Evaluating the Effects of The Jing Method™ of Advanced Clinical Massage on Chronic Shoulder Girdle Pain in Active Women

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A dissertation submitted in partial fulfilment of the requirements of The Jing Institute of Massage and Complementary Medicine 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 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".



Eve Jones: _____

Date: 15/03/2026

Acknowledgements:

I would like to express my sincere gratitude to the founders of Jing, Megan Mari and Rachel Fairweather, for their vision, dedication, and passionate, heart-led teaching. Their work continues to inspire and advance the field of clinical massage. I am also deeply grateful to the wider Jing teaching team, and especially to my tutors Jemma and Susan, for their guidance, encouragement, and support throughout this BTEC journey.

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I am particularly grateful to Sam and Iona for their vision in creating The Hideaway and for nurturing and supporting my massage therapy career. I would not be where I am today without them.

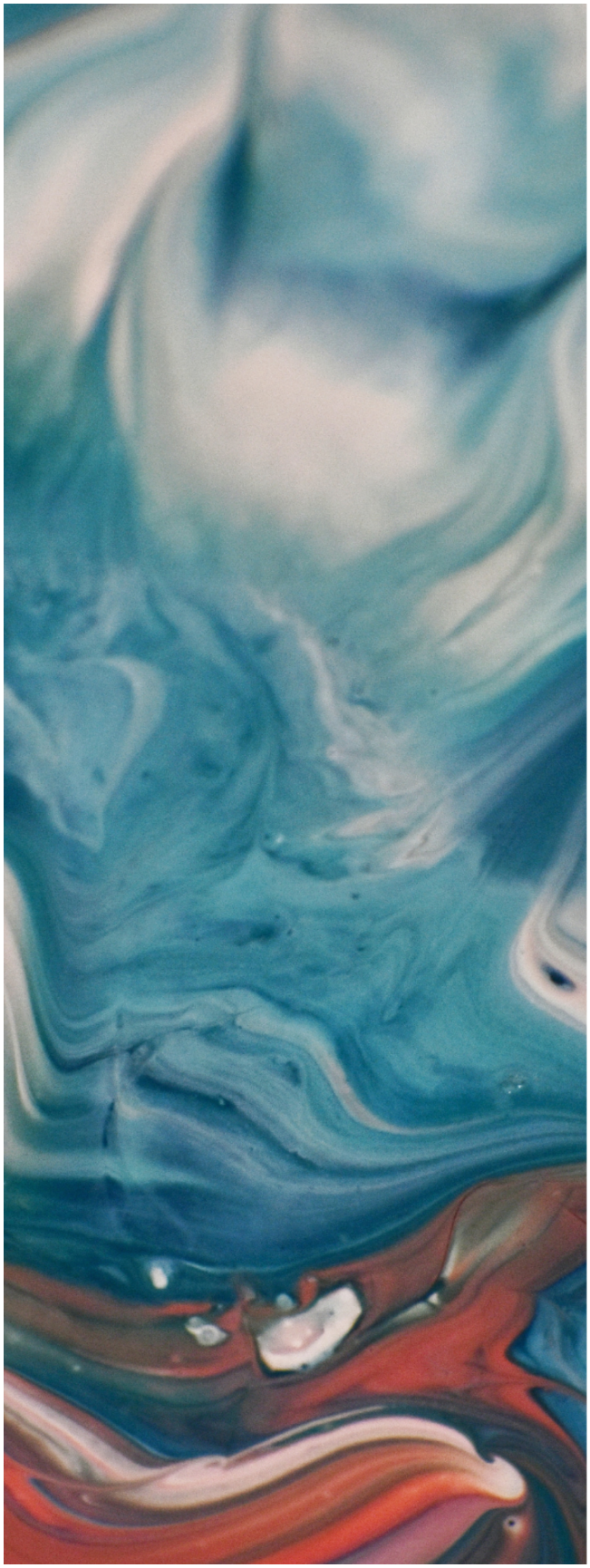
A special thank you goes to my partner, Harry, for his patience and kindness throughout this process, for cooking dinners, bringing cups of tea, and always believing in me.

Finally, my sincere thanks go to the participants who generously gave their time and trust to take part in this study. This research would not have been possible without them.

This work reflects the many conversations, shared knowledge, and supportive hands that helped guide it into being. I am deeply grateful to have been part of such a supportive learning community.



Eve Jones: _____ **Date: 15/03/2026**



Fascia

Within the body there lays a vast web,
Strong, soft, meandering, an endless tread,
This trail of communication dynamically flows,
Shaping life's movements, with experience it grows.

Throughout our bodies, fascia is widespread,
Compassionately we connect with hands, heart and head,
Wait, hold, follow, and find the still,
Listen through this tissue, and feel it's will.

Read bodies with hands like Braille,
Evoke movement, balance and follow the trail,
Should sense of self begin to erode
Wiggle fingers, wiggle toes, use the green cross code.

With healing touch, unfurl the tangled twine,
The layers of the silken suit change from tough to fine,
Aid recovery, relieve a body and mind from pain,
Calm the wind up of signals sent from the brain.

Reroot through the ground,
Create space for what might be found,
Fascia interconnected, shaping our frame,
Holds an intangible power, beyond any name.

-By Eve Jones

Abstract

Objective

The objective of this study was to evaluate the effects of The Jing Method™ of Advanced Clinical Massage (JMACM) on chronic shoulder girdle pain in active women.

Method

Using a within-subjects design, nine women with chronic shoulder pain (CSP) recorded pain and disability using the Shoulder Pain and Disability Index (SPADI) over a six-week control period. This was followed by a six-week intervention phase in which participants received weekly JMACM treatments using the Jing Method™ shoulder girdle protocol alongside structured self-care rehabilitation exercises. A four-week follow-up period was included to measure retention of treatment effects.

Results

The intervention resulted in an overall 63% reduction in SPADI scores, reflecting improvements in both pain and disability. These improvements were maintained at the four-week SPADI follow-up.

Conclusion

The Jing Method™ of Advanced Clinical Massage may represent a viable conservative treatment option for managing chronic shoulder pain in active women, compared with more invasive or costly pharmacological interventions. Further research using larger sample sizes is warranted.

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Abbreviations

BPS Biopsychosocial

CP Chronic pain

CSP Chronic shoulder pain

CS Central sensitisation

DASH Disabilities of the Arm, Shoulder and Hand

HFMAST Heat, Fascial release, Muscles, Acupressure, Stretching, Teach

JMACM Jing Method™ of Advanced Clinical Massage

NICE National Institute for Health and Care Excellence

NSAIDs Non-steroidal anti-inflammatory drugs

PNF Proprioceptive neuromuscular facilitation

PROM Patient-reported outcome measure

RCTs Randomised controlled trials

ROM Range of motion

SPADI Shoulder Pain and Disability Index

CAM Complementary and Alternative Medicine

TA Therapeutic alliance

CNS Central nervous system

LITERATURE REVIEW

Introduction

Chronic pain (CP), defined as pain lasting ≥3 months (Treede et al., 2015), is a significant public health concern and a leading cause of disability across Europe (Rometsch et al., 2025). It is estimated that 28 million adults in the UK experience CP, and with an ageing population, this prevalence is projected to rise (Fayaz et al., 2016).

Chronic shoulder pain (CSP) is the third most common musculoskeletal (MSK) complaint, significantly impairing daily physical function and well-being (van Doorn et al., 2021; Lucas et al., 2022). Common causes of CSP include rotator cuff disorders, adhesive capsulitis, shoulder instability, and arthritis (Burbank and Stevenson, 2008).

Beyond physiological causes, there is increasing recognition that chronic pain is influenced by biopsychosocial (BPS) factors. The BPS model, first proposed by Engel (1977), challenged the predominant biomedical model of disease and proposed that pain, health, and illness arise from a dynamic interplay between biological, psychological and social factors (as illustrated, Fig. 2). Current literature supports this rationale and highlights that factors such as gender, race, and socioeconomic status are strongly linked to a person's experience of CP and are key to understanding why pain becomes chronic (George et al., 2014; Rometsch et al., 2025).

This review explores the impact of CSP in physically active women through sport and/or occupation, a subgroup that experiences higher levels of CSP and faces unique BPS challenges, yet has historically been misdiagnosed, disbelieved, and underrepresented in pain science (Palermo et al., 2023).

Chronic Shoulder Pain in Women: Prevalence, Causes and Impact

Women experience a higher prevalence of CSP, report greater pain intensity, and demonstrate slower healing times following surgical intervention compared to men (Cho et al., 2015; Lucas et al., 2022; Rometsch et al., 2025). In addition to these biological differences, gender stereotyping within healthcare settings can contribute to women's pain being misdiagnosed or not taken seriously, further exacerbating disparities in assessment and treatment (Laughey et al., 2025; Grinberg and Sela, 2025).

These challenges may be partially explained by sex-related differences in pain processing. Casale et al. (2021) describe how women's pain experiences are shaped by interacting biological, hormonal, and psychosocial factors, increasing the risk of delayed diagnosis and progression to chronic pain. Together, these findings reinforce the need for sex-specific approaches to pain management.

Prevalence rates of shoulder pain are also higher among physically active populations, particularly those exposed to repetitive movements or sustained biomechanical loading (Hodgetts et al., 2021). This is supported by a cross-sectional study by Meroni et al. (2014), which identified higher incidences of shoulder dysfunction in working-age women employed in occupations involving repetitive tasks or increased physical demand.

Evidence from systematic reviews supports the use of strength training in the management of CP in peri-menopausal and menopausal populations (Chaudhary, Rajpurohit and Zeeshan, 2025; Rangey and Shah, 2024). However, women approaching menopause may also experience increased vulnerability during exercise due to hormonally mediated changes such as reduced muscle mass and tendon resilience, elevating injury risk if loading and progression are not appropriately managed (Wright et al., 2024). In this context, social pressures to continue exercising despite pain, alongside inadequate guidance, may contribute to symptom

persistence and progression toward chronicity (George et al., 2014; Chester et al., 2018; Stone et al., 2025).

