Evaluating the Effects of the Jing Method™ of Advanced Clinical Massage in Adults Aged 30-60 with Non-Specific Shoulder Pain

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

March 2025

Total word count: 3808

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

Mrs Katie Young: _____ **Date: March 2025**

Acknowledgments

I would like to give thanks to Rachel Fairweather, who despite being discouraged, never gave up her dream of opening her own massage school, without her, none of this would be possible. She is an inspiration, her knowledge boundless and she can feel fascia without even touching you – amazing! To Meghan Mari, who as well as being a very talented individual, has the biggest heart, with an endless supply of enthusiasm and encouragement when you need it most. Jing has not only significantly changed my professional life, but also facilitated my growth as an individual, providing me with a community of like-minded people. That leads me to my wonderful BTEC group, who are a bunch of complete nutters! They are all amazing and I am so glad I got to take this journey with them, we have had such great times together, and I will cherish those memories, always.

Last, but certainly not least, my husband. He has had to put up with many teary episodes and dealt with them in the calmest of manners. His support has helped me in so many ways, he has truly "walked this path with me". For his support, I am ever grateful.

It's been an emotional journey, and this has been the hardest piece of work I've ever had to do, but to quote Jim Kwik, "often our greatest struggles lead to our greatest strengths". I've come out of this having to face some uncomfortable insights about my own beliefs and limitations which, I was completely unaware of. I really have learned a great deal, and from here, I'm going to "keep on keeping on", who knows what comes next…..

ABSTRACT

Objective

The purpose of this study was to assess the Jing Method of Advanced Clinical Massage as an effective intervention for individuals aged 30-60 with chronic shoulder pain.

Method

3 participants took part in a within subject design, using the Shoulder Pain and Disability (SPADI) questionnaire to access pain and disability over a 6-week control period and a 6-week intervention period.

Results

All participants had a reduction in pain and disability. The mean reduction in pain for the group was 68% and disability was 58%.

Conclusion

The results of this study suggest the Jing Method of Advanced Clinical Massage is shown to be effective in reducing pain and disability, as well as well-being. Future studies would benefit from larger control groups and more emphasis on recording and comparing biopsychosocial factors in relation to central sensitisation and how a multimodal approach supports individuals and is part of the healing process.

Contents

Abbreviations

BPS	Biopsychsocial
CP	Chronic Pain
CS	Central Sensitisation
CSP	Chronic Shoulder Pain
DASH	Disabilities of the Arm, Shoulder and Hand
JMACM	Jing Method of Advanced Clinical Massage
MFR	Myofascial Release
MSK	Musculoskeletal
MT	Massage Therapy
P1	Participant 1
P2	Participant 2
P3	Participant 3
PNE	Pain Neuroscience Education
ROM	Range of Motion
SGP	Shoulder Girdle Protocol
SPADI	Shoulder Pain and Disability Index
TA	Therapeutic Alliance

Literature Review

Introduction

Chronic Pain

Chronic pain (CP) affects nearly 28 million adults in the UK and is expected to rise with an ageing population (Fayaz et al., 2016). CP is defined by the International Association of Pain (2023), as pain lasting over 3 months and can be persistent or recurrent and is linked to biopsychosocial (BPS) factors. Chronic primary pain occurs without a specific cause and is not attributed to any specific injury, inflammation, or disease according to Raffaeli et al (2021). Often seen as a disorder in the pain processing system, where the nervous system may be sending pain signals without an apparent physical cause (Lepri et al., 2023).

Shoulder pain in particular is the third most common musculoskeletal (MSK) symptom in UK adults presenting with pain (Greving et al., 2004) and a major cause of sickness absence and leading cause of pain and disability (Walker-Bone and Van Der Windt., 2021). It is of interest that most MSK pain is associated with central sensitisation (CS), rather than tissue dysfunction, having no single site of pain. This raises questions about how the medical community is tackling this widespread issue and whether it is adequate.

Treatment Considerations

Healthcare providers have a lack of consensus on treating chronic shoulder pain (CSP) as it is challenging to diagnose and treat effectively (Maxwell et al., 2021). Although interventions

offer short-term relief, effects are not shown to be long lasting (Walker-Bone and Van Der Windt., 2021).

General Practitioners in the UK commonly treat CSP with medications such as nonsteroidal anti-inflammatory drugs (NSAIDs), steroid injections, surgery, and physical therapy (Artus et al., 2017). These conventional treatments often prove ineffective and come with side effects, primarily focusing on the biological aspects of CSP (Margapandu, 2022; Cuomo et al., 2019). Traditional approaches typically neglect psychological considerations, despite suggestions that both physical damage and psychological factors, such as anxiety and feelings of helplessness, significantly influence how individuals experience and manage pain (Farzad et al., 2021), and as evidence suggests, considering a multimodal approach to treating CSP has been shown by Brantingham et al (2011) to be effective and this may be of greater benefit. Given the current limitations of conventional treatment, it may be more effective to consider complementary healthcare as a viable alternative (Wong et al., 2007).

Massage Therapy

Due to the high prevalence of pain and unsatisfactory results from conventional interventions, massage therapy (MT) as a viable approach for those seeking pain management, as a non-pharmacological intervention (Kong et al., 2013; Furlan et val., 2015; Kerratitanont et al., 2015; Yuen et al., 2017).

Dingding et al (2022) make the argument that massage may be a significant method for alleviating (CP) and, may be favourable, due to being more cost-effective. Research suggests that there is no one single intervention that is shown to be effective in treating CP (Bults., 2023).

Evidence suggests that manual therapy in combination with exercise is more effective than manual therapy alone (Paraskevopoulos et al., 2023) and when used as a multi-modal approach the results are significant (Bron et al., 2011). A 2023 systematic review of evidence showed that pain neuroscience education (PNE), especially when combined with exercise, resulted in positive outcomes. Reducing pain; including psychosocial factors in patients with persistent MSK disorders and central sensitisation (CS) (Lepri., 2023).

Nemati (2023) conducted a systematic review of data up to 2023, revealing that seven studies found significant improvements in chronic MSK pain with massage therapy as a self-management tool, indicating its potential to improve pain, stress, anxiety, and quality of life. A database search of randomised control trials up to 2011 regarding MT for neck and shoulder pain highlighted its effectiveness. However, Yeun et al (2017) concluded that interventions often include various techniques, making it challenging to measure their effectiveness accurately.

