

***Evaluating the effects of the
Jing method of Clinical Massage on
Non-Specific, Chronic Shoulder Pain in Adults***

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**Dissertation submitted in partial fulfilment of the requirements of The Jing
Institute for the Advanced Clinical and Sports Massage BTEC Level 6**

Word count: 4538

March 2025



Abstract

Objective

The study aimed to investigate and evaluate the effects of the Jing method of Clinical Massage on Non-Specific, Chronic Shoulder Pain in adults.

Method

Utilising a within-subjects design, 11 participants who had suffered from shoulder pain for longer than 3 months completed the study. The baseline stage was 6 weeks, followed by 6 weeks of intervention treatment based on the Jing Institute of Advanced Clinical Massage Shoulder Girdle protocol.

During the control and intervention phases, participants completed the Shoulder Pain And Disability Index (SPADI) outcome tool to record their pain and disability levels weekly.

Four weeks after the final massage, participants completed a final SPADI questionnaire to assess the progress of any changes.

Results

The overall combined SPADI reduction for the study was 57%. A significant SPADI pain and disability score reduction of 10 - 20%, or 10 - 20 points is considered significant. All participants observed this.

Conclusion

This study adds to the growing body of evidence suggesting that clinical massage therapy is effective in reducing the clinical signs and symptoms of Chronic Shoulder Pain, and the Jing method of Advanced Clinical Massage could be a useful addition to conventional treatment options as part of a pain reduction plan.

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Abbreviations and Terms

BAP	Brief Action Plan
BPS	Biopsychosocial model
CAM	Complementary and Alternative Medicine
CBT	Cognitive-behavioural therapy
Comorbidities	When a patient simultaneously has two or more medical conditions
COX-2	Cyclooxygenase-2 enzyme inhibitors to relieve inflammation and pain with purported less adverse gastrointestinal effects
CP	Chronic Pain
CSP	Chronic Shoulder Pain
CPSS	Chronic Pain Stockholm Syndrome
CV	Cardiovascular
DALYs	Disability-Adjusted Life Years
DVT	Deep Vein Thrombosis
GP	General Practitioner, Doctor
HBS	Hostage Bargaining Syndrome
JIACM	Jing Institute Advanced Clinical Massage
JIACMT	Jing Institute Advanced Clinical Massage Therapist
JICM	Jing Institute of Complementary Medicine
MSK	Musculoskeletal
NINPT	Non-invasive non-pharmacological therapies
NSCSP	Non-Specific Chronic Shoulder Pain
NSAID	Non-Steroidal Anti-Inflammatory Drugs
PMP's	Pain Management Programs
QOL	Quality of Life
ROM	Range of Movement
SGP	Shoulder Girdle Protocol
SP	Shoulder Pain
TENS	Transcutaneous electrical nerve stimulation
VR	Virtual reality
YLDs	Years Living with Disability
YLLs	Sum of Life Years Lost

Literature review

Introduction

According to the Office for Health Improvement and Disparities (OHID), musculoskeletal (MSK) pain is the leading cause of pain and disability in England. It ranks among the top reasons for sickness absence and productivity loss (OHID, 2022).

Shoulder pain (SP) is the third most common MSK reason for GP visits (Alaca et al, 2025, Artus, 2017, Engebretsen 2015, IQEHC, 2022).

Chronic Pain (CP) is defined as persistent pain lasting longer than three months, or longer than the expected healing time
(NHS, Scot, 2023, Appendix B2).

Chronic pain (CP) is a complex and multifactorial condition that can be a major source of suffering and anguish (PNE, 2025, Hill, 2014). It can affect up to two-thirds of people during their lifetime (Hodgets, 2021) and studies place it in the top position of persistent debilitating health issues (Vos, 2012).

When chronic shoulder pain (CSP) occurs, standard biomedical treatments consist of pain-relieving medications such as non-steroidal anti-inflammatory

(NSAID) drugs, physiotherapy, and surgery (Alaca, 2025; Gruson, 2008; NHS UK, 2023).

However, the medical model or biomedical treatment is often insufficient to cure the pain. When acute musculoskeletal issues remain unresolved and pain evolves into a chronic state, research indicates that pain levels are not directly related to the severity of the initial biological condition (Raja, 2020) and can be worsened by, or arise solely from, psychological and social factors (Meints, 2018), which increase stress levels. Cuomo, along with the World Health Organization (WHO) and the International Association for the Study of Pain (IASP), emphasised the need to address all factors in their patient-centred multimodal approach (Cuomo, 2019; WHO, 2019; Talbot IASP, 2024) and highlighted the significance of the therapeutic alliance (Cincic, 2025).