Beyond structural and biomechanical contributors, sensitisation processes play a key role in the persistence of CSP. Peripheral sensitisation refers to increased nociceptive responsiveness at the site of tissue injury, resulting in heightened sensitivity to stimuli (Borstad and Woeste, 2015). Central sensitisation (CS), by contrast, involves an amplification of neural signalling within the central nervous system (CNS), whereby stimuli that would not normally provoke pain are perceived as painful. This process can contribute to hypersensitivity and the persistence of symptoms in CSP (Sanchis *et al*., 2015; see Fig. 1).

Peripheral sensitisation has been associated with shoulder pain continuing beyond expected tissue healing times (Borstad and Woeste, 2015), highlighting the importance of BPS interactions in the CP experience (Pribicevic, 2012). Supporting this, a systematic review by Sanchis et al. (2015) identified the presence of CS across multiple shoulder pathologies. However, the authors noted considerable variability in methodological quality, emphasising the need for more rigorous diagnostic criteria and standardised assessment of sensitisation mechanisms.

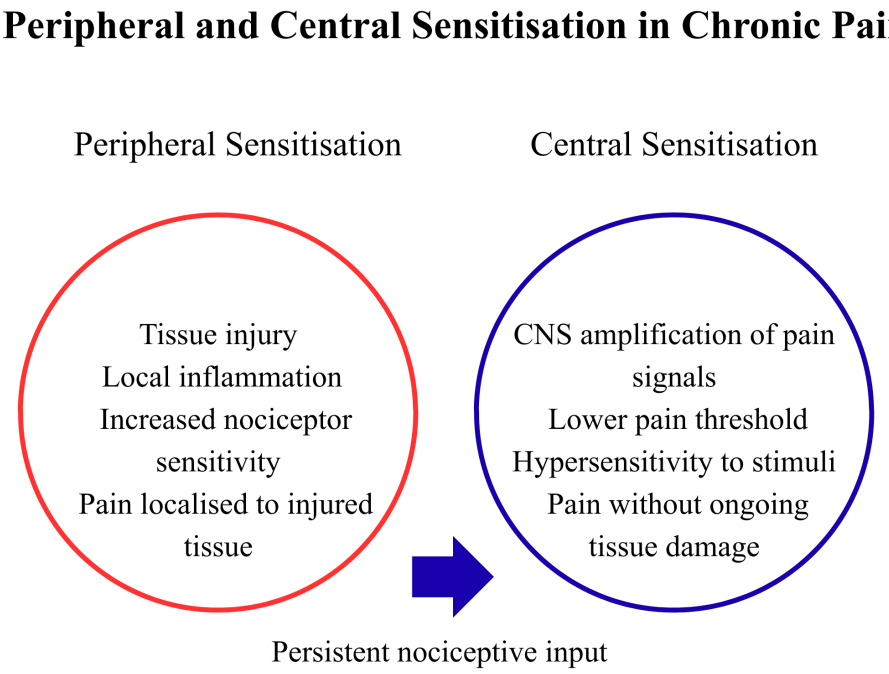


Figure 1. Illustration of peripheral and central sensitization mechanisms involved in chronic pain *(author's own illustration, adapted from Borstad and Woeste, 2015; Sanchis et al., 2015).*

The biopsychosocial (BPS) model

"The dominant biomedical model of disease… leaves no room within its framework for the social, psychological and behavioural dimensions of illness" (Engel, 1977, p.131)

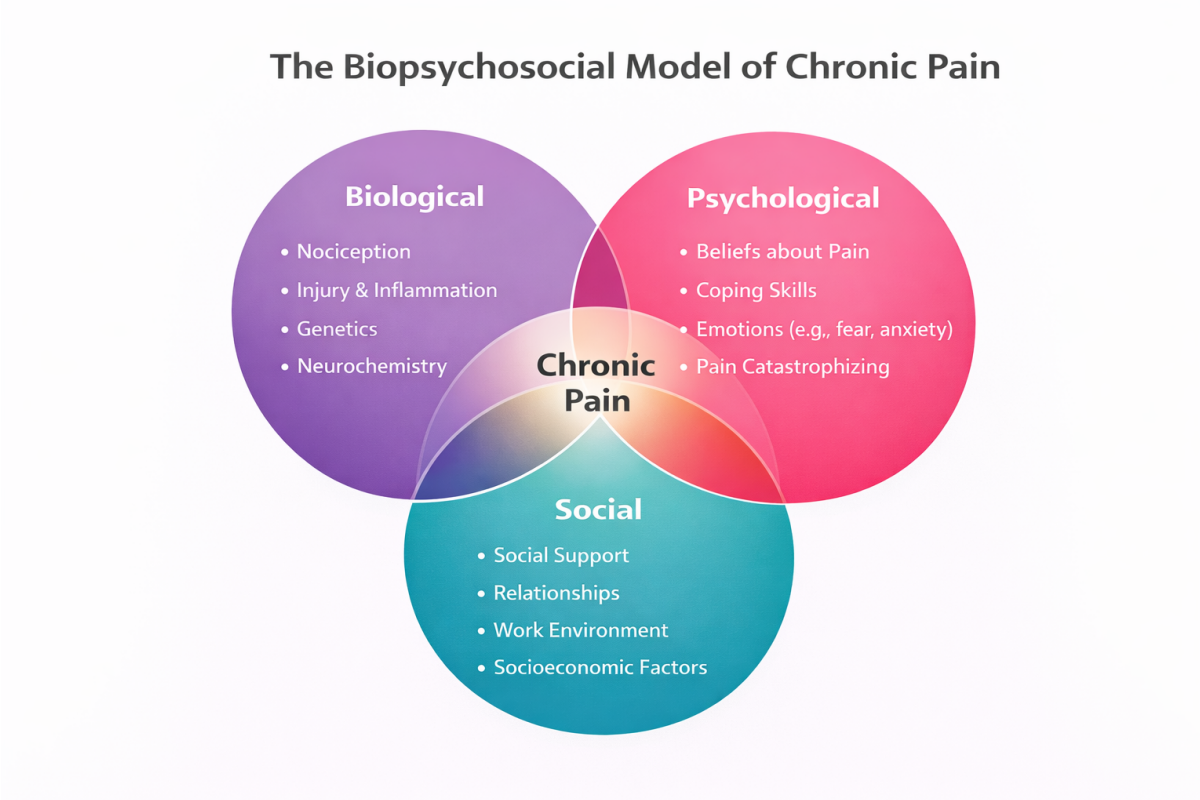


Figure 2. Biopsychosocial model of chronic pain illustrating the interaction between biological, psychological and social influences on pain *(adapted from Engel, 1977).*

This model is increasingly accepted within medical and scientific literature, recognising that CP exists within a BPS framework (Parisien *et al.*, 2022; Babatunde *et al.*, 2021; NICE, 2021). The BPS model proposes that CP is multifactorial, influenced by biological factors, such as soft tissues, tendons and joints; psychological factors including emotions, pain related beliefs and catastrophising; and social factors such as gender, race, social support networks and socioeconomic status (Engel, 1977; George et al., 2014; Pribicevic, 2012; Rometsch et al., 2025).

Furthermore, increasing evidence suggests that the experience of pain does not necessarily correlate with the extent of tissue damage and pain may be present in the absence of identifiable structural pathology, while MSK pathology can also occur without the experience of pain (Lewis, 2010; Chester et al., 2018; Sanchis et al., 2015).

Conventional Care Pathways and Their Limitations

There is a lack of consensus among healthcare providers on the effective management of CSP, reflecting challenges in diagnosis and treatment (Maxwell et al., 2022). While various interventions are available, most demonstrate only short-term benefits (Walker-Bone and van der Windt, 2021), indicating that further research into CSP management strategies is warranted.

Conventional treatments for CSP include corticosteroid injections, surgery, physiotherapy, and non-steroidal anti-inflammatory drugs (NSAIDs) (Yang et al., 2024). Although widely used, many provide only modest short-term benefits, with limited support for sustained long-term efficacy (Babatunde et al., 2021), highlighting a gap between the evidence base and clinical practice.

While current National Institute for Health and Care Excellence (NICE) guidelines (NICE, 2021) recommend holistic, person-centred care emphasising conservative, non-pharmacological treatments, general practitioners often face significant time constraints (Hasegawa et al., 2005). This may contribute to an overreliance on NSAIDs, which show limited efficacy compared with placebo (Babatunde et al., 2021) and may have detrimental effects, particularly with long-term use (Ussai et al., 2015). Evidence suggests that suppressing the natural inflammatory response with treatments such as NSAIDs may prolong the pain experience and increase the risk of persistent pain (Parisien et al., 2022).

Evidence from systematic reviews indicates that physiotherapy can improve pain and function in CSP, particularly when exercise is combined with manual therapy (Page et al., 2016; Steuri et al., 2017; Liu et al., 2024). However, traditional approaches may over-emphasise biological factors while insufficiently addressing psychosocial influences such as self-efficacy, fear avoidance, and catastrophising, which significantly affect outcomes (Chester et al., 2018; Sheikhzadeh et al., 2021).

Standard physiotherapy programmes may also lack progression relevant to specific activities or sports. This is particularly pertinent for female overhead athletes, who face increased risk due to sex-related factors such as joint laxity and muscle imbalance (Bishop et al., 2022; Alonso-Muñoz et al., 2024). These limitations reinforce the need for individualised, multimodal rehabilitation approaches, consistent with *Lewis's continuum* model (Lewis, 2010).

Evidence for surgical outcomes remains mixed. While suprascapular nerve block may provide short-term relief (Chang et al., 2016), high-quality trials indicate that decompression surgery offers no additional benefit over placebo or structured exercise at five-year follow-up (Beard et al., 2018; Paavola et al., 2021).