Therefore, a standard protocol should be used and investigated for treating CSP to assess the effectiveness of MT. This paper aims to evaluate the effectiveness of the Jing Method™ in treating CSP, as it offers a standard protocol using a multimodal approach, focusing on the BPS model of pain along with fostering a strong therapeutic alliance. This study aims to understand CP and the use of complementary therapy in treating shoulder pain, building on a body of evidence gathered from numerous small-scale studies conducted over the past 10 years at the Jing Institute (Murdoch 2023; Harte 2023; Scott 2023; Watson-Bance 2021; Harwood 2018; Chung 2018). These studies have shown to be effective, demonstrating up to a 54% improvement in pain and disability of individuals with CSP.

Understanding Chronic Pain

Central Sensitisation (CS)

Central Sensitisation (CS) is a process where the central nervous system becomes hypersensitive, amplifying pain signals. Pain can be experienced despite the absence of injury or tissue damage, as described by Fairweather and Mari (2015). CS contributes to chronic pain in up to 30% of the western population and significantly impacts quality of life and healthcare costs (Nijs et al., 2019).

CS involves changes in the central nervous system, resulting in heightened sensitivity to pain and other sensory stimuli. Education on pain physiology and CS can empower patients to better manage their symptoms and improve their quality of life (Lepri, 2023). Addressing CS plays a crucial role in the holistic management of CSP, potentially reducing reliance on opioids and other medications with significant risks of overdose and death.

A study in the Journal of Orthopaedic Science investigated psychosocial factors on CS in patients with chronic low back pain. It found that higher pain catastrophising scores are associated with increased CS, highlighting the impact of BPS factors on pain perception (Moriki et al., 2022). This study adds to the growing evidence supporting BPS interventions and emphasises the need for a multidisciplinary approach to address the complex nature of pain conditions.

The Biopsychosocial Model

Pain is a complex experience influenced by BPS factors, requiring a multidisciplinary approach for effective management. The BPS approach describes pain as a multidimensional interaction between physiological, psychological, and social factors (Meints., 2018). These

factors are often overlooked in physical therapy clinics, making it less likely to improve pain and disability in these settings (Linton & Shaw., 2011).

Bults et al (2023) suggest that Pain Neuroscience Education (PNE) can significantly improve health, reduce illness, and decrease emotional pain when explained using the BPS model. Bults' 2023 study examined chronic (over six months) non-specific pain in primary care, utilising BPS factors for a shared decision-making treatment plan, including PNE, cognitive behavioural therapy, and physical therapy. The study found that the intervention primarily impacted patients' pain perception and feelings of being taken seriously by healthcare professionals but didn't necessarily improve pain-related outcomes. Conversely, Moss-Morris et al., (2007) found that patient beliefs and emotional responses did improve pain-related disability and function, indicating a need for further research due to limitations in the 2023 study.

Therapeutic Alliance (TA)

The therapeutic alliance (TA) is crucial in therapy, fostering collaboration and trust between therapist and patient. It motivates patients by creating a supportive environment where they feel valued. This partnership encourages active participation in treatment, increasing adherence to the therapeutic plan. Tailoring treatment to individual circumstances, including life context and beliefs, enhances the therapy outcome. Integrating a person-centred approach with a biopsychosocial perspective improves overall health and well-being (Lebert et al., 2022; Hibbard & Greene., 2013).

The Jing Method™

Using a standardised protocol developed by Fairweather and Mari in 2002 and later published 2015 *Massage Fusion*, is a collection of protocols for the treatment of CP. This includes the shoulder girdle protocol, which has been used by thousands of therapists in clinical practice. The Jing Method™ is an outcome-based, multimodal fusion of eastern and western massage techniques designed to reduce pain and increase range of motion (ROM) (Fairweather and Mari, 2015). Utilising a standardised protocol developed by Fairweather and Mari in 2002 and later published internationally in their 2015 book *Massage Fusion*, this method offers a collection of protocols for treating CP. Among these, the shoulder girdle protocol (SGP) has been employed by thousands of therapists in clinical practice. The Jing Method™ considers why pain becomes chronic and how BPS factors contribute to CSP and CS. It combines pain education, self-care suggestions, and exercise, making it a truly holistic and multimodal approach to managing CSP.

This is achieved by dedicating sufficient time to a comprehensive consultation, during which BPS factors are identified. Truly listening to the individual helps them feel heard, thereby creating a strong TA, a fundamental aspect of the Jing Method™. This approach establishes a lasting connection where individuals feel supported through maintained contact. CS is addressed by using empowering language, an explanation of symptoms and techniques that facilitate desensitisation of the central nervous system. These techniques are delivered by incorporating the use of hot or cold (Heat), Fascial techniques (Fascia), trigger point therapy (Muscles), acupressure and meridian approaches (Acupressure), various forms of stretching (stretching) and client self-care (Teach) and together these form the acronym HFMAST.

HFMAST

Heat has been found to increase ROM (Bleakley & Costello., 2013) as well as downregulate the sympathetic nervous system (Lee et al., 2011).

The use of **F**ascial techniques in the form of myofascial release (MFR) has been shown to significantly reduce pain, disability and fear avoidance (Arguisuelas et al., 2017).

Treating the **M**uscles with trigger point work has been shown to reduce pain and increase ROM in individuals with CSP (Bron et al., 2011).

Acupressure has been shown to be an effective, safe and low-cost non-pharmacological intervention for treating disability and CP (Godley and Smith 2020).

Stretching is effective in increasing ROM (Behm et al., 2021) and reducing pain (Tunwattanapong et al., 2016).

Teaching specific and tailored self-care techniques empowers patients by learning new strategies to help cope with and minimise pain (Kang et al., 2024).

Small scale studies (Murdoch 2023; Harte 2023; Scott 2023; Watson-Bance 2021; Harwood 2018; Chung 2018) demonstrate the effectiveness of the Jing Method™ of Advanced Clinical Massage (JMACM), specifically in reducing pain and increasing mobility in individuals with CSP. Murdoch supports evidence gathered by The Jing Institute, to suggest that CS is a likely result of BPS factors contributing towards CSP. He suggests when treating individuals, a multimodal approach is required. Harte found her mix of online and in-person study to have a more positive effect in reducing pain than disability, with similar findings as Chung. Therefore, there is a clear need to evaluate the effectiveness of the JMACM in treating CSP.