Recent studies indicate that NSAIDs can extend pain (Parisien, 2022), while surgery may provide only slight benefits for pain relief or functional improvement, like a placebo (Karalainen et al., 2019; Rangan et al., 2020).

Cost and efficiency savings have resulted in shorter and more impersonal physiotherapy appointment times. They seldom include the vital reassuring human touch, and schedules favour tele-rehabilitation appointments over the trust-building, rapport-building face-to-face interactions (Bjorbaekmo, 2023; Gomez-Molina, 2024; Mann 2021).

Focusing instead on the whole person, utilising the biopsychosocial (BPS) model and providing treatment plans that reduce stress and enhance understanding of pain can give patients a pathway to alleviate their MSK pain (WHO, 2019). The Jing Method™ of Advanced Clinical Massage is firmly grounded in the holistic BPS approach and the therapeutic alliance. This small-scale study examines and assesses the effects of the Jing Method of Clinical Massage on Non-Specific, Chronic Shoulder Pain (NSCSP) in Adults.

The increasing prevalence and cost of Chronic Pain

According to the UK Chief Medical Officer's office, CP affects 30-50% of people at any given time and accounts for 20% of GP visits (Treede, 2015; Connect Health, 2025; CMO Report, 2009; Fayaz, 2016), impacting most age groups worldwide (PNE, 2025). The number is increasing rapidly, but of greater concern is that it is also increasing proportionally within the global disease burden (Murray, 2012, GBD 2021).

There has been a wealth of research. Historically, the causes of the increase have been identified as an aging population and the growing trend of sedentary lifestyles. Recent post-COVID shifts toward online studying and remote work practices have further exacerbated the situation (Fayaz, 2016, Appendix E1, Mazaheri-Tehrani, 2023, Mahdavi, 2021, Senba, 2017, IPSOS 2021, Salameh, 2022, Harithasan, 2022, Eltayeb, 2007, Loew, 2019, Karasuyama, 2023, Soo Hoo, 2022, Tooth, 2020, Chorley, 2017, Tate, 2012, Salameh, 2022, Harithasan, 2022, BMA, 2025, ONS, 2025).

Ipsos (2022) found that nearly half (46%) of the population may experience shoulder pain (SP), and over two-thirds of individuals will likely encounter SP during their lifetime (Engebretsen, 2015; Artus, 2017; McMorran, 2018; Hodgets, 2021).

Tissue repair processes can take up to three months to achieve optimal strength and mobility, at which point pain should subside. Persistent pain is then referred to as chronic pain, CP or persistent pain 'syndrome,' or non-specific pain (Nijs, *The Lancet*, 2021; Ristori, 2018), as this pain no longer has a specific known physiological cause and Central Sensitisation (Appendix F1) has occurred.

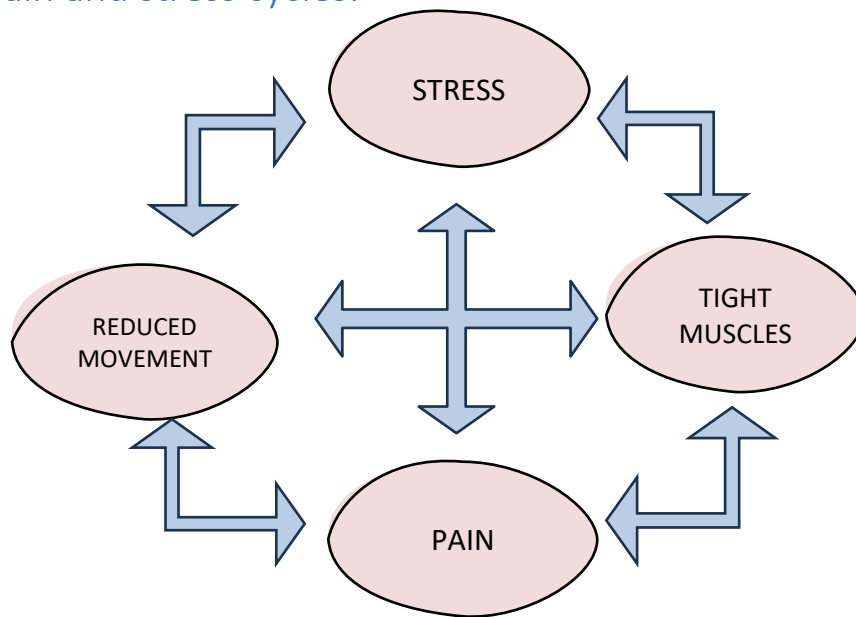
Physiological maladaptive changes lead the brain to perceive ongoing danger, continuously sending or amplifying pain signals to the body (Woolf, 2011, Schneider, 2004). Perceived pain may persist, shift, or spread from the original injury site and often intensifies in waves.