This review highlights the limitations of conventional care and underscores the need for longer-term approaches incorporating multimodal programmes that promote self-efficacy within a BPS framework.

Complementary and Alternative Medicine Approaches for Chronic Shoulder Pain

Massage therapy has long been used to treat MSK pain, including shoulder pain, across cultures (Kong et al., 2013). Clinical trials demonstrate meaningful short-term relief (van den Dolder and Roberts, 2003), though evidence for long-term benefits remains uncertain.

A meta-analysis of 12 RCTs found that manual therapy produced immediate improvements, comparable to exercise, but with short-lived effects (Kong et al., 2013). Methodological limitations, including heterogeneity, small sample sizes, and lack of follow-up, limit conclusions regarding sustained benefits.

Complementary treatment approaches for CSP, including massage therapy (Kong et al., 2013), osteopathy (Schwerla et al., 2020), and acupuncture, have demonstrated short- to medium-term benefits (<3 months) (Zhang, 2024). However, variability in treatment protocols and limited follow-up periods make standardisation difficult and restrict definitive conclusions regarding long-term effectiveness (Yeun, 2017).

Increasing evidence suggests passive treatments alone are insufficient for long-term CSP management. Multimodal approaches combining manual therapy, rehabilitation, and self-care appear more effective (Page et al., 2016; Steuri et al., 2017; Liu et al., 2024), particularly when addressing psychosocial factors (Chester et al., 2018; Pribicevic, 2012).

The Jing Method™ of Advanced Clinical Massage (JMACM)

The Jing Method™ of Advanced Clinical Massage (JMACM) is an outcome-based, multimodal approach developed by Fairweather and Mari (2015), integrating manual therapy, education, and self-care to address CP and CS. It is grounded in the BPS model and emphasises therapeutic alliance (TA) and client empowerment.

Preliminary JMACM studies (O'Connell, 2024; Hallt, 2025; Middleton-Smith, 2025; Murdoch, 2023; Starkey, 2025; Young, 2025; Doñate Gimeno, 2023) report promising outcomes for CSP. These studies include a six-week control period and utilise structured JMACM treatment programmes based on protocols outlined by Fairweather and Mari (2015), which strengthens their methodological consistency. More recently, JMACM studies have incorporated a four-week follow-up assessment to evaluate the potential longer-term impact of the intervention. However, these studies remain limited by small sample sizes.

Online-only JMACM studies have also yielded promising results, further highlighting the role of self-care (Scott, 2024). This evidence supports the role of self-efficacy in CP management (Mann et al., 2013; Sullivan et al., 2018).

JMACM has been specifically designed to address CP and complex MSK conditions through a multimodal, client-centred approach that combines advanced manual therapy techniques with structured self-care, client empowerment and the development of a TA. Using structured treatment protocols within a six-week framework, JMACM presents a promising treatment option for chronic shoulder pain. Fairweather and Mari (2015) hypothesise that the therapeutic benefits observed may result from the cumulative effects of all components of the HFMAST (Heat, Fascial release, Muscles, Acupressure, Stretching, Teach) framework within JMACM, delivered over a structured six-week treatment programme.

HFMAST

The HFMAST framework underpins JMACM (see Table 1). Fairweather and Mari (2015) propose that combined application yields greater benefit than individual components, aligning with *Lewis's continuum model* (Lewis, 2010).

Table 1. Components of the HFMAST framework and proposed therapeutic effects

Intervention	Effects / Benefits	References
Heat	Improves range of motion (ROM) and reduces pain; activates the parasympathetic system, reducing CS.	Bleakley and Costello (2013); Leung and Cheing (2008); Lee, Park and Kim (2011)
Fascia (Myofascial Release)	Reduces stiffness and decreases pain in CP related conditions.	Gordon *et al.* (2016)
Muscles (Trigger Point Therapy)	Reduces pain and improves ROM in CSP.	Bron *et al.* (2011)
Acupressure	Effective for relieving various pain types.	Chen and Wang (2014)
Stretching	Improves ROM and function when combined with strengthening.	Mata Diz *et al.* (2017); Tahran and Yeşilyaprak (2020)
Teaching Self-Care	Reduces pain, fear avoidance, and catastrophising; promotes long-term outcomes.	Lebert *et al.* (2022)

Summary

The literature highlights CSP as a multifactorial condition requiring tailored management. Active women face unique biological and psychosocial challenges that conventional treatments may not adequately address.

While standard interventions often provide short-term relief, multimodal, client-centred approaches incorporating education and self-care may offer more sustainable outcomes. This study aims to build on existing JMACM research by implementing structured protocols, incorporating validated outcome measures, and utilising a 16-week study design, including a six-week control period, a six-week intervention phase as well as a follow-up SPADI assessment conducted four weeks after the final treatment, to evaluate longer-term outcomes.

Research sources for this study included PubMed, Google Scholar, Mendeley, and the institute's online library.

METHOD

Ethical approval for this study was received from The Jing Institute of Massage and Complementary Medicine (see Appendix A).

The Shoulder Pain and Disability Index (SPADI) questionnaire

The Shoulder Pain and Disability Index (SPADI) questionnaire (Breckenridge and McAuley, 2011) was selected as the Patient Reported Outcome Measure (PROM) (see Appendix B). With 13 questions, the SPADI is quick to complete. In comparison, the Disabilities of the Arm, Shoulder and Hand (DASH) questionnaire (De Smet, Luc and Smet, 2008) contains 30 questions and focuses on more specific activities that may not be performed regularly. The SPADI is recommended for assessing general shoulder pain and stiffness of unknown origin and for evaluating shoulder pain and function across daily activities.

The SPADI is a widely used validated outcome measure. Roy, MacDermid and Woodhouse (2009) report a minimal clinically important difference of 8–13 points, indicating that changes of approximately 10–20% are clinically meaningful.

Participants were recruited through the researcher's clinic, The Hideaway Shoreham, and social media channels (Facebook and Instagram). Recruitment posts included study details and a link to a Google Forms application. Local gyms and yoga studios displayed flyers and shared the study via social media. Posts were also shared in local Facebook groups, including the Shoreham-by-Sea Community page.

Eligible applicants received a participant information letter and attended a 20-minute phone call outlining the study and expectations. Consent forms (see Appendix C) were completed after the call once participation was agreed and participants met the inclusion/exclusion criteria (see Table 2).

Of the 18 applicants, 13 were eligible and invited to phone meetings. Eleven participants consented to take part. During the study, two participants withdrew, leaving nine female participants aged 37–61 who completed the full 16-week study.

Shoulder pain duration ranged from 7 months to 22 years, with baseline SPADI scores of approximately 20–60%. Pain was typically attributed to suspected overuse. All participants regularly engaged in sport or physically demanding occupations. Previous treatments included physiotherapy, NSAIDs, corticosteroid injections, massage, osteopathy, chiropractic care, and acupuncture, none providing lasting relief.

Participants completed a digital health history questionnaire via the secure Square platform, detailing medical history, surgeries, medications, and previous treatments.

Table 2. Inclusion and exclusion criteria for study participation

Inclusion	Women aged 18 years or older with shoulder girdle pain lasting more than 3 months and rated ≥3/10 on a numerical pain scale
	Shoulder Pain and Disability Index (SPADI) score greater than 20%
	Shoulder pain or restriction interfering with activities of daily living (e.g., washing hair, reaching overhead, sleeping on the affected side)
	Participation in at least 150 minutes per week of moderate-to-vigorous physical activity
	Ability and willingness to complete SPADI assessments, commit to the 16-week study period, and refrain from initiating new shoulder pain treatments or medications
Exclusion	History of significant trauma or surgery to the affected shoulder
	Current diagnosis of frozen shoulder
	Diagnosis of fibromyalgia or polymyalgia rheumatica
	Presence of serious medical conditions (e.g., cancer)
	Pregnancy

Study Design

This was a within-subjects design evaluating the effects of JMACM (Fairweather and Mari, 2015) in active women with chronic shoulder girdle pain.

The study was conducted over 16 weeks.

Weeks 1–6 formed the control period. Participants completed the SPADI weekly via Google Forms with no intervention.

Weeks 7–12 formed the intervention period. Participants attended an initial 90-minute session including consultation, range of motion (ROM) assessment, a 50-minute JMACM massage, and self-care instruction.

Five subsequent weekly sessions lasted 65 minutes. Weeks 8, 10, and 12 included a 50-minute massage and 15 minutes of ROM reassessment. Weeks 9 and 11 included a 50-minute massage followed by 15 minutes to review and progress self-care exercises.

All sessions followed the JMACM Shoulder Girdle protocol (Fairweather and Mari, 2015, pp. 247–269). Additional techniques from the JMACM Neck and Shoulder Pain protocol were also incorporated (Fairweather and Mari, 2015, pp. 225–245). The treatment incorporated amma, heat, myofascial release, trigger point therapy, acupressure, stretching (static and PNF), and self-care education (see Appendix F).

Participants completed self-care exercises at home three times per week (approximately 10 minutes per session). Exercises were demonstrated during sessions, with written instructions and a tick sheet emailed to record adherence.

Participants completed the SPADI weekly during the intervention period, six days post-treatment and prior to the next session. A follow-up SPADI questionnaire was completed at week 16 to assess longer-term outcomes.