Method

Ethical approval was received for the following study from Jing Advanced Massage Training. Participants were recruited via social media, the researcher's own website, leaflets left with Pharmacists and an advert placed in a local magazine delivered to 12,000 homes in the local area. Interested participants were invited to a face-to-face meeting where their suitability for the research project was established, consent obtained, and they were introduced to the SPADI questionnaire.

Of the 15 applications received, only 3 were eligible to take part in the study, 1 male and 3 female. 5 were discounted due to injury. 3 were aged 75 and over. After agreeing to take part, 1 failed to reply after sending the participant letter, despite having been reminded and encourage to respond. 2 had previous surgery on the affected shoulder, 1 had an inflammatory disease, and 1 was unavailable during the treatment phase.

The study was conducted over a period of 16 weeks. Participants completed the SPADI questionnaire (see appendix 3) weekly via Jotform for weeks 1-6 to provide a base layer of their pain and functional activity (control phase). Weeks 7-12 they continued to complete the SPADI questionnaire with the addition of a clinical treatment (intervention phase). The first treatment included a 30-minute consultation recording health history and considering any biopsychosocial factors that may relate to their pain condition. During the treatment sessions the Jing Method shoulder girdle protocol (see appendix 4), was used to treat participants incorporating the use of heat, myofascial work, trigger point therapy, acupressure stretching and self-care. Self-care exercises specific to mobilising, stretching and strengthening the shoulder (see appendix 5) were demonstrated at the end of each treatment, and a pre-recorded video of the self-care was emailed, as a reminder, to the participant following treatments. The self-care was directed to be carried out 3 times per week. A 6-week calendar was given to

each participant, indicating the days the exercises were required to be done. The participants were asked to indicate in the box for that day if the exercises were completed by either placing a tick or a cross in the box. Text messages were sent to the participants on the morning of the exercise day as a reminder.

Participants were asked to complete the SPADI questionnaire the day before their next treatment, reflecting on their pain and functionality over the past six days. Participants were also asked to complete the SPADI questionnaire on week 16 to establish any lasting effects.

The SPADI questionnaire was selected in this study as there were fewer questions compared to the Disabilities of the Arm, Shoulder and Hand (DASH) questionnaire, therefore making completion less onerous and deterring participant drop out. Both being the most appropriate instruments (Padua et al,.2021), the SPADI faired more appropriate of the two for "unspecified shoulder pain, and shoulder stiffness". The SPADI appeared to cover a good range of daily tasks compared to the DASH questionnaire where some actions may not have been performed on a regular basis.

Research sources for this study included, PubMed, Google Scholar and Mendeley.

Research Design

This study used a "within subjects" design requiring fewer participants, also giving the study more statistical power. Participants were able to act as their own control group, providing a baseline across different presentations of pain and disability. Participants receive the same treatments, where changes are measured over time (Bhandari 2022).

Results

Combined SPADI Scores

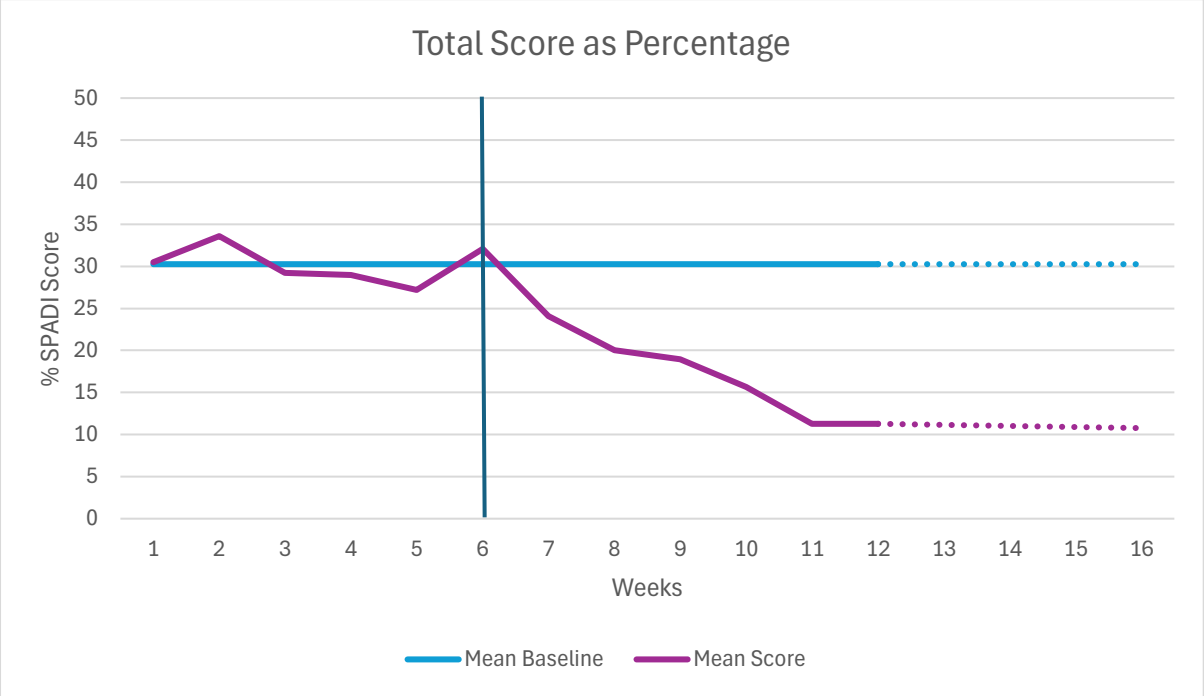

Figure 1: The total SPADI score for combined pain and disability. During the 6-week control period a baseline was established for pain and disability. For the intervention period participants showed an overall 63% improvement in combined pain and disability.

