological factors (such as emotions, pain beliefs and catastrophising) and sociological factors affects a person's experience of pain (Fairweather & Mari, 2015, pp. 35-37). Increasingly it is being recognised that a multi-disciplinary approach can have a far greater impact on chronic pain than just the use of pain killers. During a small study in America of forty one patients diagnosed with chronic pain, massage and exercise was used amongst other disciplines to improve chronic pain experiences (Bruns, et al., 2019). However, according to Mescouto, et al., (2022) who critically reviewed the BSP model within a physiotherapy setting, they concluded that further research was required to ensure that the model was used in its full spectrum.

When treating chronic pain, thought must also be given to Central Sensitisation (CS), where the nervous system goes into a hyper state of activity, resulting in hypersensitivity and the consistent feeling of pain, even though (not necessarily in all cases) the soft tissues in the area may be in a relatively healthy state. CS can affect the body in a localised area such as the hip or shoulder, at times after an injury, or become a more global problem in the form of a condition such as fibromyalgia (Fairweather & Mari, 2015, p. 43). A small study of those suffering with Greater Trochanteric Pain Syndrome found that 44.4% of the subjects had signs of CS (French, et al., 2019). A pilot study looking at the effect of hands-on therapies at treating fibromyalgia, compared myofascial release with Swedish massage, and whilst both modalities resulted in a reduction of pain, myofascial release had a far greater effect on the neck and shoulders whereas those receiving the Swedish massage did not report relief in consistent focal areas (Lipta, et al., 2013).

Modalities of soft tissue release

Heat has been used through the centuries to help ease pain, and studies have since gone on to back thermotherapy's positive effect on pain. Freiwald, et al., (2018) treated patients with chronic low back pain using heat in a multimodal therapy setting with positive results. Although, in a meta-analysis review Clijsen, et al., (2022) concluded that heat was more effective for acute pain than chronic pain, and more research was needed to support the use of heat with chronic pain.

Included in soft tissue work is myofascial release. An evaluation of the evidence, on whether myofascial release therapy can have an impact on chronic musculoskeletal pain, found that there was insufficient evidence to prove that it had any effect (Laimi, et al., 2018). A later systematic review by Wu, et al., (2021) disagreed and found that myofascial release for chronic low back pain could be used as an effective form of treatment, although the authors concluded that the available literature was of poor quality and more rigorous randomised controls are needed.

Since Travell & Simmons published their first book "Myofascial Pain and Dysfunction: The Trigger Point Manual," in 1983, working with trigger points in the muscles and their associated fascia has been a popular technique in massage and other soft tissue therapies, when dealing with chronic pain (Shah, et al., 2015). In a review of evidence and literature, Quintner, et al., (2015) questioned and refuted the connection of trigger points to pain where no other medical explanation was diagnosed. However more recent research agrees that trigger points not only create pain at their localised site but can also radiate pain into other parts of the body (Barbero, et al., 2019).

Trigger points are treated by an exertion of pressure directly on the location of the pain/trigger point. Various studies have looked at the best form of treatment and pressure needed to have the greatest effect on the muscle or fascia (Moraska, et al., 2017; Daynair, et al., 2020). A study published in 2005 demonstrated that manual pressure release over sham soft tissue work may be effective at treating myofascial trigger points in the upper trapezius (Fryer & Hodgson, 2005). Similarly, and more recently, a small-scale study of six participants in England, that focused on hip pain, confirmed that trigger point work relieved pain in women (Emery, 2015)

Rehabilitation and Exercise

When considering treating chronic pain, some form of rehabilitation exercise and self-management/care work is often included. A feasibility study, in preparation of a randomized controlled trial, on exercised-based rehabilitation for chronic hip pain concluded that a five week exercise rehab programme (which included a self-management programme) had an immediate impact on pain levels; although this showed less impact on a six month follow up (Bearne, et al., 2011). A meta-analysis review of exercise types (Pilates, McKenzie therapy and functional restoration) impact on pain intensity and function on chronic low back pain concluded that all the exercises had a positive impact on both pain and function: but a key factor was ensuring that the individuals with chronic low back pain enjoyed the exercises they were participating in (Hayden, et al., 2021). Similarly, a systematic review and meta-analysis considering home exercise training for those with nonspecific back pain concluded that it lessened pain intensity and improved function (Quentin, et al., 2021). Although a meta-analysis of the reduction of pain sensitivity through exercise training showed that whilst there was low

to moderate evidence that exercise could lower pain thresholds, there was little or low quality evidence that exercise had more benefit than non-exercise interventions (Belavy, et al., 2021).

This Study

The aforementioned techniques and disciplines are brought together through clinical massage to treat chronic pain, in a person-centred massage with a blend of Western and Eastern soft tissue techniques, to create TJMoM (Fairweather & Mari, 2015, p. 6). Current research strongly suggests that these techniques have a beneficial effect on pain (Donate, 2034; Murdoch, 2023), which in turn should help sufferers build a more active lifestyle (Hasanpour-Dehkordi, et al., 2021). Therefore, the aim of this study is to investigate whether TJMoM can help women with chronic hip pain improve their activity levels.

Method

Research was conducted through PubMed, Mendeley and Google Scholar.

The author used a within subjects design, to measure the change over a period of time on the subjects pain and activity levels. This allowed for the small sample size of participants, ensuring control and comparability of results. The study used a six week control period followed by a six week intervention period and a final four week follow up period.

This study was based on four participants with an average age of 58.75 (±10).

The participant inclusion criteria were for females only aged between forty - seventy years, with posterior and or lateral hip pain, the pain must have been present for three months or more. The participant exclusion criteria excluded pregnant women, anyone with a hip replacement or waiting for a hip replacement and those with serious medical conditions such as advanced cancer or spine disorders (vertebral fusions, spondylolisthesis). Each participant was interviewed to establish their suitability for the investigation.

Recruitment for participants was carried out through social media posts, an email to the author's existing clients, an article and poster in the newsletter sent out from the author's own wellbeing centre, verbal networking with friends, family and current clients, and a link was also placed on the author's website.

All participants received the Non-Arthritic Hip Score Questionnaire (NAHSQ) weekly for six weeks to establish their pain levels and activity levels. This questionnaire is considered to be very sensitive to levels of activity (Christensen, et al., 2003), which was of particular importance to the study, with questions about daily living activities and recreational/exercise activities as well as recording pain levels.

The intervention stage included bi-weekly massage and group exercise work plus a daily self-care routine. On weeks one, three and five each participant received a sixty minute massage. On weeks two, four and six each participant joined a thirty minute group exercise class. Participants were asked to fill in the NAHSQ seven days after each treatment or class.

At the start of the intervention each participant had a full consultation establishing their medical

history, which also included a full range of motion assessment of the lower back, hips and knees (the painful side and non-painful side were assessed). This consultation also included the first massage treatment.

The massage protocol used was the Jing Chronic Pain Massage Protocol for Hip and Pelvis Pain (Farirweather & Mari, 2015, pp. 291-315); each session followed the same protocol. The participant started hands-on treatment in a prone position receiving general amma body work. This was followed by specific fascia release and muscle release to the lumbar, hip and thigh in the prone position, as well as side lying and supine positions. The hands-on treatment finished with hip mobilisation. Each session ended with an explanation/reminder of the daily self-care.

The daily self-care routine consisted of self-massage, stretches and mobilisation exercises. Each participant received a reminder sheet and was asked to make a record of each day they completed the routine. The self-care routine was not carried out on massage and group class days.

The group classes reinforced the self-care routines as well as including further exercises. The protocol included self-massage, mat-based mobilisation exercises, stretches and some strength work.

After the final intervention period questionnaire, the participants were asked to complete the NAHSQ after four weeks to monitor the longer-term effects of the intervention.