RESULTS

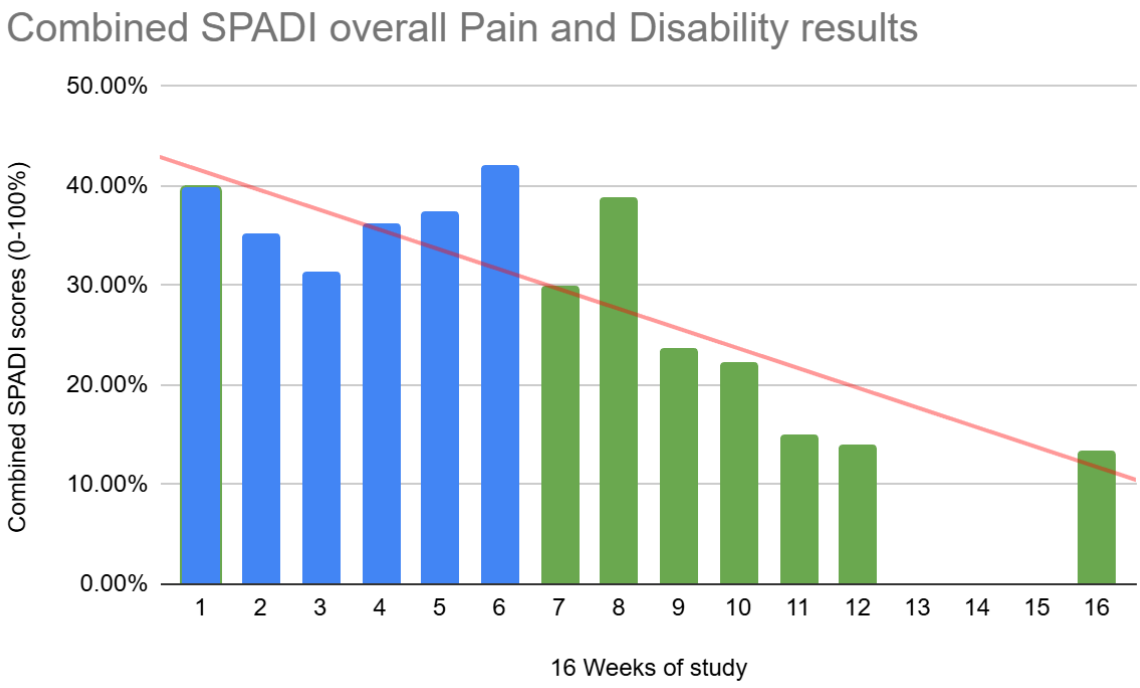


Figure 3. Mean combined SPADI scores across control and intervention periods.

Weeks 1–6 represent the control period. While some small fluctuations were observed during the control period, no sustained improvements were evident. The mean combined SPADI score across weeks 1–6 was 37.7%.

Weeks 7–12 represent the intervention phase, where, despite a brief spike at week 8, a clear downward trajectory in combined SPADI scores was observed. This resulted in a mean score of 14% by week 12, representing an overall 63% improvement compared to the control baseline. These improvements were maintained and continued to improve slightly to 13.5% at the 16-week follow-up.

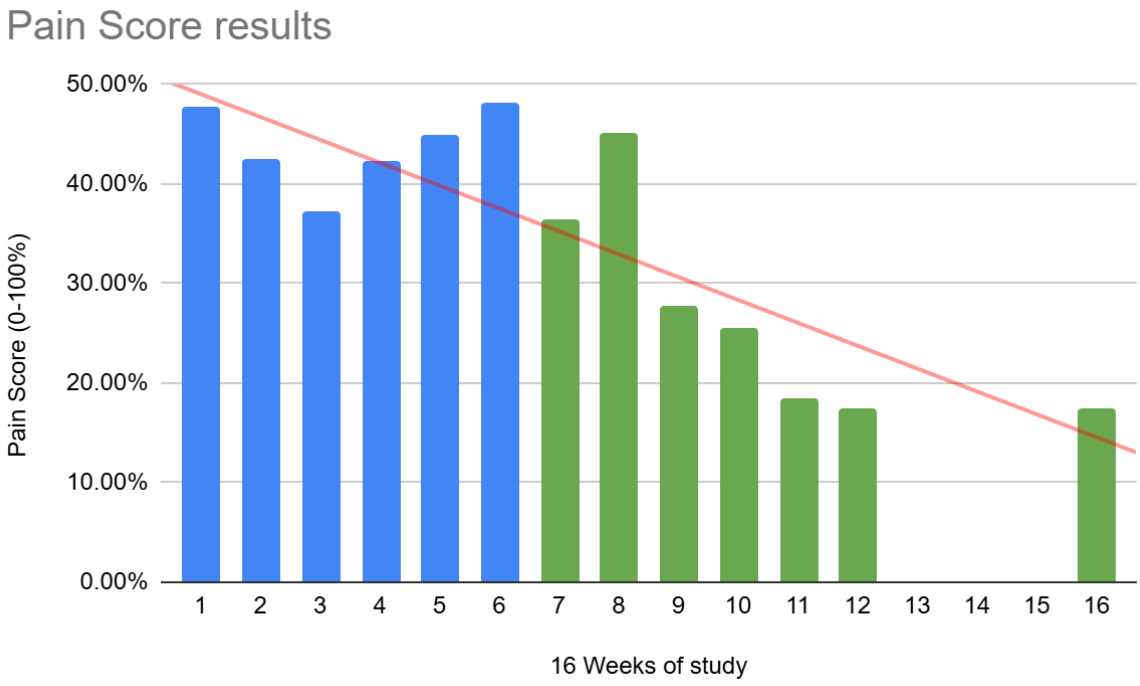


Figure 4. Mean SPADI pain subscale scores across control and intervention periods.

The mean baseline pain score during the control period was 43.8%, with no sustained improvement observed. By week 12, the mean pain score had reduced to 17.6%, and this improvement was maintained at the 16-week follow-up. This represents an overall 60% improvement compared to the baseline.

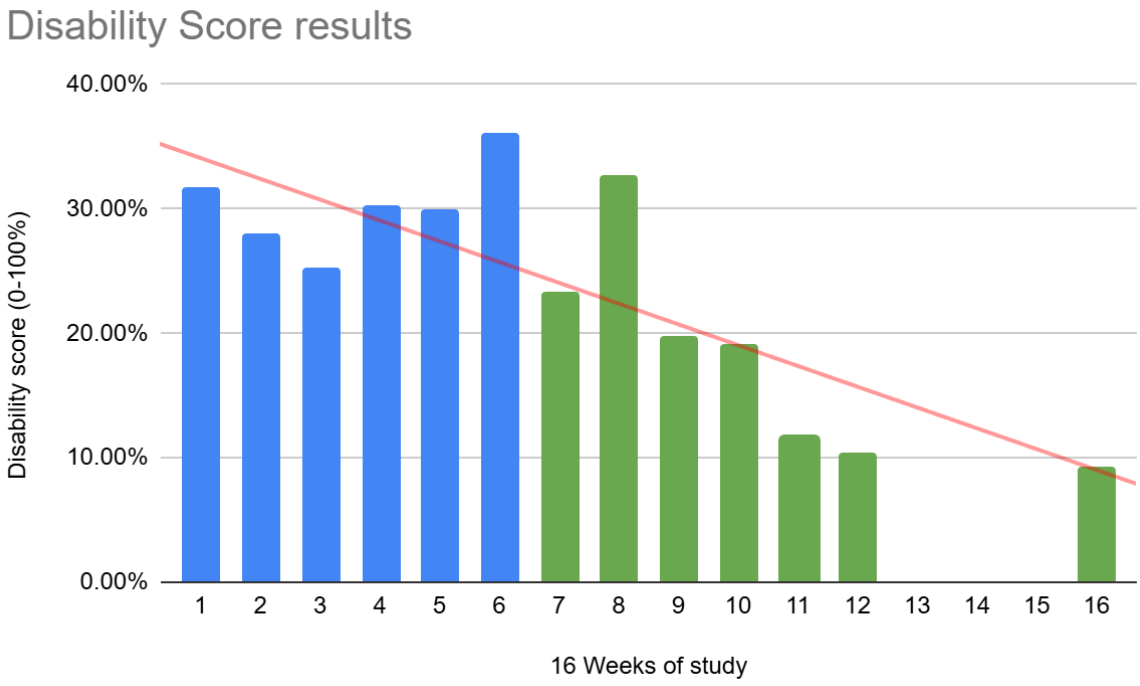


Figure 5. Mean SPADI disability subscale scores across control and intervention periods.

The mean baseline disability score during the control period (weeks 1–6) was 30.3%. A clear downward trend in disability scores was observed, decreasing to 10.4% by week 12 and continuing to reduce to 9.3% at the 16-week follow-up. These scores represent an overall 66% improvement in disability.

DISCUSSION

This study indicates that JMACM was associated with a reduction in CSP and improvement in function in active women.

Results demonstrate an overall 63% improvement in combined SPADI scores, with a 60% improvement in pain and a 66% improvement in disability across the cohort of nine participants (see Figs. 3–5). This is reflected in the mean SPADI score during the control period (weeks 1–6), which was 37.7%, compared with a mean SPADI score of 14% at the end of the intervention phase (week 12). These improvements were retained and, in some cases, further enhanced at the 16-week follow-up, where the mean SPADI score remained low at 13.5%. Disability scores continued to improve post-intervention, reaching a 69% reduction, suggesting that functional gains were maintained beyond the treatment phase.

A SPADI score improvement of 10–20% is generally considered clinically significant (Roy, MacDermid and Woodhouse, 2009). In the present study, 89% of participants achieved a minimum improvement of 10%, and approximately two-thirds of the cohort demonstrated a large improvement of greater than 50%.

During the six-week control period, some fluctuations in SPADI scores were observed; however, no sustained improvements occurred, indicating relative stability of participants' CSP and disability symptoms. Following the first intervention session, there was a marked improvement in both pain and disability scores. Pain decreased from 48% in week 6 to 36% in week 7, while disability scores reduced from 36% to 23%, suggesting an immediate therapeutic effect of the intervention.

Notably, the proportional reduction in disability exceeded that of pain, suggesting meaningful functional improvement, often a primary goal in chronic MSK pain management, and may

reflect increased confidence in functional activities, improved load tolerance, and reduced fear avoidance.