Pain SPADI Scores

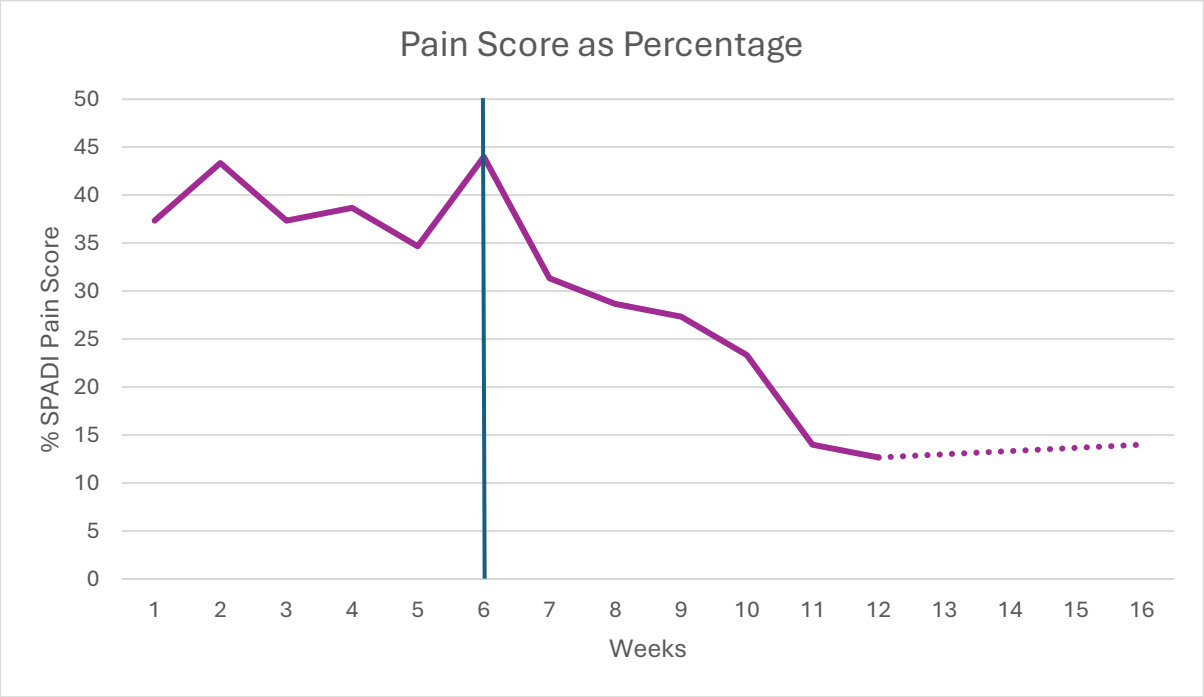

Figure 2: The Pain SPADI Score. During the 6-week control period a baseline was established for pain. For the intervention period participants showed an overall 68% improvement in pain. Week 16 showed a slight increase in pain.

Disability SPADI Scores

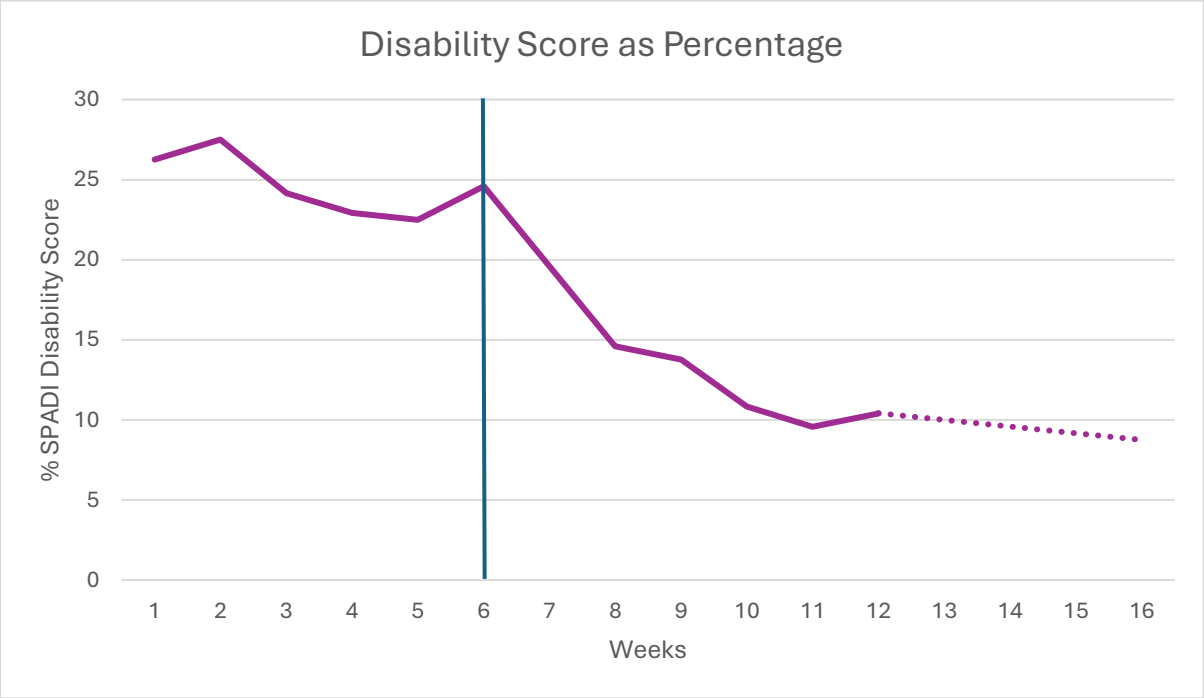

Figure 3: The Disability SPADI Scores. During the 6-week control period a baseline was established for pain. For the intervention period participants showed an overall 58% improvement in disability. Week 16 shows a continued decreased in disability.

Discussion

As previously discussed, MSK pain is a leading cause of sickness absence and global disability (Walker-Bone and Van Der Windt, 2021). Conventional treatments often fail and have side effects, leaving healthcare providers without a consensus on managing shoulder pain (Margapandu, 2022; Cuomo et al., 2019; Maxwell et al., 2021). Since few people experience pain in a single site, CS may play a role in the long-lasting effects of CP (Walker-Bone and Van Der Windt, 2021). Massage therapy has proven effective for treating CSP (Nemati et al., 2023; Kong et al., 2013; van den Dolder et al., 2015; Yuen, 2017; Dingding et al., 2022), and this study investigates the multimodal approach of the JMACM.