Results

The NAHSQ, which consists of twenty questions, measures pain in the hip and hip function problems on a scale of 4 = none to 0 = extreme pain/difficulty over a range of activities from essential everyday activities to sporting and recreational activities. These are then added together to give an overall score. (As not all participants will perform all the activities listed, they are asked to estimate their answer.) All participants were asked to complete the questionnaire one week after each treatment or group class.

All four participants completed the intervention process, although participant one was unable to take part in the massage treatment at week five (due to a sudden change in her work commitments) so she was allocated the average score provided by the other three participants for that week. It should also be noted that participant one did not return her questionnaire for week two of the control period, so again an average score was allocated to her for that week.

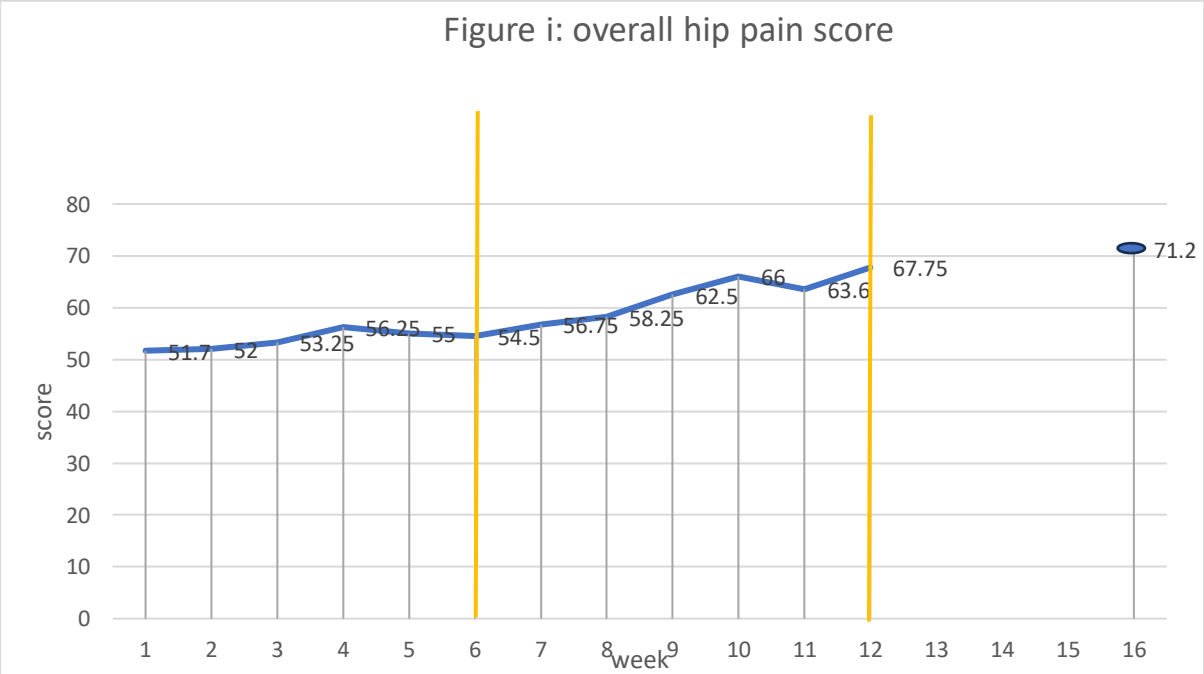

Figure 1: At the final questionnaire all the answers received in the NAHSQ showed improvement. Overall scores can range from 0 which is extreme pain and difficulty of function to 80 which is no pain or difficulty of function. The average overall pain score changed from 51.7 (the worst overall pain and function score at the beginning of the control period) to 71.2 (the best overall pain score at the end of the whole study), with a change of 19.5 in the overall scores. From the end of the control period until the end of the intervention period there was an improvement in the average scores of 16.05. The improvement continues after the intervention period by a further 3.45.

There is a noticeable drop in pain and physical function at week eleven. This corresponds with the week's results when participant one was unable to attend her massage and was allocated an average score from the other three participants.

Individual question scores range from 0 which is extreme pain and difficulty of function to 4 which is no pain or difficulty of function. The results showed an improvement for each question the amount of improvement varied widely; the lowest improvement was 0.45 (see figure iv page 19) whilst the highest was 1.7 (see figure ii page 17 & figure iii page 18).

Some notable big increases in improvement across the different questions are:

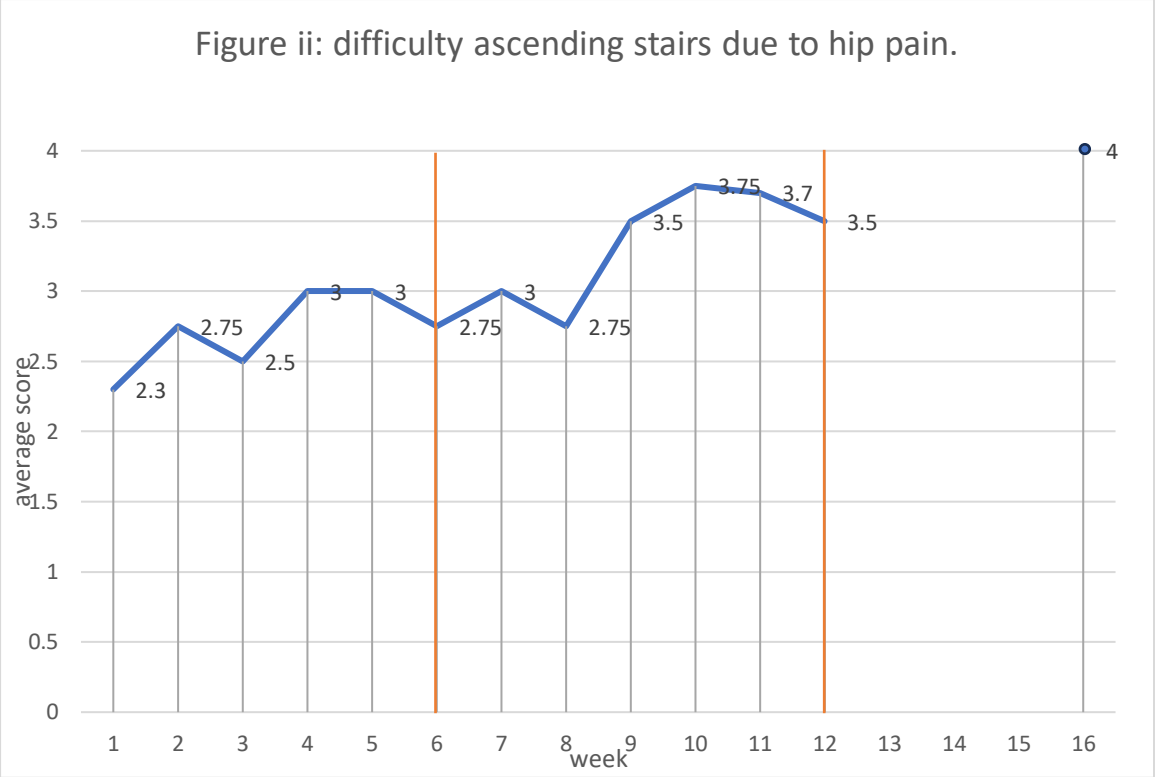

Figure ii: The first question that demonstrated the biggest change was how much difficulty the participants had ascending stairs due to their pain. The participants started with an average level of 2.3 for their difficulty ascending the stairs but at the end of the intervention period difficulty had decreased by 1.7 to 4 (no difficulty). This question follows the overall upward trend of the overall average pain score.