The functional improvements observed may reflect the cumulative effects of the HFMAST framework delivered over the six-week intervention period. This aligns with Fairweather and Mari's (2015) hypothesis underpinning JMACM, which proposes that CP is best addressed through a multimodal approach targeting both peripheral and central sensitisation while integrating self-care within a BPS framework.

These findings are consistent with preliminary JMACM studies investigating CSP using the shoulder girdle protocol (O'Connell, 2024; Middleton-Smith, 2025; Murdoch, 2023; Starkey, 2025; Doñate Gimeno, 2023; Young, 2025) which reported average improvements of approximately 50% in SPADI or DASH scores.

While much of the massage therapy literature suggests that beneficial effects may be short-lived (Kong et al., 2013), the current study demonstrated sustained improvement at the 16-week follow-up. This aligns more closely with evidence indicating that multimodal approaches combining manual therapy with active self-care and rehabilitation strategies are more effective than either intervention alone (Liu et al., 2024; Page et al., 2016). Comparable improvements have also been reported in osteopathic interventions targeting chronic shoulder pain (Schwerla et al., 2020).

Improvements in reported pain and range of motion (ROM) of the glenohumeral, cervical and scapulothoracic regions (assessed in weeks 7, 8, 10 and 12) were observed across the cohort. These improvements may partially be attributable to the targeted trigger point therapy incorporated within the treatment sessions, consistent with the findings of Bron *et al.* (2011).

Adherence to prescribed self-care was generally consistent across the cohort. Slightly greater improvements were observed in participants who consistently adhered to, or exceeded, the prescribed three sessions per week (see Appendix G). This pattern suggests that self-care engagement may play a supportive role in functional recovery, although causation cannot be inferred. While Murdoch (2023) observed similar associations between self-care adherence and SPADI outcomes, Middleton-Smith (2025) found no strong correlation. Nonetheless, these observations align with broader evidence emphasising the importance of self-efficacy, client empowerment, and the integration of rehabilitation exercises alongside manual therapy in CP management (Mann, LeFort and VanDenKerkhof, 2013; Sullivan et al., 2018).

Across multiple participants, the researcher observed associations between BPS factors, such as stress, increased workload, family or emotional strain, and fluctuations in SPADI scores. These findings support the BPS model of pain, which proposes that psychosocial stressors and life load can amplify pain perception and contribute to chronicity (Engel, 1977; Pribicevic, 2012; George et al., 2014; Rometsch et al., 2025). These observations are consistent with Chester et al. (2018), who found that psychological factors, including self-efficacy and patient expectations, were associated with outcomes in shoulder pain, whereas structural findings did not predict recovery. Similar observations have been reported in previous Jing Method™ studies (Murdoch, 2023).

Although these associations were primarily anecdotal, they highlight the need for further research to more accurately examine the relationship between BPS factors and CSP outcomes. Participants provided weekly reflections on workload, activity levels, sleep, and stress prior to each treatment. A transient but notable increase in SPADI scores occurred around week 8 for several participants, coinciding with increased life stress and workload. This pattern led the researcher to hypothesise that CS may have contributed to symptom presentation and CSP chronicity, consistent with existing literature (Borstad and Woeste,

2015; Pribicevic, 2012). However, this interpretation remains speculative, as CS was not directly measured.

A brief mindfulness-based body scan meditation was introduced during week 9 of the intervention phase, to be completed twice weekly. This additional self-care activity was included to support the BPS approach underpinning JMACM and may also have helped reduce sensitisation-related symptoms by promoting parasympathetic activation. However, the study was not designed to isolate or quantify the independent effects of this component of the intervention.

Participant age (37–61 years) may also be relevant, as many fell within perimenopausal or menopausal stages associated with increased MSK pain and altered pain perception (Chaudhary et al., 2025; Meroni et al., 2014). Although hormonal factors were not formally measured, they may interact with BPS influences affecting pain experience and treatment response in women with CSP.

Participant activity profiles may also be relevant, with several individuals engaging in overhead or load-intensive activities such as netball, Olympic weightlifting, and physically demanding occupations. These activities involve repetitive shoulder loading and have been associated with an increased prevalence of shoulder pain, particularly in female overhead athletes (Alonso-Muñoz et al., 2024; Bishop et al., 2022), which may have contributed to symptom presentation within this cohort. Despite variability in participant characteristics, an overall trend of improvement was observed. This is consistent with previous Jing Method™ studies, which have demonstrated improvements in shoulder pain across heterogeneous clinical populations (Murdoch, 2023; Middleton-Smith, 2025; O'Connell, 2024), suggesting that the multimodal approach may be adaptable across a range of presentations.

The findings align with *Lewis's continuum* model, which conceptualises rotator cuff-related shoulder pain as multifactorial and influenced by load, posture, and environmental factors (Lewis, 2010). This perspective supports the rationale for multimodal interventions such as The Jing Method™. Fairweather and Mari (2015, p. 6) propose that the combined components of the HFMAST framework create a cumulative therapeutic effect over a structured six-week programme, with the integrated approach offering greater benefit than any single technique alone**.**

These findings also align with current NICE guidelines (NICE, 2021), which recommend a holistic, person-centred approach emphasising non-pharmacological, conservative treatments and self-care as first-line management for persistent MSK pain.

Study limitations and recommendations for further research

Although this study demonstrated promising results, several limitations should be acknowledged. The small sample size (n = 9) limits generalisability and highlights the need for larger-scale studies. The within-subjects design meant that no independent control group was used; this pragmatic decision was based on participant availability but limits causal inference. However, this design is appropriate for small-scale exploratory studies, such as the present study, and strengthens internal validity by reducing inter-participant variability. Furthermore, the inclusion of a six-week control period further strengthens the study's validity, as this is substantially longer than in many comparable MT studies.

Additionally, the researcher acted as both therapist and investigator, introducing potential bias related to TA and participant expectancy effects. Self-reported outcome measures such as the SPADI may also be influenced by subjective factors. However, TA is a core component of JMACM, and excluding this element would not reflect authentic clinical practice.

Psychosocial factors such as stress, work demands, and life load appeared to influence pain outcomes. As these variables were not formally measured, future studies would benefit from systematic weekly numerical stress ratings to allow more robust analysis of the relationship between stress and pain. These observations are consistent with existing literature on BPS influences in chronic pain (Chester et al., 2018; Sheikhzadeh et al., 2021) and previous Jing Method™ studies (Murdoch, 2023).

The heat component of the HFMAST framework was not applied during weeks 7–9 due to a heatwave and participant preference. Although this modification was consistent across the cohort, the absence of heat may have influenced outcomes.

While all participants were active women, heterogeneity remained in age, medical history, shoulder pathology, and physical activity type. The heterogeneity of participant activity levels may also represent a limitation of this study. Although all participants were required to engage in a minimum of 150 minutes of moderate to vigorous physical activity per week, the specific type and intensity of activity were not prescribed or formally measured. This limited the ability to tailor interventions to sport- or occupation-specific demands and may have influenced treatment outcomes. Future research could benefit from investigating more homogeneous populations with similar activity profiles or injury presentations, allowing for more targeted interventions.

Although this limits specificity, the consistency of improvement across participants strengthens the findings. Cervical spine involvement emerged as a contributor to perceived shoulder pain and functional limitation, particularly in participants reporting headaches or cervical stiffness and was reflected in restricted cervical ROM and reproduction of similar symptoms during cervical ROM testing, observed during both initial assessment and ongoing

reassessment. Future research should consider more rigorous inclusion and exclusion criteria to better isolate shoulder girdle pathology.

CONCLUSION

JMACM may represent a viable and potentially safer treatment option for managing CSP compared with more invasive or costly interventions such as NSAIDs (Babatunde et al., 2021; Parisien et al., 2022; Ussai et al., 2015) or surgery (Beard et al., 2018; Paavola et al., 2021).

Future interdisciplinary research could further explore the relationship between manual therapy, rehabilitation, and BPS factors. Such research could be funded by organisations such as Sport England, especially where interventions promote physical activity participation for people with chronic MSK issues and improve public health outcomes. Larger controlled studies with longer follow-up periods, integrating JMACM within conventional care settings such as physiotherapy clinics or primary care, would align with best-practice MSK guidelines (NICE, 2021) and may help bridge the gap between complementary and conventional healthcare research.

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APPENDICES

Appendix A

Jing BTEC Research Ethics Form

BTEC Level 6: Professional diploma in

Advanced Clinical and Sports Massage

	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)	✓

Section 1: to be completed by student

Student's name:	Eve Jones
Student number:	PE31571
BTEC Year-group:	2024-2026

Date of application:	April 2025
Student e-mail address:	eveberyljones@gmail.com
Title of research project:	*"Evaluating the effects of The Jing Method™ of Advance Clinical massage on chronic shoulder girdle pain in active women"*

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. Shoulder pain and disability index (SPADI)

Section 3: Research premises

Where is your research being undertaken? The Hideaway Shoreham, 186 Upper Shoreham road, Shoreham-by-Sea, BN43 6BG	
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. See Appendix B	**Yes /Yes** **No /** **Not applicable**

Section 4: Recruitment

How will you recruit subjects for this research study?

- Promote through posts via The Hideaway Shoreham social media channels (Facebook and Instagram) and mailing list.
- Promote through The Hideaway website, with details of how to apply available on the website.
- Contact local gyms and yoga studios to display a poster and or flyers and to share with their clients via mailing list.
- Share on local social media groups such as Shoreham by sea community groups.

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.

- Participants will be recruited to evaluate the effects of The Jing Method™ of Advanced clinical massage shoulder girdle protocol in active women experiencing chronic shoulder girdle pain lasting for at least 3 months.
- Applicants will be required to complete an initial online enquiry form to state their interest, their reason for wanting to take part and confirm that they meet all the required inclusion and exclusion criteria.
- Prospective participants who meet the criteria will then be invited for a 20-minute video meeting/ phone call outlining the study, what treatment they'll receive and what would be expected of them. They will be able to ask any questions they have about the study.
- Prior to the video meeting/ phone call the applicants will be sent the will then be sent the participant information letter via email outlining the study and arranging a time for the video meeting/ phone call.
- Should there be mutual interest in the applicant joining the study then they will be sent a consent form for them to sign agreeing to take part.
- Applicants will also be emailed a digital health history questionnaire, via data and password protected Square platform providing information on medical conditions, past surgeries, medications, current or previous treatment received relating to their shoulder pain.