High levels of stress and anxiety can trigger our natural response by raising the shoulders and shortening the neck to guard and prepare for flight (Neurolaunch, 2024). When experiencing constant or chronic stress, failing to relax and fully rest the muscles can lead to CP, exhaustion, and numbness, which unconsciously contribute to the pain cycle and stress (Diagram 1 & 2, Fairweather & Mari, 2015; Wisner, 2022, Appendix F1).

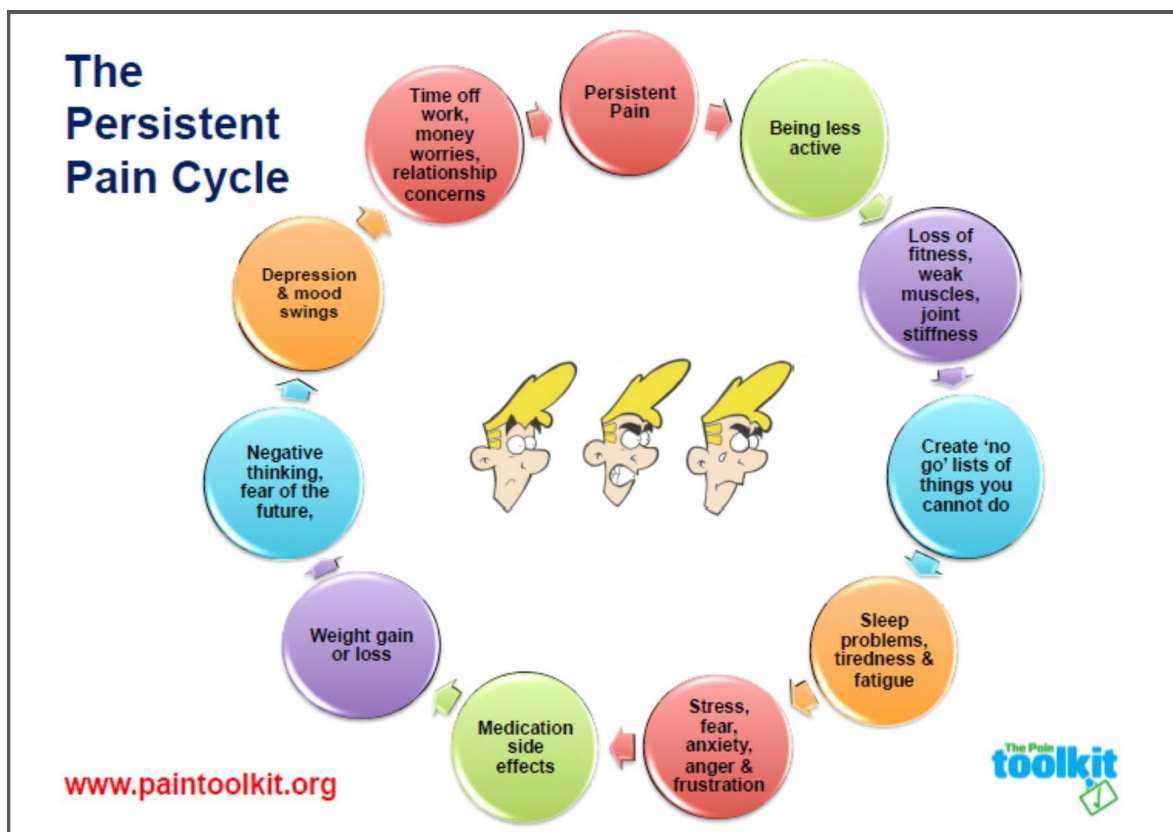
The prevalence of SP increases with age, likely due to degeneration of articular cartilage on the joint surfaces (Djade, 2022; Domenichiello, 2019;

Mullins, 2022). It affects more women, potentially due to lower testosterone levels, a decline in oestrogen, social conditioning or gaslighting (Univ Nottingham, 2021; Casale, 2021).