This study aimed to evaluate the effectiveness of the JMACM in individuals with non-specific chronic shoulder pain. Results showed a 63% improvement in combined pain and disability (figure 1). Pain alone improved by 68% (figure 2), and disability improved by 58% (figure 3). During the control phase, a baseline was established. In the intervention phase, combined pain and disability improved or remained the same (figure 1). The SPADI results indicated that the mean baseline for participants was moderate (40) (see appendix 6) during the control phase, which reduced by 25 points to mild (15) by week 12.

The results support previous Jing studies on shoulder pain using the SPADI questionnaire, with similar findings (Scott 2024; Harte 2023; Murdoch 2023; Watson-Bance 2021; Harwood 2018; Chung 2018).

Scott (2024) took rehabilitation as one of the elements of the Jing Method and found that although during the intervention phase pain and disability showed a fluctuation, the results were positive with a 28% improvement in pain and disability.

Harte (2023) noted a 23% improvement in pain and disability when using a dual modality approach and found that participants that fully engaged in self-care experienced more favourable outcomes. Murdoch (2023) also observed that those with the lowest adherence to self-care showed the least progress. All participants in this study reported 100% compliance with self-care exercises. This is supported by Paraskevopoulos et al (2023), suggesting that manual therapy combined with exercise is more effective than manual therapy alone in reducing CSP, which is backed up by Lepri (2023) who found pain education, including BPS factors can be reduced in patients when combined with exercise. Therefore, when used as part of a multi-modal approach Bron et al (2011) highlight that results can be significant. Fairweather and Mari (2015) established that multidisciplinary education empowers clients to believe they have control over their pain, which can be crucial for recovery. This may explain why one participant in this study expressed "new hope" in relation to self-care exercises, and with all participants showing decreased pain and disability, this is a contributing factor to the progress made by participants.

Murdoch (2023) had a 54% improvement in overall pain and disability, observing links such as stress and anxiety to outcomes. In their study the participants with the lowest stress and anxiety made the most significant progress. The opposite was observed in this study. Although not officially measured, the researcher considered the participant with multiple health concerns including migraines and visual disturbances; therefore, ultimately experiencing more stress and anxiety, made significant progress compared to others. Pain is more likely to worsen with stress in individuals with primary pain and they are more likely to have other conditions related to nerve sensitivity, like migraines or tension headaches

(Schubiner et al., 2024). In this study the migraines and visual disturbances had ceased 2 weeks into the intervention phase. This may be due to the creation of a strong TA, which enhances health outcomes regardless of the treatment provided (Fairweather & Mari, 2015). Lebert et al. (2022) and Hibbard & Greene (2013) support this, stating that combining a person-centred approach with a BPS perspective enables patients to feel heard and supported, resulting in greater outcomes and furthering our understanding of its positive effects. Although Murdoch (2023) had opposite findings, it is not clear on the causation of stress in their study and may not have been related directly to health outcomes and therefore the relationship between these studies may have no correlation and it would have been of interest to the researcher to have measured this aspect.

This study, along with other Jing Method™ papers such as those by Harte and Murdoch, have observed participants experiencing BPS influences, including their own and others' beliefs, previous experiences, catastrophising, anxiety, and feelings of hopelessness. It should be recognised that beliefs and emotional responses can impact pain perception, as outlined by Bults et al (2023) and Moss-Morris et al (2007). Education on pain physiology and CS can empower patients to better manage their symptoms and improve their quality of life, potentially reducing the reliance on pain medications that can carry risks (Lepri., 2023). Anecdotally in this study, it was of interest that by week 8 all participants had reported they voluntarily ceased taking pain management, it may be that through education in this study the researcher was able to dispel some beliefs. The above listed studies included 41 participants in total, demonstrating that the JMACM is an effective intervention for the treatment of CSP in reducing pain and disability.

In Scott's 2024 study, participants questioned the appropriateness of the SPADI questionnaire, reporting that participants found it did not account for certain painful movements. Murdoch found 43% of participants doubted the SPADI, feeling some questions and movements were not appropriately covered. Similarly, this study found that the SPADI didn't include certain difficult movements or symptoms like numbness and tingling, which the Disabilities of the Arm, Shoulder and Hand (DASH) questionnaire could have addressed. However, while the DASH seemed more suitable for one participant, it wasn't the case for the other two. During the intervention phase in was noted that participants had made mistakes when completing the SPADI questionnaire. These ranged from omitted questions, scoring 7/10 at week 16 on a question that had consistently been 0/10 throughout the study, and confusion over whether using the aid of a back brush meant they should score 10/10 for the entirety of the intervention period, despite finding it easier to perform the task over time, this was then therefore not reflected in the SPADI questionnaire results. Given the confusion over this question, it should be noted that the DASH questionnaire may also have included some questions that could have been misinterpreted, therefore potentially not truly reflecting participants' answers, if that had been the chosen instrument.

Limitations and recommendations

This is a small-scale study and therefore proved to be statistically challenging, making it harder to compare data. Murdoch (2023), along with other small-scale studies using the SGP suggest a larger cohort would produce more indicative results. However, it's not clear how best to improve upon participant numbers. Recruitment for this study, despite using paid advertising was surprisingly challenging. When seeking treatment for CSP, the public typically considers osteopathy and physiotherapy as primary options. Despite its benefits,

massage is not recognised as part of the healthcare system and is not listed as a primary option with the NHS (National Health Service, 2023). This may be due to variations in education and training among practitioners and the lack of standardisation in qualification.

For future studies, it may be beneficial to include the results of this study and previous Jing studies in recruitment advertising. This would educate potential participants about the effectiveness of the JMACM, potentially generating more interest.

Due to the small sample size and the absence of an official instrument to report stress and anxiety, it is not feasible to accurately measure how these factors might have influenced participants' pain perception. Additionally, these variables could have been valuable for comparing the results to previous Jing studies. Murdoch (2023) recommends formal pre-treatment education on pain and self-management, suggesting this may further improve results. Combining this approach with the reporting of stress and anxiety might provide stronger evidence, offering a better understanding of the effectiveness of using a multimodal approach according to the Jing Method™.

Now realising the potential for error or misunderstandings, completion of the SPADI questionnaire may have been better placed to be done in clinic before the start of the next session. Thus, giving participants an opportunity to clarify anything they were unsure of. However, when in the presence of the researcher this could lead to social desirability bias where participants could either over or under-report (Chang et al., 2019).