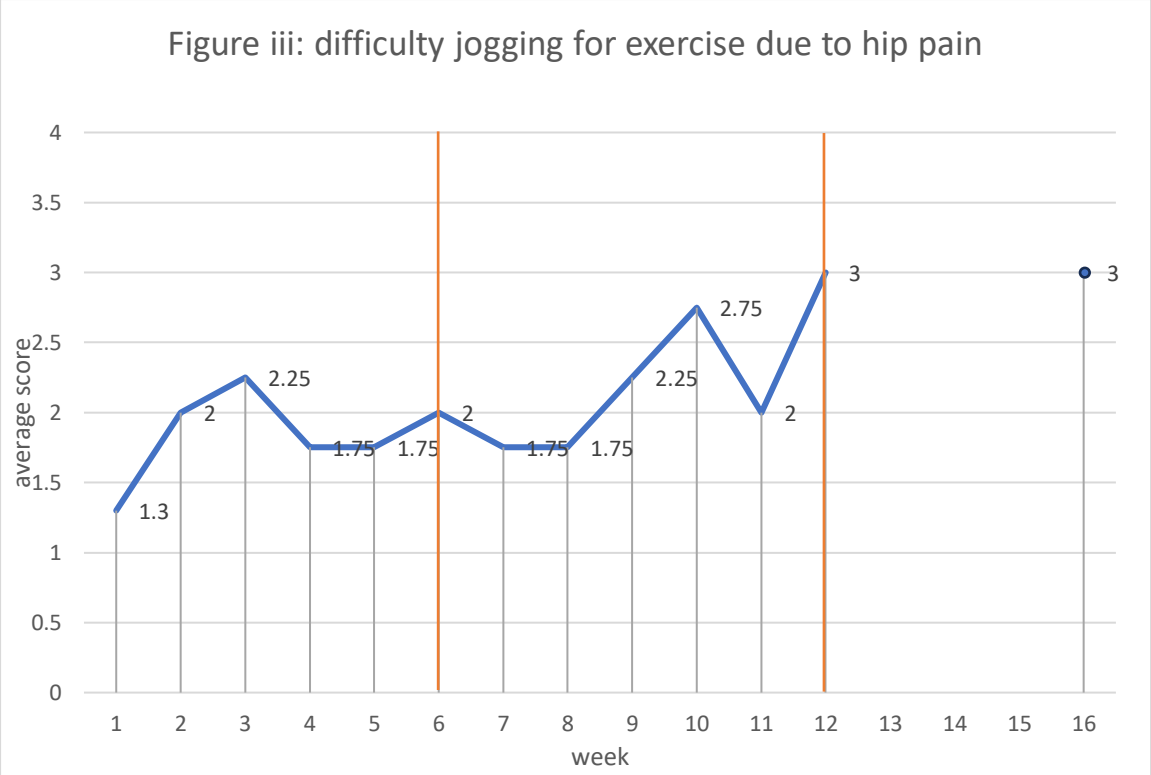

Figure iii: The second question that showed the biggest change referred to how much difficulty, due to pain, the participants had when jogging for exercise, which went from an average pain level of 1.3 at the start of the control period lowering to 3 at the end of the whole study, with a change of 1.7. The improvement did not continue after the intervention finished but the pain score stayed the same.

The most noticeable questions with the smallest improvement are:

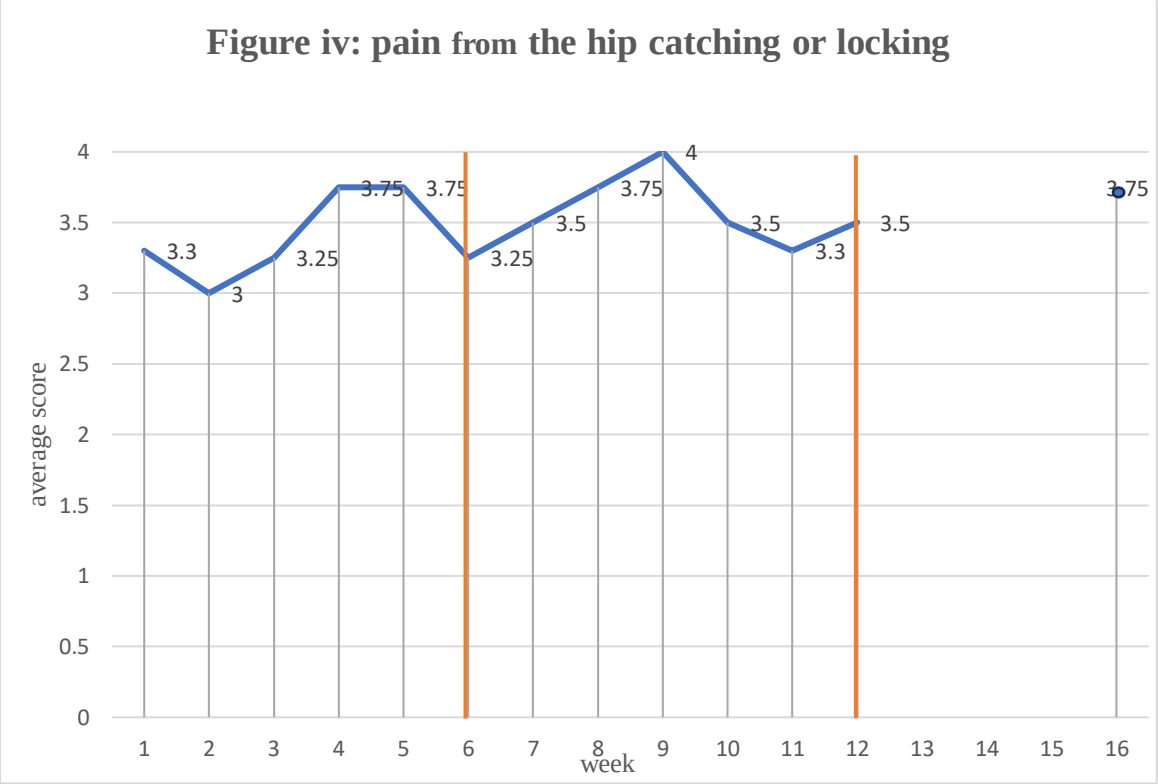

Figure iv: The participants started with an average pain level of 3.3 for how much pain do you have with your hip giving way but at the end of the intervention period pain had lessened by 0.45 to 3.75. This question also follows the overall trend of continual improvement.