- They will also be digitally sent The Shoulder Pain and Disability index (SPADI) questionnaire via email to complete prior to the video meeting/ phone call.
- During the meeting the researcher will ensure they meet the inclusion criteria, understand the research study, have the opportunity to ask any questions and provide consent to take part.

Weeks 1-6 of the study will form the control period and give a baseline of the participants shoulder pain

- During this time participants will complete the SPADI once a week but there will be no intervention.

Weeks 7-12 will be the intervention period.

- During this time participants will receive a 90 min treatment on the first session comprising of a full consultation and assessment and 50 min clinical Jing Method™ massage then the following 5 weekly sessions will be 65 mins where the participants will receive a 50-minute clinical Jing Method™ massage during this session. The remaining 15 mins will be used for ROM assessment or teaching self-care exercises.
- During the first treatment participants will be receive a full ROM assessment testing 3 joints (glenohumeral, scapulothoracic and cervical Spine), self-care rehab exercises will also be given.

- On weeks 8-12 the 15 minutes of remaining treatment time will be used to re-assess ROM on weeks 8, 10 & 12. On weeks 9 & 11 self-care exercises will be reviewed, and new self-care exercises will be given.

- The session will follow The Jing Method™ Shoulder girdle protocol (see Massage Fusion, pp. 247-269). The techniques used with follow The Jing Method™ Using amma, heat, fascial work, trigger point work, soft tissue release, acupressure, stretching (static and PNF), and teaching self-care (Exact techniques to be added to appendix in the study.)

- There will be some background music played throughout the treatment.

- After each session, the participants will be given simple self-care comprising mobilisations, such as pendulum arm swings, stretching such as doorway pec stretch and strengthening exercises such as internal and external rotation of the glenohumeral joint.

- Self-care to be performed at home 3 days per week; these should take no longer than 10 minutes to complete. Participants will be shown these during the session and emailed an instruction sheet, which will include a weekly tick sheet to record their adherence to the self-care. They will be asked to return this each week.

- Details of each weekly treatment plus self-care routine will be added as an appendix to the study.

- The Self-care exercises will progress throughout the 6 weeks and be adapted with new exercises given on weeks 7, 9 and 11.

- Six days after treatment the SPADI 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 SPADI questionnaire 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 an online meeting or phone call to:

- Check they meet the inclusion criteria
- Have the study explained to them so they can 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 shoulder girdle pain throughout the duration of the study.
- Weeks 1-6, Participants are required to fill in SPADI questionnaire once a week for 6 weeks with no intervention.

- Weeks 7-12, participants will receive a 90 min treatment on the first session comprising of a full consultation and assessment and a standardised 50-minute Jing Method™ clinical massage treatment.
- Then the following 5 weekly sessions will be 65 mins where the participants will receive a 50-minute clinical Jing Method™ massage during this session. The remaining 15 mins will be used for assessment and teaching self-care exercises.
- During the first treatment participants will be receive a full ROM assessment testing 3 joints (glenohumeral, scapulothoracic and cervical Spine), self-care rehab exercises will also be given.
- On weeks 8-12 the 15 minutes of remaining treatment time will be used to either re-assess ROM or review and teach self-care exercises. ROM will be assessed on weeks 7, 8, 10 & 12. On weeks 7, 9 & 11 self-care exercises will be reviewed, and new self-care exercises will be given.
- The treatment will include techniques from The Jing Method™ Shoulder girdle protocol - Using amma, heat, fascial work, trigger point work, soft tissue release, acupressure, stretching (static and PNF), and teaching self-care (Exact techniques to be added to appendix in the study)
- Participants will be required to perform the 10-minute self-care routine 3 times per week.
- Self-care exercises will comprise of mobilisations, such as pendulum arm swings, stretching such as doorway pec stretch and strengthening exercises such as internal

and external rotation of the glenohumeral joint with a resistance band. (Exact techniques to be added to appendix in the study)

- Participants will be shown these during the session and emailed an instruction sheet, which will include a weekly tick sheet to record their adherence to the self-care. They will be asked to return this each week.
- Six days after each treatment and prior to the next treatment or within 24 hours each participant is required to fill in the SPADI 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.
- For the following four weeks after the last treatment there will be no treatment intervention or SPADI questionnaires administered.
- Follow-Up Period at week 16
- Then on week 16 one final SPADI questionnaire will be sent to participants to complete to assess the potential longer-term effects of the treatment.
- Participants will be asked to provide feedback via a feedback form to help evaluate their experience and offer insight into potential improvements for future studies.

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?

- Data held will be in accordance with the General Data Protection Regulation (GDPR)
- Information on initial signup form informing participants that their information will not be available to third parties.
- Assurance that details will not be seen by anyone else.
- Their names will be replaced by numbers so they will be anonymous.
- As soon as the study is over, all details will be deleted.
- There is minimal risk of injury but possibly there might be some localized bruising, especially if participant presses too hard during self-care or transient muscle aches that can occur after a massage. This will be explained to participants before consenting to the study.
- This study will be evaluating function and pain in the shoulder. Should the researcher be concerned about a participant, resources will be available of local specialist help where participants can be signposted to.
- This study will not focus on ethically sensitive topics such as sexuality or trauma. All participants will be at least 18 years old, and no vulnerable adults will be included.
- Therapist fully qualified and insured.

Information:

- Participants will be informed both verbally and in writing via email about the study and what will be expected. Informed consent will be obtained through a signed consent form.

Withdrawal:

- Participants can withdraw from the study at any time without question, reason, or consequence.

Section 8: Inclusion and exclusion criteria

What sort of people will the subjects be?

The study will include:

- Women over who are over the age of 18 year with chronic shoulder girdle pain.
- Participants will have experienced self-reported shoulder girdle pain of at least 3/10 on the numerical rating scale ongoing for more than 3 months.
- Pain and or restriction located in the shoulder girdle region which effects their ability to perform daily activities such as washing hair, reaching for a hight shelf, sleeping on effected side.
- A SPADI score of greater than 20%.
- Participants who engage regularly in a minimum of 150 minutes of moderate to vigorous intensity physical activity per week.

- Willing to commit to the whole 16-week study.
- Participants who are willing and able to complete and understand the SPADI questionnaire.
- Willing to refrain from starting any new treatments or medications relating to their shoulder pain during the study period.

The study will exclude:

- Previous history of significant trauma or surgery to the same shoulder.
- Current diagnosis of Frozen shoulder.
- Diagnosis of Fibromyalgia or Polymyalgia.
- Women with serious medical conditions such as cancer.
- Participants who are pregnant.

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** **x**	**NO**

Student's handwritten signature:



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

Print Name: **EVE JONES**

Date: 28/05/25

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: .....23/5/25.....

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: Permission to Conduct Research at The Hideaway Shoreham

Eve Jones

Flat 3, 60 The Drive

Hove, BN3 3PD

eveberyljones@gmail.com

Date: 24/04/2025

Permission Request to Conduct Research at The Hideaway Shoreham

Dear Iona and Sam,

I am writing to formally request permission to conduct a research study titled “Evaluating the Effects of the Jing Method on Chronic Shoulder Girdle Pain in Active Women” at The Hideaway Shoreham.

This study is being undertaken as part of my BTEC Level 6 Diploma in Advanced Clinical and Sports Massage and aims to evaluate the effectiveness of the Jing Method in managing chronic shoulder girdle pain in active women.

The research will involve a 6-week intervention phase between 25 th August and 30 th September 2025, during which participants will receive weekly hands-on clinical massage treatments based on the Jing Method. Each session will be provided at a discounted rate of £35, as part of their involvement in the study. Participants will be fully informed of the study’s aims and procedures and will give written consent before taking part.

Ethical standards, including confidentiality, professional conduct, and data protection, will be strictly observed throughout the research process.

I kindly request your written permission to carry out this study on your premises. Please

see the section below to confirm your approval.

Thank you for your time and support in facilitating this project.

Sincerely,

Eve Jones

Student Practitioner

BTEC Level 6 Diploma in Advanced Clinical and Sports Massage

Jing Advanced Massage Training

Permission Granted by The Hideaway Shoreham

I hereby give permission for Eve Jones to conduct the research study titled “Evaluating the Effects of the Jing Method on Chronic Shoulder Girdle Pain in Active Women” on the premises of The Hideaway Shoreham.

Name: _____Iona Jones_____

Position: _____Owner_____

Signature: ____*Iona Jones*_____

Date: ___ 28/04/2025

_____

Contact Email/Phone (optional): _hello@hideawayshoreham.com_____

Appendix C: Participant information letter and Consent form

THE HIDEAWAY
SHOREHAM
The Hideaway Shoreham
186 upper Shoreham rd. BN43 6BG
evejonesmassage@gmail.com
07883695650

JING Advanced Massage Training
28/29 Bond Street Brighton BN11RD
www.jingmassage.com
01273628942

Dear,

Thank you for showing interest in my study. I am truly grateful that you have responded to my advert for participants. I'd love to share more about this unique opportunity with you. Alongside my sister Iona, I co-manage The Hideaway Shoreham, and I have been a massage therapist for over four years. I specialise in treating chronic pain and support a wide range of clients, from pregnant woman to those living with conditions like frozen shoulder, rotator cuff injuries, low back pain, migraines, and fibromyalgia.

In 2022, I embarked on an advanced postgraduate degree level qualification in my field, The BTEC Level 6 in Advanced Clinical and Sports Massage through Jing Advanced Massage, the highest educational qualification available for manual therapists in the UK. It is overseen by experts in musculoskeletal pain, sports science, psychology, and education.