Conclusion

This study demonstrated success, with all three participants showing improvements in both pain and disability. Results indicate a 63% improvement in pain and disability related to CSP. This supports previous studies and continues to validate a multimodal approach, as pioneered by Fairweather and Mari (2015), in the treatment of CSP. The approach not only reduces pain and disability but also enhances overall well-being.

A great deal was learned from this experiment. With more investigation, resources, and research into the potential of massage therapy; particularly using the Jing Method as a multimodal, cost-effective, and non-invasive approach, the hope is that more people may come forward to participate in future research, leading to a wider recognition and use of massage therapy for the treatment of CSP.

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APPENDICES

Appendix 1: Ethics Form

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

Jing BTEC Research Ethics Form

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

Section 1: to be completed by student

Student's name:	Katie Young
Student number:	PF69868
BTEC Year-group:	23-25
Date of application:	18/4/24
Student e-mail address:	katiegynn@gmail.com
Title of research project:	Evaluating the effects of the Jing Method of Advanced Clinical Massage in adults aged 30-60 with non-specific shoulder pain.

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) https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0014/22136/shoulder-pain-and-disability-index-spadi1.pdf		

Section 3: Research premises

Where is your research being undertaken? My clinic: 9 Market Street, Launceston, PL15 8EP	
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.	N/A

Section 4: Recruitment

How will you recruit subjects for this research study?

- I will recruit from my local and surrounding area.
- Advertise on my website.
- I will use social media (Facebook and Instagram)
- Posters in other clinics (Osteopaths), in the newsagents window in my local town, the local leisure centre, library, local pharmacist and my clinic window. I will make contact with managers/person in charge and introduce myself and my business.

Section 5 Outline your project procedure

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

This study aims to investigate the effects of the Jing Method of Advanced Clinical Massage in adults aged 30-60 with non-specific shoulder pain.

This is a within group study design and participants will use the SPADI as the instrument to measure results.

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

Weeks 1-6 of the study will form the control period and give a baseline of the client's pain.

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

Weeks 7-12 will be the intervention period.

- A full consultation to take place on week 7 (prior to treatment – up to an extra 30 minutes allowed for this).
- During this time participants will receive a 45-minute clinical massage once a week. I will demonstrate self-care ensuring the participant is able to do it by observing them.
- The session will follow the Jing shoulder girdle protocol (see Massage Fusion, pp. 247-269). Using amma, heat, fascial work, trigger point work, stretching (static and PNF), and teaching self-care (demonstrated).
- After each session, the participants will be demonstrated self-care exercises and followed with a 5-minute self-care video sent via email within 24 hours of treatment. This self-care will be performed three times per week.
- Details of each weekly treatment plus self-care routine will be added as an appendix to the study.
- There will be some background music played throughout the treatment.
- 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 me how many times they performed the self-care that week.
- Participants will be charged a one-off fee of £100 to take part in the study and this shall be taken at the time of signing consent – details outlined in the participant letter.

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. Participants will have 48 hours from receipt to complete this.

Section 6: Describe what your participants need to do

Participants are required to initially attend a face-to-face meeting:

- Check they meet the inclusion criteria,
- Have the study explained to them so they can give consent to take part in the study.
- Participants are required to inform the researcher of any manual therapy, medication or any other relevant treatment, they are receiving for their shoulder 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.
- Have a full consultation at week 7, prior to first treatment (allowing up to an extra 30

minutes, on top of 60-minute treatment time).

- Weeks 7-12, participants will receive a standardised 45-minute Jing clinical massage treatment once per week for the duration of 6 weeks.
- The treatment will include, amma the shoulder girdle protocol (heat, direct and indirect fascial work, trigger point work, stretching (static and PNF).
- Participants will have to perform a 5 minute self-care routine 3 times per week (demonstrated at the end of each session). The self-care video will be sent each week, within 24 hours after a client has their intervention during weeks 7-12.
- Six days after each treatment and prior to the next treatment participant is required to fill in the SPADI questionnaire and return it to the researcher prior to the next treatment or within 24 hours of receipt.
- The participant will also inform the researcher how many times they performed the self-care routine.
- At week 16, a follow up of the SPADI questionnaire will be sent to participants to assess if there were any longer-term changes because of the intervention period. Participants will have 48 hours from receipt to complete and return this.

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 localised bruising, especially if participant presses too hard during self-care and muscle aches may occur after a massage. This will be explained to participants before consenting to the study.

Section 8: Inclusion and exclusion criteria

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

- Are experiencing pain levels that affect their everyday life (difficulty dressing, washing hair, placing objects on a high self).
- Have had shoulder pain that started 3 months or more ago.
- Individuals living in my local area.

- Individuals I have never treated for shoulder pain before.
- Can commit to the 6 in-person weekly treatments.

The study will exclude:

- Previous surgery to the same shoulder.
- Participants who are pregnant.
- Individuals who have suffered an injury in relation to their current shoulder pain.
- Individuals who have had pain for under 3 months.
- Individuals with inflammatory diseases.
- Individuals that are having any other kind of formal treatment (physio, steroid injections)

Section 9: Student declaration:

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

Student's handwritten signature:

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

Print Name: Katie Young **Date: 18/4/24**

Appendix 2: Participant Letter and Consent

Holistic Therapies

STUDENT NAME:
Katie Young

STUDY LOCATION:
Holistic Therapies
9 Market Street
Launceston
PL15 8EP

Tel: 07708 711426
e-mail: katie@holistictherapies.ltd

Jing Advanced Massage Training
28/29 Bond Street
Brighton BN1 1RD

www.jingmassage.com
01273 628942

Dear

Re: Evaluating the effects of the Jing Method of Advanced Clinical Massage in adults aged 30-60 with non-specific shoulder pain.

Thank you for showing interest in my study. I appreciate you responding to my call for participants. Let me tell you a little more about what it entails.

As part of our course work, we are given an opportunity to design and carry out a study into the effects of clinical massage. I have chosen to investigate the effects of the Jing Method of Advanced Clinical Massage on non-specific shoulder pain in adults aged 30 -60.

I am looking for people who are over aged between 30 -60 years old who: -

- Are experiencing pain levels that affect your everyday life (difficulty dressing, washing hair, placing objects on a high self).
- Have had shoulder pain that started 3 months or more ago.
- Individuals I have never treated for shoulder pain before.
- Can commit to the 6 in-person weekly treatments.