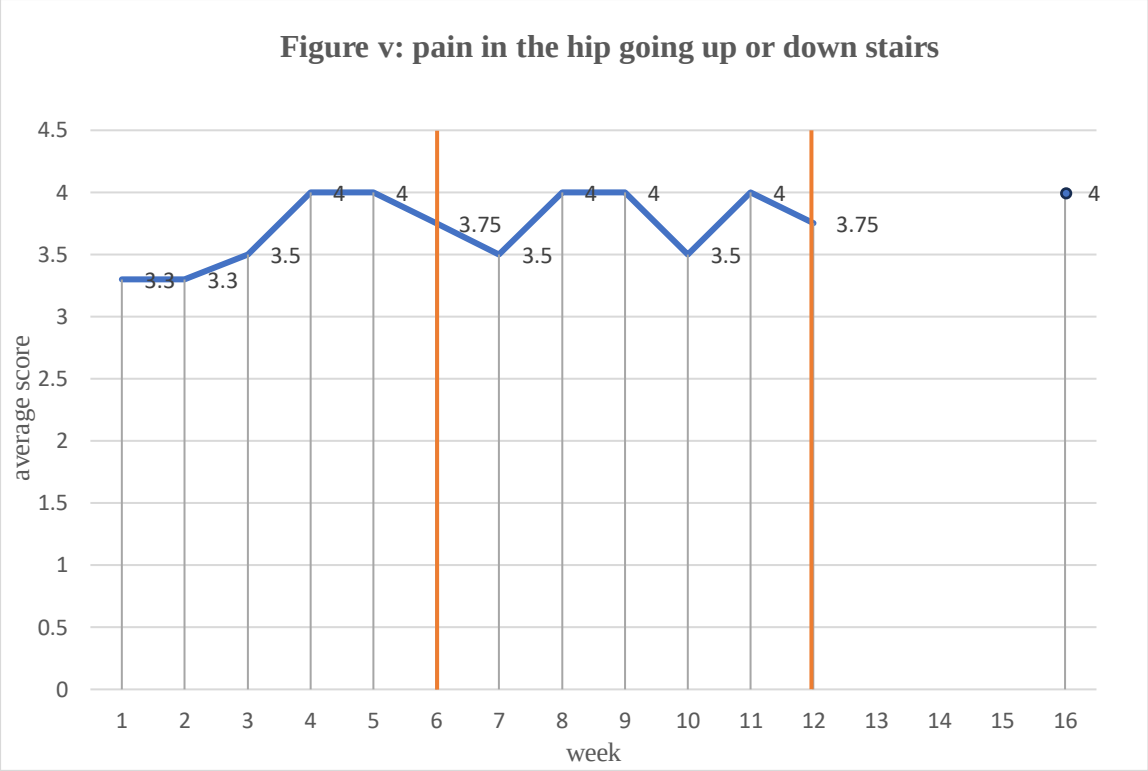

Figure v: The participants started with an average pain level of 3.3 for how much pain do you experience going up and down the stairs but at the end of the intervention period pain had lowered by 0.45 to 3.75 and to no pain at 4 by the final questionnaire.

The above examples demonstrate the overall improvement in activity levels across the spectrum of everyday living activities and sporting and recreational activities.

It should be noted that although not every participant experienced improvement for every question, all four participants showed improvement in their overall scores, demonstrating a lessening of their pain levels and ease in being able to be active.

Discussion

This study shows that TJMoM can lessen pain levels and help people become more active. All four participants experienced a reduction in pain and greater ease in being more active over the six week intervention period and at the final week sixteen assessment.

The overall hip pain in the participants had lessened by 24.4% at the final week sixteen assessment in a range of activities including everyday living, recreational and sporting activities. This corresponds with the results of a clinical trial published in 2021, which concluded that massage and aromatherapy positively affected the pain levels and quality of life and recreational activities of people with knee osteoarthritis (Hasanpour-Dehkordi, et al., 2021).

At the start of the control period the average overall pain score was 51.7 out of 80 (80 is no pain), this varied slightly over the six weeks, but at the start of the intervention period the average pain score was 54.5 out of 80. The pain score then continued to climb over the six week intervention period finishing at 67.75 out of 80, with further improvement to 71.2 out of 80 at the final assessment at week sixteen. The method involved bi-weekly hands-on massage treatments and bi-weekly group exercise classes on alternating weeks, as well as physical exercises for the participants to do at home every day, which were also repeated as part of the group exercise class. This is in line with the results of a small American study where improvement in pain level was recorded when forty-one participants suffering with chronic pain followed a muti-discipline treatment protocol including massage and exercise (Bruns, et al., 2019).

The multimodal Jing Method of Massage protocol

The massage treatments followed a multimodal massage protocol based on TJMoM hip protocol (Farirweather & Mari, 2015, pp. 291-315). The elements that were focused on in this study were hot stone therapy, myofascial release techniques, muscle trigger point work, rehabilitation exercises and self-care. The results of this study follow the results found by a recent study of the effects of TJMoM on chronic shoulder pain (Murdoch, 2023) which found that massage had a beneficial impact on pain levels.

All participants were treated with hot stone massage techniques as part of the broad muscle work. The results of this study agree with a study of one hundred and seventy six patients with chronic back pain where the use of heat as part of a multimodal treatment was found to be successful in relieving pain (Freiwald, et al., 2018). This study also follows the results of an evaluation of the cost effectiveness of low-level heat wrap therapy for the NHS against pharmaceutical drugs, which found that heat had far greater results than the drugs (LLoyd, et al., 2004).

The study used a mix of direct and indirect myofascial release techniques as part of the Jing treatment protocol and the positive results of the study follow the findings of the systematic reviews of Wu, et al., (2021) which found that myofascial release is beneficial, specifically for chronic lower back pain. This evidence is also in line with a systematic review by Ajimsha, et al., (2015) that considered the effect of myofascial release on general pain and function and concluded that it had a positive effect.

As part of the Jing protocol, muscles in and around the lumbar and pelvic areas were treated systematically and trigger points treated with pressure as they were found. The results in this study are consistent with the results of a small study by Emery (2015), which found that held pressure techniques on trigger points were effective in relieving hip pain, also those of a larger study by Kannan (2012), who addressed the efficacy of treating trigger points for shoulder pain and concluded that treatment of trigger points could reduce pain.

All participants were asked to follow self-care exercises at home and attend a group exercise class as part of the method. Some stretching and mobilisation were also included as part of the Jing massage protocol. The results of this study echo the results of a feasibility study on chronic hip pain which concluded that an exercise rehab programme, including a self-management programme, positively impacted pain and function in sufferers of chronic hip pain (Quentin, et al., 2021).

Limitations and Recommendations

Like so many other studies on the effectiveness of massage this study is on a very small scale. As so many of the systematic reviews or meta-analyses of the field conclude, this type of work needs to be done on a much bigger scale (Tsao, 2007; Nelson & Churilla, 2017; Wu, et al., 2021). Moving forward with further study, a much bigger cohort would bring greater credibility to the study results and to the modality of clinical and sports massage. Future study could be supported by organisations such as Versus Arthritis or The Pain Relief Foundation.

This study aimed to investigate whether TJMOM could not only improve pain levels but also activity levels. The NAHSQ asks participants about their pain levels whilst performing a variety of tasks, those required for daily living such as walking on a flat surface, climbing stairs, rising from chairs, and recreational activities such as jogging for exercise or playing golf. For the recreational activities, the questionnaire requires the individual to imagine the pain levels they would experience, if they do not actually participate in the activity. Whilst the NAHSQ showed a decrease in pain for various activities suggesting that participants can be more active due to less pain (Vader, et al., 2021), it does not record their actual activity levels. It is only by monitoring participants activity levels through the study as well as pain levels we can ascertain whether a decrease in pain has improved activity levels. Anecdotally, each participant has said that they have managed to increase their activity levels in various ways because of the treatment they received, but this is not shown in the NAHSQ results. A different or additional instrument is needed to record the activity levels of the participants throughout the study, and to ascertain whether changes in pain levels can result in a change in activity levels.

All participants were asked to perform a short five - ten minute self-care routine at home every day (apart from on treatment days), they were all asked to record the days they did not do the self-care exercises. All the participants reported back their record at the end of the six week intervention period and their tracking shows that they all performed the exercises on most days. However, there is no actual proof that the participants carried out the exercises on the days stated or as they were asked. For future studies a possible solution to this is to create a time for each participant to meet virtually with the therapist to run through the exercises, although this does create a bigger time commitment for the participants involved.

A further limitation with the exercise and stretching in this method was that all participants received the same stretches and mobilisation techniques as part of the massage treatment: also all participants received the same selfcare routine regardless of any discrepancies in the muscles that were flagged as being a potential pain problem during the process of assessment and treatment. Therefore, the author would suggest that future studies may wish to consider the efficacy of offering participants exercises that better reflect their specific needs as opposed to offering a general exercise programme in the massage treatment and self-care protocols.

Conclusions and Recommendations

The results of this study suggests that TJMoM can reduce chronic hip pain and help improve the ability to perform daily living activities and recreational activity levels for women aged forty – seventy with chronic hip pain. The positive results suggest that further research is warranted to gain a greater understanding of the full effect of massage on chronic pain and activity levels. For future studies key recommendations are to ensure a larger cohort of participants, to give the results greater credibility and also consideration of a more effective instrument to ascertain and monitor the actual level of physical activity by participants.