As part of this qualification, I have been given an exciting opportunity to design and carry out a research project, and this is where you come in.

My study will explore the effects of The Jing Method of Advanced Clinical Massage on chronic shoulder girdle pain in active women. Women are often underrepresented in research related to physical activity and pain management, and I am passionate about helping to bridge this gap. I also wish to contribute to the growing body of evidence from previous Jing Method dissertations, which suggest that this multimodal approach could be a valuable alternative to other interventions. Shoulder girdle pain can have a profound impact on everyday activities like lifting, reaching, exercising, and even sleeping, and through this study, I aim to make a real difference.

To participate, you must:

- Be a woman aged 18 years or older
- Have experienced chronic shoulder girdle pain for over 3 months
- Report a pain score of at least 3/10
- Have pain or restriction affecting daily activities (e.g., washing hair, dressing, reaching, sleeping on the affected side)
- Engage regularly in at least 150 minutes of moderate to vigorous physical activity per week
- Be willing to commit to the full 16-week study
- Be able to complete and understand the SPADI (Shoulder Pain and Disability Index) questionnaire and other assessments
- Have a SPADI score greater than 20%
- Agree to refrain from starting new treatments or medications for shoulder pain during the study

Unfortunately, you would not be eligible if you:

- Have a history of significant trauma or surgery to the same shoulder
- Currently have a frozen shoulder diagnosis
- Have been diagnosed with Fibromyalgia or Polymyalgia
- Have a serious medical condition (such as cancer)

- Are currently pregnant

The study will run for 16 weeks, from 14th July to 2nd November 2025.

Here's what participation involves:

Initial meeting over the phone or on video call - Between 26th May and 30th June: Prior to the start of the study, you will be invited for a 20 min video call/ meeting over the phone at to introduce the study and gather initial information, assess how your shoulder pain is impacting your life. At this time, you will also be asked to consent to take part in the study and if you agree to take part you will be sent a consent form and make your payment.

Initial Phase- The control period- 14th July to 24th August (Weeks 1 to 6):
The first 6 weeks is about understanding your pain. You will be sent a weekly short questionnaire relating to you shoulder pain called the Shoulder Pain and Disability Index (SPADI) (approx. 5-10 minutes to complete) sent every Monday, via email to be completed at home. I will send you an email prompt to remind you. There will be no intervention at this stage.

Once all that data is gathered and we know what we are dealing with, we will then start to endeavour to make a difference.

The hands-on treatment – The Intervention Phase – 25th August to 30th September (Weeks 7-12):

Weekly 65-minute sessions at The Hideaway, including a 50-minute hands-on advanced clinical massage treatment and 15 minutes for assessment and self-care coaching. Treatments will take place on either Mondays or Tuesdays between 25th August and 30th September.

The first treatment will be a 90 min session comprising of a full consultation and range of motion assessment and a 50-minute Jing Method™ clinical massage treatment.

Then the following 5 weekly sessions will be 65 mins where you will receive a 50-minute clinical Jing Method™ massage during this session. The remaining 15 mins will be used for assessment or teaching self-care exercises.

Self-care exercises:
Simple, guided exercises to be completed at home 3 times per week (taking around 10 minutes each time).

During these 6 weeks, you will continue to fill out the SPADI questionnaire, the day before you next treatment. I will continue to send you an email prompt.

Follow-Up Period Monday – 27th October (at Week 16)

For the following four weeks there will be no treatments or questionnaires to fill out.

Then on week four one final SPADI questionnaire will be sent for you to complete to help us assess the potential long-term effects of the treatment. You will also be asked to provide feedback via a feedback form to help evaluate your experience and offer insight for potential improvements for future studies.

Important to note:

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.

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.

It is very important that you don't engage in another other pain-relieving activity including the use of pain medication, trying a new therapy for your pain/wellbeing/stress without letting me know.

The Hideaway is usually booked up months in advance, and treatments with are usually priced at £70 for a 60-minute session.

As a participant, you will be receiving these specialised treatments at a significantly reduced cost of £35 per session, a total of £210 for six weeks of treatment, paid upfront at the time of initial in person meeting and signing of contract to agree to take part (non-refundable after the study has started).

Your information will remain confidential.

You are free to withdraw from the project at any time, without notice or explanation.

If any participants happen to know each other, I ask that you refrain from discussing the sessions with others outside of our treatment sessions. Additionally, please refrain from starting any new treatments or taking new pain medication related to your shoulder during the study without letting me know.

I would love to have you on board for this important and rewarding journey - not only to potentially help relieve your own pain but to contribute to the advancement of care for many others.

Please feel free to contact me with any questions.

If you think you might be a good fit and are interested in taking part, then please let me know when a good time might be to arrange a call. I'm also very happy to arrange a phone call if have any question or you would like to discuss anything further.

Thank you again for considering this opportunity!

Warm wishes,
Eve Jones

ACMT Advanced Clinical Massage Therapist
The Hideaway Shoreham

PARTICIPANT CONSENT FORM

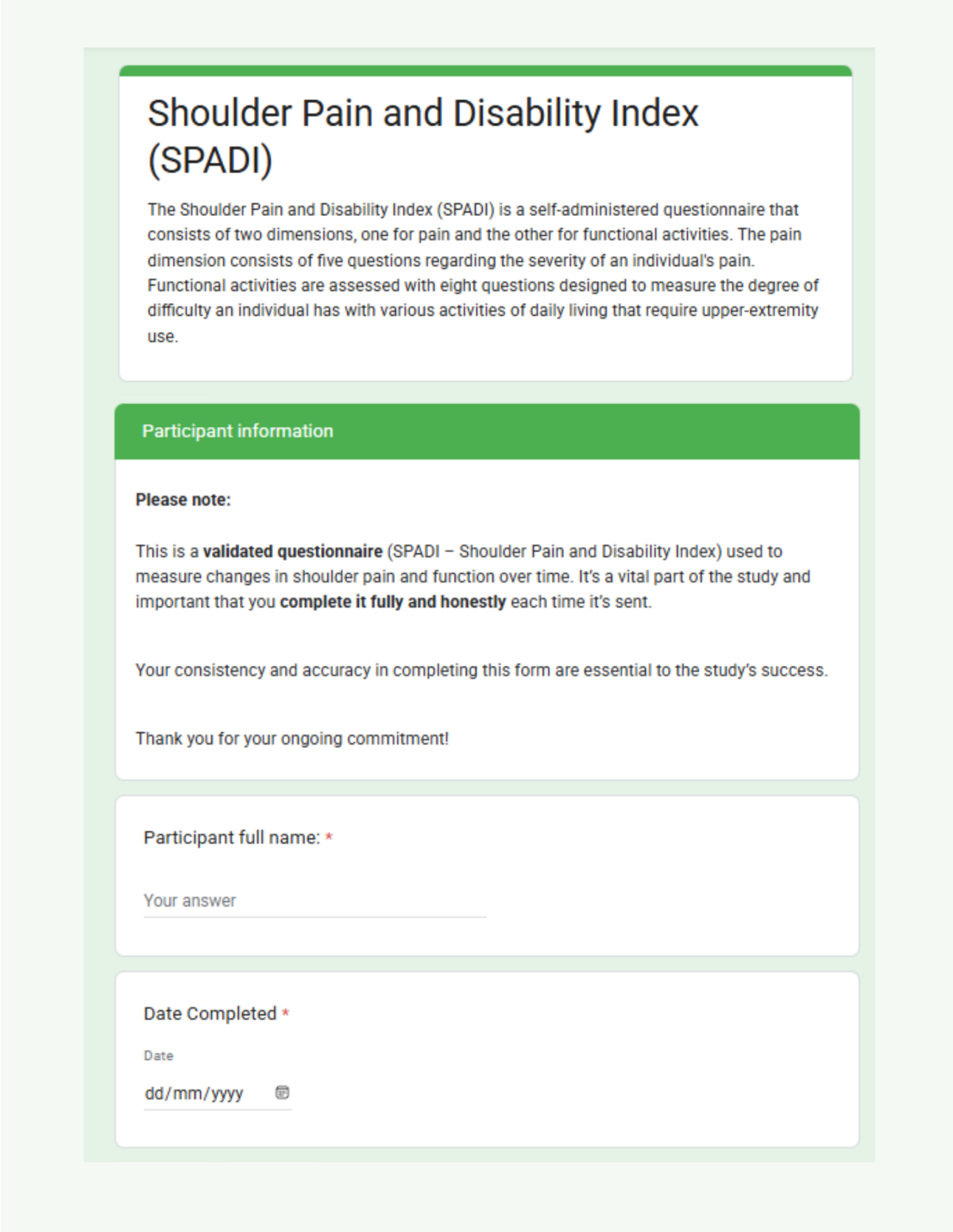
Title of study: “Evaluating the effects of The Jing Method of Advance Clinical massage on chronic shoulder girdle pain in active women”

Name of student: Eve Jones

	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 / the participant is free to withdraw from this study: At any time (until such date as this will no longer be possible) 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 agree to take part in this study		
Signature (participant) Date:		
Name: (BLOCK LETTERS)		
Signature (parent/guardian/other, if under 18) Date:		
Name: (BLOCK LETTERS)		
Eve Jones Tel no: 07883695650		

Email: evejonesmassage@gmail.com

Appendix D: Shoulder Pain and Disability Index (SPADI)



Shoulder Pain and Disability Index (SPADI)

The Shoulder Pain and Disability Index (SPADI) is a self-administered questionnaire that consists of two dimensions, one for pain and the other for functional activities. The pain dimension consists of five questions regarding the severity of an individual's pain. Functional activities are assessed with eight questions designed to measure the degree of difficulty an individual has with various activities of daily living that require upper-extremity use.