Chronic Pain and stress cycles:



Diag 1: Chronic Pain and Stress cycle By Wendy Middleton-Smith, 2025



Diag 2: Persistent Pain Cycle. Available at www.paintoolkit.org

Effects of Chronic Shoulder Pain

CP can be exhausting, affecting memory and potentially leading to brain atrophy, anxiety, stress, poor sleep, low mood, and even depression (Pasmore 2014, Fritz 2016, Yao 2023, Brindisino 2022, Tang 2022, Apkarian 2003). The longer the pain persists, the less predictable the pain pattern and experience may become (PNE, 2025).

While CSP affects people globally, this study primarily focuses on the UK.

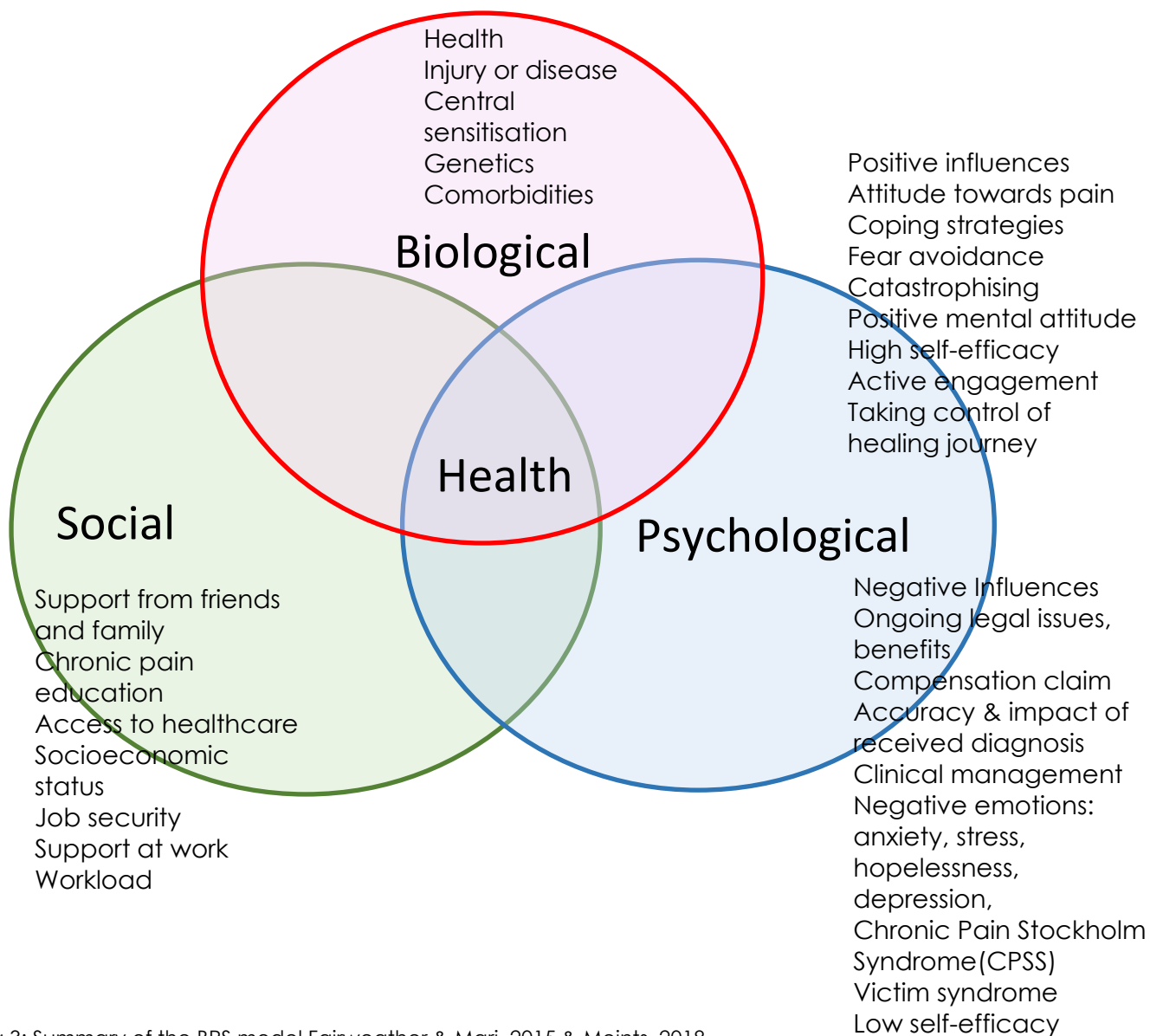
CSP has been shown to impair the quality of life significantly (QOL) for various athletes and professionals (Karasuyama, 2023; McKenzie, 2023; Soo Hoo, 2022; Loew, 2019; Struyf, 2017). It can lead to decreased activity levels, reduced working hours or capacity, loss of income, and withdrawal from hobbies and social activities. This may result in anxiety, low mood, embarrassment, shame, hopelessness, and depression (Cho, 2013; Edwards, 2016; Yoma, 2022; Yeo, 2024). The sufferer can become trapped in Chronic Pain Stockholm Syndrome (CPSS), feel victimised by CP, see no way out, lose faith in recovery, or succumb to learned helplessness (Wade, 2004; Gulak, 2014, Liu, 2015, Li, 2025, Berry, 2017, Appendix F1). CSP can be debilitating and demoralising (Fatimah, 2019), and the added impact of treatment waiting times can further adversely affect mental health (Punton, 2022).