References

Ajimsha, M., Al-Mudahka, N. & Al-Madzhar, J., 2015. Effectiveness of myofascial release: Systematic review of ransomized contolled trials. *Journal of Bodywork and Movement Therapies,* 19(1), pp. 102-112.

Barbero, M., Schneebeli, A., Koetsier, E. & Maino, P., 2019. Myofascial pain syndrome and trigger points: evaluation and treatment in patients with musculoskeletal pain.. *Current Opinion in Supportive & Palliative Care,* 13(3), pp. 270-276.

Bearne, L., Walsh, N., Jessep, S. & Hurley, M., 2011. Feasiblity of an Exercise-Based Rehabilitation Programme for Chronic Hip Pain. *Musculoskeletal Care.*

Belavy, D., Van Oosterwijck, J., Clarkson, M., Dhondt, E., Mundell, N., Miller, C. & Owen, P., 2021. Pain sesitivity is reduced by exercise training: Evidence from a systematic review and meta-analysis. *Neuroscience & Biobehavioral Reviews,* Volume 120, pp. 100-108.

Bethers, A., Swanson, D., Sponbeck, J., Mitchell, U., Draper, D., Feland, J. & Johnson, A., 2021. Positional release therapy and theraputic massage reduce muscle trigger and tender points. *Journal of bodywork and movement therapies,* Volume 28, pp. 264-270.

Breivik, H., Collett, B., Ventafridda, V. & Gallacher, D., 2006. Survey of Chronic Pain in Europe: prevalence, impact on daily life and treatment.. *European Journal of Pain,* 10(4), pp. 287-333.

Bruns, E., Befus, D., Wismer, B., Knight, K., Adler, S., Leonoudakis-Watts, K., thompson-Lastad, A. & Chao, M., 2019. Vulnerable Patients' Psychosocial Experiences in a Group-Based Intergrative Pain Management Program.. *Journal of alternative and complementary medicine,* 25(7), pp. 719-726.

Christensen, C., Althausen, P., Mittleman, M., Lee, J. & McCarthy, J., 2003. The Nonarthritic Hip Score: Reliable and Validated. *Clinical orthopaedics and related research,* Issue 406 (1), pp. 75-83.

Clijsen, R., Stoop, R. & Hohenauer, E., 2022. Local Heat Application as a Treatment of Physical and Functional Parameters in Acute and Chronic Musculoskeletal. *Archives of Physical Medicie and Rehabilitation,* 103(3), pp. 505-522.

Daynair, I., Birinci, T., Kaya Mutlu, E., Akcetin, M. & Akdemir, A., 2020. Comparison of Three Manual Therapy Techniques as Trigger Poin Therapy for Chronic Nonspecific Low Back Pain: A Randomized Contolled Pilot Trial. *Journal of alternative & complementary medicine (New York, NY),* 26(4), pp. 291-299.

Donate, L., 2023. *The Effects of The Jing Method of Clinical Massage on Rotator Cuff Pain in Strength Training Adults, Jing Institute of Massage and Complementary Medicine,* Brighton.

Ellis, B., Ly, M. & Athena, C., 2017. *Chronic Pain in England: Unseen, Unequal, Unfair,* s.l.: Versus Arthritis.

Emery, A., 2015. *Effects of Clinical Massage on Myofascial Pain Syndrome in the Lateral Hip and Thigh, Jing Institute of Massage and Complementary Medicine,* Brighton.

Fairweather, R. & Mari, M. S., 2015. *Massage Fusion The Jing method for the treatment of chronic pain.* 1 ed. s.l.:Handspring Publishing Limited, pp. 6, 35-37, 43, 291-315.

Flynn, D., 2020. Chronic Musculoskeletal Pain: Nopharmacologic, Noninvasive Treatments. *American family physician,* 102(8), pp. 465-477.

Freiwald, J., Hoppe, M., Beermann, W., Krajewski, J. & Baumgart, C., 2018. Effects of supplemental heat therapy in multimodal treated chronic low back pain patients on strength and flexibility. *Clinical Biomechanics,* Volume 57, pp. 107-113.

French, H., Jong, C. & McCallan, M., 2019. Do features of central sensitisation exist in Greater Trochanteric Pain Syndrome (GTPS)? A case control study. *Musculoskeletal science & practise,* Volume 43, pp. 6-11.

Fryer, G. & Hodgson, L., 2005. The effect of manual pressure release on myofascial trigger points in the upper trapezius. *Journal of Bodywork and Movement Therapies,* 9(4), pp. 248-255.

Geneen, L., Moore, R., Clarke, C., Martin, D., Colvin, L. & Smith, B., 2017. Physical activity and exercise for chronic pain in adults: an overview of Cochrane Reviews. *Cochrane Databas of systematic reviews,* 1(1).

Hasanpour-Dehkordi, A., Kabiri, F. & Dris, F., 2021. Comparing the Effects of Massage Therapy and Aormatherapy on Knee Pain, Morning Stiffness, Daily Life Function, and Quality of Life in Patients with Knee Osteoarthritis. *Complementary Medicine Research,* 28(4), pp. 262-299.

Hayden, J., Ellis, J., Ogilvie, R., Stewart, S., Bagg, M., Stanojevic, S., Yamato, T. & Saragiotto, B., 2021. Some types of exercises are more effective than others in people with chronic low back pain: a network meta-analysis. *Journal of Physiotherapy,* 67(4), pp. 252-262.

Izquierdo, M., Merchant, R., Morley, J., Anker, S., Aprahamian, I., Arai, H., Aubertin-Leheudre, M., Bernabei, R., Cadore, R., Cesari, M., Chen, L., de Souto Barreto, P., Duque, G., Ferrucci, L., Fielding, R., Garcia-Hermoso, A., Gutiérrez-Robledo, L., Harridge, S., Kirk, B., Kritchevsky, S., Landi, F., Lazarus, N., Martin, F., Marzetti, E., Pahor, M., Ramirez-Vélez, R., Rodrigues-Mañas, L., Rolland, Y., Ruiz, J., Theou, O., Villareal, D., Waters, D., Won Won, C., Woo, J., Vellas, B. & Fiatarone Singh, M., 2021. International Exercise Recommendations In Older Adults (ICFSR): Expert Consensus Guidelines. *The Journal of Nutrition, Health & Aging ,* 25(7), pp. 824-853.

Kannan, P., 2012. Management of Myofascial Pain of Upper Trapezius: A Three Group Comparison Study. *Global Journal of Health Science,* 4(5), pp. 46-52.

Laimi, K., Mäkliä, A., Bärlund, E., Katajapuu, N., Oksanen, A., Seikkula V., Karppinen, J. & Saltychev, M., 2018. Effectiveness of myofascial release in treatment of chronic musculoskeltal pain: a systematic review. *Clinical Rehabilitation,* 32(4), pp. 440-450.

Lipta, G., Mist, S., Wrigth, C. & Arzt, A. J. K., 2013. A pilot study of myofascial release therapy compared to Swedish massage in fibromyalgia. *Journal of bodywork and movement therapies,* 17(3), pp. 365-70.

LLoyd, A., Scott, D., Akehurst, R., Lurie-Luke, E. & Jessen, G., 2004. Cost-effectiveness of low-level heat wrap therapy for low back pain.. *Value in health: the journal of the International Society for Pharmacoeconomics and Outcomes Research,* 7(4), pp. 413-422.

Maniadakis, N. & Gray, A., 2000. The Economic Burden of Back Pain in the UK. *Pain,* 84(1), pp. 95-103.