Unfortunately, this study will not be suitable for the following: -

- Previous surgery to the same shoulder
- Participants who are pregnant.
- Individuals who have suffered an injury in relation to their current shoulder pain.
- Individuals who have had pain for under 3 months.
- Individuals with inflammatory diseases.
- Individuals that are having any other kind of formal treatment (physio, steroid injections)

If you decide to participate the study, it will begin around 14th of July. With in-person treatment starting week commencing 26 August 2024.

Participation is completely voluntary, and you can withdraw from the study at any time without giving a reason. All your information will be kept confidential, and your data will be anonymised.

There will be a fee of £100 levied to the participant to cover some of time and consumables used for treatment. I normally charge £300 for a 6-session block, so this is a considerable saving. The fee will be non-refundable. This is to be paid at the time of giving consent to take part in the study.

What does the study involve?

We will have an initial face-to-face meeting where we talk through the study, I will gather your contact info, and I introduce you to the Shoulder Pain and Disability Index (SPADI) questionnaire. Once the study is fully explained to you, you will give your consent to take part. It is at this stage I would kindly as for the £100 fee to be paid.

The first 6 weeks is about understanding your pain and functional movement. During this time, every Sunday, you will fill in the questionnaire via email. It should take you approximately 5 minutes to complete. I will send you an email prompt to remind you. Once

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

For weeks 7-12, you will receive a 60-minute session including a 5–10-minute consultation, 45 minutes hands on clinical massage treatment and self-care advise per week. The first session will include a 30-minute consultation and range of motion assessment. Each session will be held on the same weekday and will involve a variety of massage techniques to treat your symptoms.

You will also receive a short video of self-care exercises to perform three times during the week (this will also be demonstrated to you during the 60-minute session and I will check you are familiar with it before you leave). At the end of session 12, I will also re-test your range of motion and discuss with you any changes in pain levels or range of motion that have occurred over the 6 weekly treatments.

During these 6 weeks, you will continue to fill out the SPADI questionnaire, six days after treatment. I will continue to send you an email prompt and I will ask how many times you have performed the self-care routine in the last week.

Four weeks after the last hands-on treatment you will fill out the SPADI questionnaire and I will send you a final email prompt.

At the end of the study, I will ask that we have a feedback meeting where we discussed what worked for you and what didn't. If the sessions are working for you there will be an opportunity to continue.

Are there any risks or benefits to taking part?

There is minimal risk associated with this project. For example, if you follow self-care correctly there shouldn't be any bruising from applying too much pressure. This is something that will be discussed and demonstrated during the self-care section of the treatment. There may be some low-level muscle soreness following treatment.

The benefits for taking part in the study are that you might experience a reduction in your pain, improved wellbeing, improved range of motion.

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 or trying a new therapy for your pain without telling me.

About me

I have been a massage therapist since 2016 and I specialise in the treatment of chronic pain. In my clinic, I work mostly with individuals suffering with a range of chronic pain such as headaches, frozen shoulder, and fibromyalgia.

In 2022, I embarked on an advanced degree qualification in my field: the BTEC Level 6 in Advanced Clinical and Sports Massage offered by Jing Advanced Massage, the highest level of education a manual therapist can achieve in the UK. It is overseen by experts in the field of Musculoskeletal Pain, Education, Sports Science and Psychology.

Thank you again for considering this project, your participation will make a difference to your pain and that of others. If you have any questions, please do give me a call on the number at the top of this letter.

Sincerely,

Katie Young (Advanced Clinical Massage Therapist)

PARTICIPANT CONSENT FORM

Title of study: Evaluating the effects of the Jing Method of Advanced Clinical Massage in adults aged 30-60 with non-specific shoulder pain.

Name of student: Katie Young

	Yes	No
I have read the information letter about this study		
I have had an opportunity to ask questions and discuss this study		
I have received satisfactory answers to all my questions		
I have received sufficient information about this study		
I understand that I am free to withdraw from this study: • At any time • 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. • Research data will be collected and analysed. • I agree to attend in-person treatments at the dates and times agreed. • I agree not to discuss the study with any other participants. • I agree to pay the £100 fee.		
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)

BTEC students contact details (including telephone number and e-mail address):

Katie Young
Tel no: 07708 711426
Email: katie@holistictherapies.ltd

Appendix 3: SHOULDER PAIN AND DISABILITY INDEX (SPADI)

Patient Name _____ Date _____

Instructions: Please highlight the number that best describes the question being asked.

Pain scale:
No pain at all 0 1 2 3 4 5 6 7 8 9 10 Worst pain Imaginable

How severe is your pain?

1. At its worst?
0 1 2 3 4 5 6 7 8 9 10

2. When lying on the involved side?
0 1 2 3 4 5 6 7 8 9 10

3. Reaching for something on a high shelf?
0 1 2 3 4 5 6 7 8 9 10

4. Touching the back of your neck?
0 1 2 3 4 5 6 7 8 9 10

5. Pushing with the involved arm?
0 1 2 3 4 5 6 7 8 9 10

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

How much difficulty do you have?
1. Washing your hair?

0 1 2 3 4 5 6 7 8 9 10

2. Washing your back?
0 1 2 3 4 5 6 7 8 9 10

3. Putting on an undershirt or pullover sweater?
0 1 2 3 4 5 6 7 8 9 10

4. Putting on a shirt that buttons down the front?
0 1 2 3 4 5 6 7 8 9 10

5. Putting on your pants?
0 1 2 3 4 5 6 7 8 9 10

6. Placing an object on a high shelf?
0 1 2 3 4 5 6 7 8 9 10

7. Carrying a heavy object of 10 pounds?
0 1 2 3 4 5 6 7 8 9 10

8. Removing something from your back pocket?
0 1 2 3 4 5 6 7 8 9 10

Appendix 4: Shoulder Girdle Protocol

Treatments 1 & 2

Prone

Ama – Compressions either side of spine and down the back of the legs.

Fascial work – Soft fists down the erectors. Fascial finger work over trapezius and scapulae. Skin rolling from deltoid to deltoid.

Effleurage and broad work.

Hot stones erectors and trapezius.

Trigger point work to Infraspinatus, Supraspinatus, Teres Major and Minor.

Frictions to SITS attachments.