Participant information

Please note:

This is a **validated questionnaire** (SPADI – Shoulder Pain and Disability Index) used to measure changes in shoulder pain and function over time. It's a vital part of the study and important that you **complete it fully and honestly** each time it's sent.

Your consistency and accuracy in completing this form are essential to the study's success.

Thank you for your ongoing commitment!

Participant full name: *

Your answer

Date Completed *

Date

dd/mm/yyyy

3. Reaching for something on a high shelf? *

	0	1	2	3	4	5	6	7	8	9	10	
No pain	○	○	○	○	○	○	○	○	○	○	○	Worst pain imaginable

4. Touching the back of your neck? *

	0	1	2	3	4	5	6	7	8	9	10	
No pain	○	○	○	○	○	○	○	○	○	○	○	Worst pain imaginable

5. Pushing with the involved arm? *

	0	1	2	3	4	5	6	7	8	9	10	
No pain	○	○	○	○	○	○	○	○	○	○	○	Worst pain imaginable

Back Next Clear form

Shoulder Pain and Disability Index (SPADI)

Please select an answer that best represents your experience during the last week attributable to
your shoulder problem.

Back Next Clear form

Pain Scale

How severe is your pain?
Please select the number that best describes your pain where: 0 = no pain and 10 = the worst pain imaginable.

1. At it's worst? *

	0	1	2	3	4	5	6	7	8	9	10	
No pain	○	○	○	○	○	○	○	○	○	○	○	Worst pain imaginable

2. When lying on the involved side? *

	0	1	2	3	4	5	6	7	8	9	10	
No pain	○	○	○	○	○	○	○	○	○	○	○	Worst pain imaginable

Disability scale

How much difficulty do you have? Please select the number that best describes your experience where: 0 = no difficulty and 10 = so difficult it requires help.

6. Washing your hair? *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

7. Washing your back? *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

8. Putting on an undershirt or jumper? *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

9. Putting on a shirt that buttons down the front? *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

10. Putting on your pants? *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

11. Placing an object on a high shelf? *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

12. Carrying a heavy object of 10 pounds (4.5 kilograms). *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

13. Removing something from your back pocket? *

	0	1	2	3	4	5	6	7	8	9	10	
No difficulty	○	○	○	○	○	○	○	○	○	○	○	So difficult it requires help

Appendix E: The Jing Method™ Shoulder Girdle pain Treatment Protocol

The following techniques we used during the intervention phase of the study (weeks 7-12) in line with all elements of Jing Method™ Shoulder Girdle protocol. Some techniques from Jing Method™ Neck and Shoulder pain protocol were also included. Jing Method™ broad work techniques were also included so as to incorporate the whole body, in line with Jing Method™ methodology.

Prone

- Amma compressions along erectors and posterior legs
- Broad fascial fists and palms to erectors and trapezius
- Skin rolling across scapulae and posterior cervical region
- Broad effleurage and flattened figure-of-eight strokes
- Fascial work to trapezius, rhomboids, and posterior shoulder
- Trigger point therapy and stripping to:
    - Supraspinatus
    - Infraspinatus
    - Teres major and minor
    - Levator scapulae
    - Upper trapezius
- Cross-fibre friction to deltoid and rotator cuff insertions (SITTS)
- Scapular mobilisation and scapular sawing
- Latissimus dorsi static stretching
- Acupressure to SI-11 / Shoulder Well
- Lower-limb grounding techniques (gluteal, hamstring, gastrocnemius broad work)

Side-Lying

- Scapular mobilisation and circumduction
- Trapezius stretch with forearm or STR techniques
- Scalene STR and stretching
- Serratus anterior stripping

- Subscapularis trigger point work
- Latissimus dorsi and axillary border release
- Devil pec stretch (with and without PNF)
- Grounding holds at sacrum and occiput

Supine

- Grounding hand on chest and abdomen
- Broad fascial work and trigger point therapy to:
    - Pectoralis major (sternal attachment and muscle belly)
    - Pectoralis minor
    - Subclavius
    - Coracobrachialis
    - Anterior deltoid
    - Biceps brachii
- Myofascial arm pulls
- Internal and external rotation mobilisations
- PNF stretching (internal/external rotation)
- Diaphragm release with breath cueing
- Cervical soft tissue work including:
    - Laminar groove
    - SCM and scalenes
    - Gentle cervical mobilisation and stretching
- Acupressure to Shoulder Well and Kidney 1
- Closing grounding techniques at head and feet

Appendix F: Participant Self-Care Programme

Participants were prescribed a progressive shoulder rehabilitation programme to be completed **three times per week**, with each session lasting approximately **10 minutes**.

Chapter 1 Shoulder Rehabilitation: Weeks 1–2

Frequency: 3× per week
Duration: ~10 minutes per session

1. Pendulum Arm Swings

- **How:** Lean forward with the arm relaxed and hanging freely. Perform gentle swings forwards/backwards, side-to-side, and in circles (clockwise and anticlockwise).
- **Sets/Reps:** 1 set, 10 repetitions in each direction
- **Purpose:** Promote gentle shoulder mobility, reduce stiffness, and encourage joint fluid movement.

2. Isometric External Rotation (Wall or Door Frame)

- **Setup:** Stand with elbow bent to 90° and tucked close to the side. The back of the hand presses into a wall or door frame.
- **Action:** Gently press outward (as if rotating the arm away from the body).
- **Hold:** 20 seconds
- **Sets:** 3
- **Purpose:** Activate external rotators (infraspinatus, teres minor) to improve early shoulder stability.

3. Isometric Internal Rotation (Wall or Door Frame)

- **Setup:** Same position, facing the opposite direction so the palm presses into the wall or frame.
- **Action:** Gently press inward (as if rotating the hand toward the body).
- **Hold:** 20 seconds
- **Sets:** 3
- **Purpose:** Activate internal rotators (subscapularis, pectoralis major, latissimus dorsi) to support joint stability.

4. Doorway PNF Pectoralis Minor Stretch

- **How:** Forearm placed on doorway with elbow at 90°. Step forward into a gentle stretch. Press lightly into the doorframe (20–30% effort) for 5 seconds, relax, then deepen the stretch.
- **Repetitions:** 3 per side
- **Purpose:** Reduce anterior shoulder tightness, improve posture, and support shoulder range of motion.

Chapter 2 Shoulder Rehabilitation: Weeks 3–4

Frequency: 3× per week
Duration: ~10 minutes per session

1. Glenohumeral Shoulder CARs

- **How:** Stand tall with arm straight at side. Slowly draw the largest pain-free circle possible.
- **Reps:** 5 each direction per arm
- **Purpose:** Maintain shoulder mobility and motor control.

2. Scapular Circles / Mobilisation

- **How:** Sit or stand tall and draw circles with the shoulders:
    - Forward → Up → Back → Down
    - Reverse direction
- **Reps:** 10 each direction
- **Purpose:** Restore scapular rhythm and reduce stiffness.

3. Band External Rotation (Elbow at Side)

- **How:** Anchor a light resistance band at elbow height. Keep elbow at 90° with a towel under the arm. Rotate the hand outward slowly and return with control.
- **Reps:** 2 × 10 per arm
- **Purpose:** Strengthen the rotator cuff and support shoulder stability.

4. Band Row with Scapular Squeeze

- **How:** Anchor band at chest height. Pull elbows back while squeezing shoulder blades together and down.
- **Reps:** 2 × 10
- **Purpose:** Improve scapular stability and postural strength.

5. PNF Scalene Stretch

- **How:** Sit tall. Place one hand gently on the side of the head (or use a strap if shoulder discomfort limits holding). Tilt the head away from the hand. Apply gentle resistance as you attempt to return upright, then relax and deepen the stretch.
- **Reps:** Hold resistance for 5 seconds, relax and deepen stretch; repeat 3 times
- **Sets:** 2 per side
- **Purpose:** Reduce neck tension contributing to shoulder pain and stiffness.

Shoulder Rehabilitation: Weeks 5–6

Frequency: 3× per week
Duration: ~10 minutes per session

1. Shoulder CARs (with Light Resistance)

- **How:** Perform controlled circles while gently pressing the free hand against the moving arm.
- **Reps:** 3 each direction per arm
- **Purpose:** Integrate mobility with strength through full range of motion.

2. Band External Rotation (Progressed)

- **How:** As per Weeks 3–4, using slightly increased resistance or repetitions.
- **Reps:** 2 × 10–12 per arm
- **Purpose:** Improve rotator cuff strength and endurance.

3. Band Row with Scapular Squeeze (Progressed)

- **How:** As per Weeks 3–4, holding the end position for 2 seconds before returning.
- **Reps:** 2 × 8–10
- **Purpose:** Enhance scapular control and functional shoulder strength.

4. Doorway Pectoralis Stretch

- **How:** As per earlier weeks, focusing on gentle deepening of the stretch.
- **Repetitions:** 3 per side
- **Purpose:** Maintain chest flexibility and reduce anterior shoulder tension.
-

Appendix G: Self-Care Adherence, and SPADI Outcomes During Intervention Phase

This table summarises baseline SPADI scores, self-care adherence, and SPADI outcomes during the intervention phase (weeks 7–12).

Participant	Control Period Mean SPADI (%)	Self-Care Adherence (Weeks 7–12)	Intervention SPADI Trend	Final SPADI at Week 12 (%)
P1	36–43	3, 2, 3, 3, 3, 3	Gradual improvement after early fluctuation	~18
P2	48.9 → 21.9	3/week (1 missed week)	Progressive reduction	~12
P3	45–62	3/week consistently	Fluctuating but downward trend	~20
P4	~45	3–4/week	Rapid improvement by week 3	~5
P5	31 → 24	3/week	Steady reduction	~10
P6	28 → 48	3/week	Improvement with intermittent flare-ups	~15
P7	14–53	3–4/week	Large reduction after week 3	~8
P8	37 → 67	3/week	Variable but overall improvement	~22
P9	~20	3+/week	Consistent improvement	~9