Mescouto, K., Olson, R., Hodges, P. & Setchell, J., 2022. A critical review of the biopsychosocial model of low back pain care: time for a new approach?. *Disability and Rehabilitation,* 44(13), pp. 3270-3284.

Mills, S., Nicolson, K. & Smith, B., 2019. Chronic pain: a review of its epidemiology and associated factorsin population-based studies. *British Journal of Anaesthesia,* 123(2), pp. e273-e283.

Moraska, A., Schmiege, S., Mann, J., Butryn, N. & Krutsch, J., 2017. Responsiveness of Myofascial Tigger points to Single and Multiple Trigger Point Release Massages: A Randomized, Placebo Controlled Trial. *American journal of physical medicine & rehabilitation,* 96(9), pp. 639-645.

Murdoch, S., 2023. *The Effects of Jing Method Advanced Clinical Massage in Adults with Chronic Shoulder Pain, Jing Institute of Massage and Complementary Medicine,* Brighton.

Nelson, N. & Churilla, J., 2017. Massage Therapy for Pain and Function in Patients With Arthritis: A Systematic Review of Randomized Controlled Trials. *American journal of physical medicine & rehabilitation,* 96(9), pp. 665-672.

NHS Scotland, 2023. *Chronic Pain.* [Online]
Available at: https://www.nhsinform.scot/illnesses-and-conditions/brain-nerves-and-spinal-cord/chronic-pain#:~:text=Chronic%20or%20persistent%20pain%20is,of%20an%20injury%20or%20operation. (n.d.).
[Accessed 2 july 2023].

NHS, 2021. *Chronic Pain: How Common Is It?.* [Online]
Available at: https://cks.nice.org.uk/topics/chronic-pain/background-information/prevalence/#:~:text=Between%20one%2Dthird%20and%20one,moderate%20to%20severely%20disabling%20pain.
[Accessed 2 July 2023].

Phillips, C. J., 2009. Pain, The Cost and Burden of Chronic. *Reviews in Pain,* 3(1), pp. 2-5.

Quentin, C., Bagheri, R., Ugbolue, U., Coudeyre, E., Pélissier, C., Descatha, A., Menini, T., Bouillon-Minois, J. & Dutheil, F., 2021. Effects of Home Exercise Training in Patients with Nonspecific Low-Back Pain; A systematic Review and Meta-Analysis. *International journal of Environmental Research and Public Health ,* 18(16), p. 8430.

Quintner, J., Bove, G. & Cohen, M., 2015. A critical evlauation of the trigger point phenomenon. *Rhenmatology,* 54(3), pp. 392-399.

Shah, J., Thaker, N., Heimur, J., Sikdar, S., & Gerber, L., 2015. Myofascial Trigger Points Then and Now: A Historical and Scientific Perspective. *PM&R,* 7(7), pp. 746-761.

Skelly, A., Chou, R., Dettori, J., Friedly J., Rundell, S., Fu, R., Brodt, E., Wasson, N., Kantner, S. & Ferguson, A., 2020. *Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review Update,* s.l.: Rockville (MD): Agency for Healthcare Research and Quality (US).

Stubbs, B., Binnekade, T., Soundy, A, Schofield, P., Huijnen, I. & Eggermont, L., 2013. Are Older Adults with Chronic Musculoskeletal Pain Less Active than Older Adults Without Pain? A Systematic Review and Meta-Analysis. *Pain Medicine ,* 14(9), pp. 1316-1331.

Thorstensson, C., Gooberman-Hill, R., Adamson, J., Williams, S. & Dieppe, P., 2009. Help-seeking behaviour among people living with chronic hip or knee pain in the community. *BMC Musculoskeletal Disorder,* Volume 10, p. 153.

Tsao, J., 2007. Effectiveness of Massage Therapy for Chronic, Non-Malignant Pain: A Review. *Evidence-Based Complementary and Alternative Medicine,* 4(2), pp. 165-179.

Vader, K., Doulas, T., Patel, R. & Miller, J., 2021. Experiences, barriers and facilitators to participating in physical activity and exercises in adults living with chronic pain. 43(13), pp. 1829-1837.

Versus Arthritis, 2022. *People With Chronic Pain Need More Spport To mangae Their Condition.* [Online]
Available at: https://www.versusarthritis.org/news/2022/may/people-with-chronic-pain-need-more-support-to-manage-their-condition/?gad=1&gclid=CjwKCAjwzJmlBhBBEiwAEJyLu6Mz_QORo5sEtpvMksozwC_mHNSFe9PhNXxtDox6sO3x-6yXZ62SuRoCrukQAvD_BwE
[Accessed 6 July 2023].

Watson, J., 2016. *Effects of Clinical Massage of Life In People With Hip Replacements, Jing Institute of Massage and Complementary Medicine,* Brighton.

Wu, Z. et al., 2021. Myofascial Release for Chronnic Low Back Pain: A Systematic Review and Meta-Analyis. *Frontiers in Medicine,* Volume 8.

Appendixes

Appendix 1 – Treatment Protocols

Massage protocol

Prone work

- Amma
- Fascia
- Broad work down back
- Lumba cross hand stretch
- Hips torquing
- Broad work with hot stones
- Specific muscle trigger point work

Side lying work (repeated on the left and right side)

- Fascia
- Cross hand stretch
- Specific muscle trigger point work

Supine

- Specific muscle trigger point work
- Mobilisation circles of hips

Muscles treated as part of the massage protocol

- Quadratus Lumborum
- Gluteus Maximus

- Gluteus Minimus
- Gluteus Medius
- Piriformis
- Obturator Internus
- Bicep femoris
- Semitendinosus
- Semimembranosus
- Tensor Fascia Latae
- Vastus Lateralis
- Psoas
- Iliacus
- Rectus Femoris

Self-care routine:

- Self-massage of hips with massage balls
- 10 hip circles in each direction on each side
- Stretching – each stretch to be held for 30 seconds (left and right where appropriate)
    - Lumbar stretch - hug knees together to chest
    - Gluteal stretch - bend one knee foot on the floor hug the second knee across the body to the opposite shoulder (repeat on other side)
    - Hip flexors stretch - straighten one leg across the floor hug the other knee directly up to the chest (repeat on other side)

Group exercise class protocol

In supine:

- self-massage of hips with massage balls
- 10 x hip circles in each direction (right and left)
- Active isolated stretch 10 x hip external rotation
- 5 building to 10 over classes - bridge
- 5 building to 10 over classes - lumbar twists
- Hold for 30 seconds lumbar stretch (as self-care routine)
- Hold for 30 seconds piriformis/gluteal stretch (as self-care routine) (right and left)
- Hold for 30 seconds hip flexor stretch (as self-care routine) (right and left)

In side lying:

- 5 building to 10 over classes – Clam (right and left)
- 5 building to 10 over classes - Quad stretch (heel to hip) (right and left)

Appendix 2 – Ethics Form (including Participants consent form and sample protocol)

	CHECKLIST OF INSTRUCTIONS FOR STUDENTS	□
1	Complete Section 1 to Section 13	
2	Electronically sign and date	
3	Participation information form	
4	Participation consent form	

Jing BTEC Research Ethics Form

BTEC Level 6 – Professional diploma in advanced clinical sports massage

Section 1: to be completed by student

Student's name:	Katrin Steed
BTEC Year-group:	2022-2024
Date of application:	April 2023
Student email address:	kat@arnavayoga.co.uk
Title of research project:	Evaluating the effects of the Jing method of Clinical Massage on activity levels in women aged 40 – 70 with chronic hip pain.

Section 2:

Does your project involve any primary research using human subjects?