Latissimus Dorsi static stretch.

Acupressure point SI12.

Supine

Fascial fingers over Pectoralis Major, palm to deltoid.

Trigger point work to Pectoralis Major – Sternal attachment and stripping. Pectoralis Minor attachment. Subscapularis.

PNF – Internal/external rotators and static stretch to finish.

Treatments 3 & 4

Prone

Ama – Compressions either side of spine and down the back of the legs.

Fascial work – Soft fists down the erectors. Fascial finger work over trapezius and scapulae. Skin rolling from deltoid to deltoid.

Effleurage and broad work.

Hot stones erectors and trapezius.

Trigger point work to rotator cuff muscles, Deltoids, SITS, Teres Minor and Major (if trigger point previously found).

Latissimus Dorsi static stretch.

Side

Trapezius stretch and trigger point work (if trigger point previously found).

Shoulder circumduction.

Latissimus Dorsi and Serratus Anterior trigger point work (if trigger point previously found).

Supine

Fascial fingers over Pectoralis Major, palm to deltoid.

Trigger point work Pectoralis minor attachment, Subclavius and Subcapularis (if trigger point previously found).

PNF – Internal/external rotators and static stretch.

Acupressure points CO15 and K1.

Treatments 5 & 6

Prone

Ama – Compressions either side of spine and down the back of the legs.

Fascial work – Soft fists down the erectors. Fascial finger work over trapezius and scapulae. Skin rolling from deltoid to deltoid.

Effleurage and broad work.

Hot stones erectors and trapezius.

Trigger point work to rotator cuff muscles, Deltoids, SITS, Rhomboids, Triceps, Teres Minor and Major (if trigger point previously found).

Pectoralis Major static stretch.

Side

Trapezius stretch and trigger point work (if trigger point previously found).

Shoulder circumduction.

Latissimus Dorsi and Serratus Anterior trigger point work (if trigger point previously found). Medial border of scapula.

Supine

Fascial fingers over Pectoralis Major, palm to deltoid.

Trigger point work Pectoralis minor attachment, Subclavius and Subcapularis (if trigger point previously found).

PNF – Internal/external rotators and static stretch.

Acupressure points CO16 and K1 to finish.

Appendix 5: Participant Self-care Exercises

Week 1

- Yoga belt stetch – 30 seconds, both ways (internal/external rotation) X 3
- Pendulum swings – All directions 1-2 minutes on each arm
- Resistance Band (medial and lateral rotation)- 10 reps X 3 sets.

Week 2

- Yoga belt stetch – 30 seconds, both ways (internal/external rotation) X 3 sets.
- Pendulum swings – All directions 1-2 minutes on each arm – Progression weight. Resistance Band (medial and lateral rotation) - 10 reps X 3 sets. – Increase resistance band or increase to 15 reps X 3 sets.

Week 3

- Scapula push ups (wall or all fours) 10 sets x 3 reps
- Wall walking: multi-directional 2-3 minutes
- Resistance Band (medial and lateral rotation) - 10 reps X 3 sets. – Increase resistance band or increase to 15-20 reps X 3 sets.

Week 4

- Scapula push ups x 10 reps x 3 sets
- Wall walking: multi-directional 3-5 minutes
- Resistance Band (medial and lateral rotation) - 10 reps X 3 sets. – Increase resistance band or increase to 20-25 reps X 3 sets.

Week 5

Feedback from all participants found they were getting more out of the pendulum swings than wall walking, therefore exercises changed.

- Pendulum swings – progress by increasing the weight.
- Scapular push ups – progression, knees under hips, knees behind hips, up on toes
- Lateral or forward raises -progress by increasing the weight

Week 6

- Pendulum swings – progress by increasing the weight.
- Scapular push ups – progression, knees under hips, knees behind hips, up on toes
- Lateral or forward raises -progress by increasing the weight

Appendix 6 - Commonly used categories for interpreting SPADI scores

The Shoulder Pain and Disability Index (SPADI) is a self-reported questionnaire designed to assess pain and disability in individuals with shoulder pathology. It was developed in 1991 and has since been widely used in both clinical and research settings.

The SPADI consists of 13 items, which are divided into two subscales: pain (5 items) and disability (8 items). Each item is scored on a visual analog scale (VAS) from 0 to 10, with 0 indicating no pain or disability and 10 indicating the worst pain or disability possible. The total score ranges from 0 to 100, with higher scores indicating more pain and disability.

The SPADI can be used in a variety of populations, including patients with rotator cuff tears, shoulder impingement syndrome, adhesive capsulitis, and shoulder instability.

Interpretation of the SPADI scores depends on the specific study or clinical context. In general, higher scores indicate greater pain and disability, while lower scores indicate less pain and disability. In some studies, a change of 10 points on the SPADI has been considered to be a clinically significant improvement.

The SPADI score ranges from 0 to 100, with higher scores indicating greater shoulder pain and disability. Here are the commonly used categories for interpreting SPADI scores:

- 0-20: mild shoulder pain and disability
- 21-40: moderate shoulder pain and disability
- 41-60: severe shoulder pain and disability
- 61-80: very severe shoulder pain and disability
- 81-100: extremely severe shoulder pain and disability

However, it's important to note that there is no universally accepted cutoff for what constitutes a "normal" SPADI score, as this can vary depending on the individual patient and their specific condition. It's also worth considering that a change of 10-20 points on the SPADI score is generally considered to represent a clinically significant improvement or deterioration in shoulder pain and disability.

Appendix - 7 SPADI Score Table

Week	SPADI Score P1	SPADI Score P2	SPADI Score P3	SPADI Category P1	SPADI Category P2	SPADI Category P3
1	58	29	32	3	2	2
2	63	36	32	4	2	2
3	48	32	34	3	2	2
4	45	33	35	3	2	2
5	44	34	28	3	2	2
6	50	45	30	3	3	2
7	32	33	29	2	2	2
8	23	28	27	2	2	2
9	20	28	26	1	2	2
10	10	24	27	1	2	2
11	5	14	25	1	1	2
12	9	13	22	1	1	2
16	10	12	20	1	1	1

SPADI Category Key		
Category	**Score**	**Description**
1	0-20	Mild
2	21-40	Moderate
3	41-60	Severe
4	61-80	Very Severe
5	81-100	Extremely Severe