Please delete 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? *If yes, you must obtain 'external ethics approval' for your proposal before the form can be signed-off by 'Jing' and before you can start your fieldwork.*		X

Are you planning to use deception?		X
Are you collecting sensitive personal data such as sexuality, mental health data, etc?		X
Does your project make use of a validated questionnaire?	Non arthritic Hip score	
Does your project make use of a new/adapted questionnaire or semi-structured interview checklist?		X

Section 3:

Where is your research being undertaken? Within my clinic space		
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.		NO

Section 4:

How will you recruit subjects for this research study?

- social media posts on Facebook & Instagram
- poster at the wellbeing centre clinic is based in
- email to current yoga and Pilates class members
- verbal networking with friends, family and current clients who can potentially refer people to the project.
- Note on website

Section 5:

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

- All data held in accordance with General Data Protection Regulation (GDPR)(EU) 2018.
- All participants informed when agreeing to participate that all information is confidential and cannot be shared with third parties and is only seen by the researcher.
- Participants' names replaced by numbers, so they remain anonymous.
- All paperwork with participants' information kept in a locked filing cabinet within clinic.
- All data will be stored securely and password protected.
- During in person group sessions participants able to choose names to be used when addressed.

Section 6:

Outline your project procedure

- Recruit participants to evaluate the effects of the Jing method of Clinical Massage on activity levels in women aged 40 – 70 with chronic hip pain.
- Hold a 30 minute 1-1 interview with all participants in person this will allow participants time to ask questions before consenting to take part in the study.
- Participants to fill in Non-Arthritic Hip Score Questionnaire (NAHSQ) for 6 weeks prior to massage and group work starting. The results will confirm pain level for each participant and establish their activity levels prior to intervention.
- The following 6 weeks, weeks 7-12 of the study, will consist of:
    - weeks 7, 9 and 11 a one hour individual massage treatment
    - weeks 8,10,12 a 30 minute in person group session
    - 5-10 minutes of self care work to be practised individually on a daily basis throughout (except on treatment and group session days). A compliance question will be added to the end of NAHSQ form to confirm when self care was practised.
- Massage treatments will include hot stone work, myofascial work, trigger point work, acupressure point work and stretching.
- Group work will include self massage techniques, mobilisation exercises and stretches.
- Self care work will include the self massage and the mobilisation

exercises and stretches included in the massage and reinforced in the group classes.

- Participants will be required to continue to complete the NAHSQ 7 days after each treatment and group session. The NAHSQ for week 12 will be returned 7 days after the final group session.
- Participants will be required to fill in the NAHSQ for a further 4 weeks after the final group session.

2. Briefly describe, **what your participants** have to do

E.g. will they be interviewed? Where, for how long? Will they complete a

Questionnaire? Will they receive a treatment intervention? Will they be involved in a group discussion?

- Participants will attend an in person initial consultation where the study will be explained and they can have any questions answered. This will include completing the consent form, providing basic personal details such as age and name, contact details, detailed health consultation, lifestyle and activity information, hip pain related information.
- Participants will be required to provide all information of any treatment/medication they receive related to their hip pain aside from the Jing method during the study.

- Weeks 1-6, participants will be required to fill in NAHSQ prior to massage and group work starting.
- During the following 6 weeks, weeks 7-12, participants will attend three one hour massage treatments focusing on the lower back and hips and three 30 minute in person group sessions involving mobilisation exercises, stretches and self massage. The massage and group sessions will occur on alternating weeks.
- Participants will not have to provide equipment required for self care.
- Participants will be required to carry out 5-10 minutes of self care daily, excluding treatment and group session days. Self care work will include the self massage, mobilisation exercises and stretches demonstrated during the massage and reinforced in the group classes. A compliance question will be added to the end of NAHSQ form for participants to confirm when self care was practised.

- Participants will be required to continue to complete the NAHSQ 7 days after each treatment and group session. The NAHSQ for week 12 will be returned 7 days after the final group session.
- Participants will be required to fill in the NAHSQ for a further 4 weeks after the final group session.

Section 7:

What sort of materials or stimuli will your participants be exposed to?		
	YES	**NO**
Questionnaires	Non Arthritic Hip Score	
Pictures (will you take a photo of participants)		X
Sounds	Non-verbal relaxation music used during each massage and group session. The same play list will be used for each session	
Words	X	
Other	Hands on massage treatment, self care work and group self care sessions.	

If using a questionnaire you are required to attach an example.

For 'Other' please elaborate:

The massage will include the Jing Method focusing on the Hip and Pelvis Pain Protocol from Fairweather & Mari (2015) Massage Fusion.

Group self care work will include stretches for self massage, mobilization exercises, hip stretches

Sample protocols of massage and self care work is attached

Section 8:

What sort of people will the subjects be? E.g. people with non-specific back pain, women above 55 years or people diagnosed with osteoarthritis

Women aged 40 – 70 with chronic hip pain.

To be included in this study, participants must have been experiencing pain in the following areas:

- Lateral and posterior hip and pelvis in one hip for at least three months.

Pain may also be present in

- Lateral and posterior thigh, on the same side as the hip pain

Exclusion Criteria:

- Have a hip replacement or waiting for a hip replacement
- Serious medical condition such as advanced cancer, spine disorders (vertebral fusions, spondylolisthesis)
- Pregnancy

Section 9:

If your research study involves minors, how will you obtain participation permission and who is the responsible adult?

N/A

Section 10:

Special Issues. Give brief details of other special ethical issues and the controls you will put in place to minimise ethical risk.

- Qualified and insured therapist
- Ensure participants details are kept fully confidential and secure
- During the treatment process therapist will observe participants emotional response and well being and direct them to additional resources if necessary
- Advise participants to inform therapist if pain exceeds a 7/10 during massage treatment
- Participants advised not to work into pain and stop any movements if pain is occurring during group sessions
- Participants advised not to work into pain and stop any movements if pain is occurring when performing self care
- Participants advised to respect the confidentiality of other participants attending in person group.

Section 11

What procedures will you follow in order to guarantee the confidentiality of your participants' data?

TIP: Personal data (name, addresses etc.) should not be saved whereby they can be associated with the participants' other data.

- Record participants name, contact details and D.O.B.
- Each participant allocated a number.
- All other data will be stored on a separate file under participants number.
- All data will be deleted as soon as study is completed.
- All data will be stored securely and password protected.
- All paperwork with participants information on kept in a locked filling cabinet within clinic.
- During in person group sessions participants able to choose name to be used when addressed.
- Participants advised to respect the confidentiality of other participants.

Section 12

Does any of the following apply to your research study?	YES	NO
It requires participants to give information of a personal nature	X	
It involves minors or other vulnerable individuals;		X
It involves paying participants or an alternative incentive to participate		X
It could put you or someone else at risk of injury.		X

Section 13:

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 X	NO

Student's handwritten signature:

_____

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

Print Name:

Katrin M Steed

Date: 10/07/2023

IMPORTANT

Consent

Informed consent must be obtained for **all** participants before they take part in your project. The Consent Form (example below) 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 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.

PROJECT TITLE: Evaluating the effects of the Jing method of Clinical Massage on activity levels in women aged 40 – 70 with chronic hip pain.

STUDENT NAME: Katrin Steed

STUDY LOCATION: Wintern House Health and Wellness, Fishguard

Tel: 07807 322830

email: kat@arnavayoga.co.uk

INFORMATION FOR PARTICIPANTS

Important

Please be advised that at any time you can withdraw your participation from this study at any time. There is no need to submit a reason and there will be no consequences to you as a result of withdrawing.

What will be expected of you, the participant?

- You will attend an in person initial consultation.
- During weeks 1-6, you will be required to fill in the Non Arthritic Hip Score Questionnaire (NAHSQ) prior to massage and group work starting.
- During weeks 7-12, you will attend three individual 1 hour massage treatments, Weeks 7, 9 and 11, focusing on the lower back and hips; and during weeks 8, 10 and 12 you will attend a 30 minute face to face group sessions involving mobilisation exercises, stretches and self massage of the hips. The massage and group sessions will occur on alternating weeks.
- You will not have to provide equipment required for self care.
- You will be required to carry out 5-10 minutes of self care daily, excluding treatment and group session days. Self care will be demonstrated during the massage sessions and reinforced in the group classes.
- You will be required to continue to complete the NAHSQ 7 days after each treatment and group session. The NAHSQ for week 12 will be returned 7 days after the final group session.
- You will be required to fill in the NAHSQ for a further 4 weeks after the final group session.

- All participants will be expected to pay a nominal fee of £140

What does the initial consultation and research study involve?

The study is the evaluation of the effects of the Jing method of Clinical Massage on activity levels in women aged 40 – 70 with chronic hip pain.

It will consist of:

- A 30 minute 1-1 interview in person where the study will be outlined and there will be an opportunity for questions to be answered. You will be asked to complete a consent form, providing basic personal details such as age and name, contact details, detailed health consultation, lifestyle and activity information. The form will also ask you for information related to your hip pain, including any information relating to treatment/medication you receive related to your hip pain aside from the Jing method during the study.
- Everybody is required to fill in the Non Arthritic Hip Score Questionnaire (NAHSQ) without any treatment for weeks 1- 6. The results will confirm the pain levels for each participant and establish their activity levels prior to the massage treatments and group work starting.
- The following 6 weeks will consist of alternate 1 hour massage treatments, and 30 minute group sessiosn and daily self care work.
- The massage treatments will include hot stone work, myofascial work, trigger point work, acupressure point work and stretching.
- During the group work we will include self massage techniques, mobilisation exercises and stretches.
- Your self care work will include the self massage and the mobilisation exercises and stretches demonstrated during your massage and reinforced in the group classes. It will only take you 5-10 minutes each day.
- Everybody needs to continue to complete the NAHSQ during weeks 7-12. This will ensure that everybody's pain and activity levels continue to be monitored to see if there are any changes to pain and/or activity levels.
- Everybody is asked to fill in the NAHSQ for a further 4 weeks after the final group session, to see what happens to any changes to pain and activity levels after the massage and group work finishes.

Are there any risks involved?

There will be no risks involved although there is a possibility of bruising if self-care massage is too deep

What are the potential benefits to you; the participants?

As a participant in the study you may experience a reduction in the pain levels in your hip, you may also be able to increase activity levels.

How the results of the study will be used

Your data will be mathematically analysed together with all the other participants' data, and the findings from this analysis will be communicated to the project supervisor and possibly other practitioners. Communication of the findings may be in the form of all / any of the following: a dissertation, reports in scientific journals, articles in newsletters, and presentation at a conference.

Confidentiality

All data and personal information will be stored securely in accordance with the terms of the General Data Protection Regulation (GDPR), 2018, and will be accessible only by Katrin Steed. After completion of the study, all data will be made anonymous (i.e. all personal information associated with your data will be removed). Your data will be anonymous in any written reports, articles, and presentations of the results of the study.

What to do now you have decided to participate

If you would like to participate, please return a completed consent form to Katrin Steed

If you have any further questions, please contact **me** on the telephone number or email address above.

Thank You.

PARTICIPANT CONSENT FORM

Title of study: Evaluating the effects of the Jing method of Clinical Massage on activity levels in women aged 40 – 70 with chronic hip pain.

Name of student: Katrin Steed

- I have read the information sheet 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 / the participant is free to withdraw from this study:
- At any time (until such date as this will no longer be possible, which I have been told)
- Without giving a reason for withdrawing
- That I am free to refuse to answer any question without saying why
- 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 here.
- I agree to take part in this study

Signed (participant)	Date
Name in block letters	
Signed (parent / guardian / other) (if under 18)	Date

Name in block letters:
BTEC students contact details (including telephone number and e-mail address): **Katrin Steed** **Telephone: 07807 322830** **Email: kat@arnavayoga.co.uk**

Section 3: Jing 's assessment (to be completed by Jing)

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: .....  **..... date: ...3/6/23.....**

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.

Sample Protocol for the massage intervention

The Jing Method focusing on the Hip and Pelvis Pain Protocol from Fairweather & Mari (2015) Massage Fusion.

In Prone:

- Amma Work
- Fascial Work (skin rolling, soft fingers, cross hand stretches, sacrum release, torquing)
- Hot stone broad work
- Broad work without hot stones
- Muscular & Trigger Point work to:
- QL
- Glute maximus, Medius
- Piriformis
- Obturator Internus
- Quadratus Femoris
- Hamstring
- Soft Tissue Release:
- Piriformis
- Hamstring
- Sacrum positional release

Side lying:

- Fascial work (side lying direct work including participant movement)
- Hot stone broad work
- Muscular & Trigger Point work to:
- Iliacus
- TFL
- IT Band

- **In Supine:**
  Fascial work (tummy sandwich, psoas cross hand stretch direct psoas work)
- Hot stone broad work to quads
- Muscular & Trigger Point work to:
- Iliacus
- Psoas
- Fascial leg pull

Stretches:

- Side lying TFL/QL stretches
- Supine glute/piriformis stretch
- Psoas stretch

Sample protocol for self care & group classes

- Self massage of glutes with massage balls
- Mobilisation exercises – hip circles and swings
- Hip stretches
- Side lying TFL/QL stretches
- Supine glute/piriformis stretch and psoas stretch

Appendix 3 - Non Arthritic Hip Score Questionnaire

Participant's Name

Date (dd/mm/yyyy)

- The following five questions concern the amount of pain you are currently experiencing in the hip that you are having evaluated.
- For each situation, please mark the response that most accurately reflects the amount of pain experienced in the past 48 hours.
- Please mark one answer that best describes your situation.

Question: how much pain do you have :-

1. Walking on a flat surface?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

2. Going up or down stairs?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

3. At night while in bed?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

4. Sitting or lying?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

5. Standing upright?

- 4 = none
- 3 = mild
- 2 = moderate
- 1 = severe
- 0 = extreme

- The following four questions concern the symptoms that you are currently experiencing in the hip that you are having evaluated.
- For each situation, please mark the response that most accurately reflects the amount of pain experienced in the past 48 hours.
- Please mark one answer that best describes your situation.

Question: how much trouble do you have with :-

1. Catching or locking of your hip?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

2. Your hip giving way?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

3. Stiffness in your hip?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

4. Decreased movement in your hip?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

- The following five questions concern your physical function.
- For each of the following activities, please mark the response that most accurately reflects the difficulty you have experienced in the past 48 hours because of your hip pain.
- Please mark one answer that best describes your situation.

Question:- what degree of difficulty do you have with :-

1. Descending stairs ?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

2. Ascending stairs?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

3. Rising from sitting?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

4. Putting on socks/stockings?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

5. Rising from bed?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

- The following six questions concern your ability to participate in certain types of activities.
- For each of the following activities, please mark the response that most accurately reflects the difficulty you have experienced in the last **month** because of your hip pain.
- *If you do not participate in a certain activity, please estimate how much trouble your hip would have caused if you had to perform that type of activity.*
- Please mark one answer that best describes your situation.

Question:- how much pain do you have :-

1. High demand sports involving sprinting or cutting (e.g. football, basket ball, tennis & exercise aerobics)?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

2. Low demand sports (e.g. golf/bowling)?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

3. Jogging for exercise?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

4. Walking for exercise?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme

5. Heavy household duties (e.g. lifting firewood/moving furniture)?

4 = none
3 = mild
2 = moderate

1 = severe
0 = extreme

6. Light household duties (e.g. cooking, dusting, vacuuming & laundry)?

4 = none
3 = mild
2 = moderate
1 = severe
0 = extreme