The high cost of Musculoskeletal (MSK) Chronic Pain

The Chief Medical Officer's office reported in 2009 that 7.8 million people were living with CP, with £584 million spent on pain prescriptions (CMO, 2009). In 2016, Fayas indicated that the figure was much higher, at 28 million people. MSK-related sick pay cost over £500 million in 2020 (ONS, 2022). In 2021, 17% of people over 16 reported having a long-term MSK condition. Musculoskeletal conditions cost the NHS £5 billion, according to the Office for Health Improvement and Disparities (OHID) in 2022.

NHS Employers estimated that 7.3 million working days were lost due to CP in the UK in 2021/22 (NHS England, 2023). This amounts to a £179 million financial burden on employers and adds to the workload for their remaining employees and colleagues.

Central Sensitisation and the Biopsychosocial (BPS) model



Diag 3: Summary of the BPS model Fairweather & Mari, 2015 & Meints, 2018.
Expanded and drawn by Wendy Middleton-Smith 2025.

The BPS model recognises a reciprocal, dynamic feedback loop in which physiological, psychological, and social factors overlap and continuously influence one another (Engel, 1977; Fairweather & Mari, 2015; Meints, 2018).

This is especially relevant when examining the CP Cycle and is a foundational element of the Jing method for treating CP.

When psychological and cognitive elements are positive, the outcome is more likely to be favourable. By eliminating negative emotions, patients are empowered to progress and develop a healthier, more positive mindset and lifestyle, which is essential for their healing and pain reduction journey.

Social elements encompass the types and levels of support within the networks of family, friends, and the CP community. A robust, knowledgeable support network makes patients more likely to adhere to their pain reduction plan.

All aspects of the BPS model can impact CP (Sheikhzadeh, 2021, Univ London College NHS, 2023, Abdallah 2017), and poor BPS health has been shown to predict unfavourable recovery outcomes and diminished QOL after surgery (Schwank, 2024, Okafor, 2023).

Previous studies on how the Jing method has positively impacted individuals suffering from CP highlight that addressing the BPS model is an important paradigm (Abbot, 2024; Scott, 2024; Harte, 2024).

Current conventional treatments

Touch is essential for comfort, calmness, and reassurance (Hippocrates, 400 BC, NHS 2024, Hauck 2024). It also contributes to pain and stress reduction (Cherkin, 2003; McGlone 2024; Sandnes 2022; Terzi 2025).

Conventional biomedical treatment methods for CSP include non-steroidal anti-inflammatory (NSAID) injections or medications, plasma, corticosteroids, local anaesthetics, and sodium hyaluronate (Alaca, 2025; Gruson, 2008), physiotherapy (NHS, 2021 & 2023) and, ultimately, surgery. When these treatment options fail to yield results or achieve complete resolution, Pain Management Programmes (PMPs) are often offered (NHS UK, 2023).

Underfunding in the NHS has extended waiting times to months (Ipsos, 2022), leaving individuals with CP feeling lost, invisible, unheard and losing faith (Hadi, 2017, Connolly, 2020). This situation can elevate perceived pain levels (Deslauriers 2020; Liddy 2017), demotivate sufferers (Reid, 2024), or lead to catastrophising, depression, or worse (Edwards 2011).

Recent studies have shown that conventional treatments alone do not resolve the issue and can even exacerbate it. For instance, NSAIDs may extend the pain (Parisien, 2022), lead to heartburn or constipation (Cuomo, 2019), increase the risk of infection with injections (NHS Southern, 2023; Desai

2018, Gruson, 2008, Sullivan 2023, Kortelainen, 1990), and raise retear rates after rotator cuff surgery (Cimino et al., 2020).

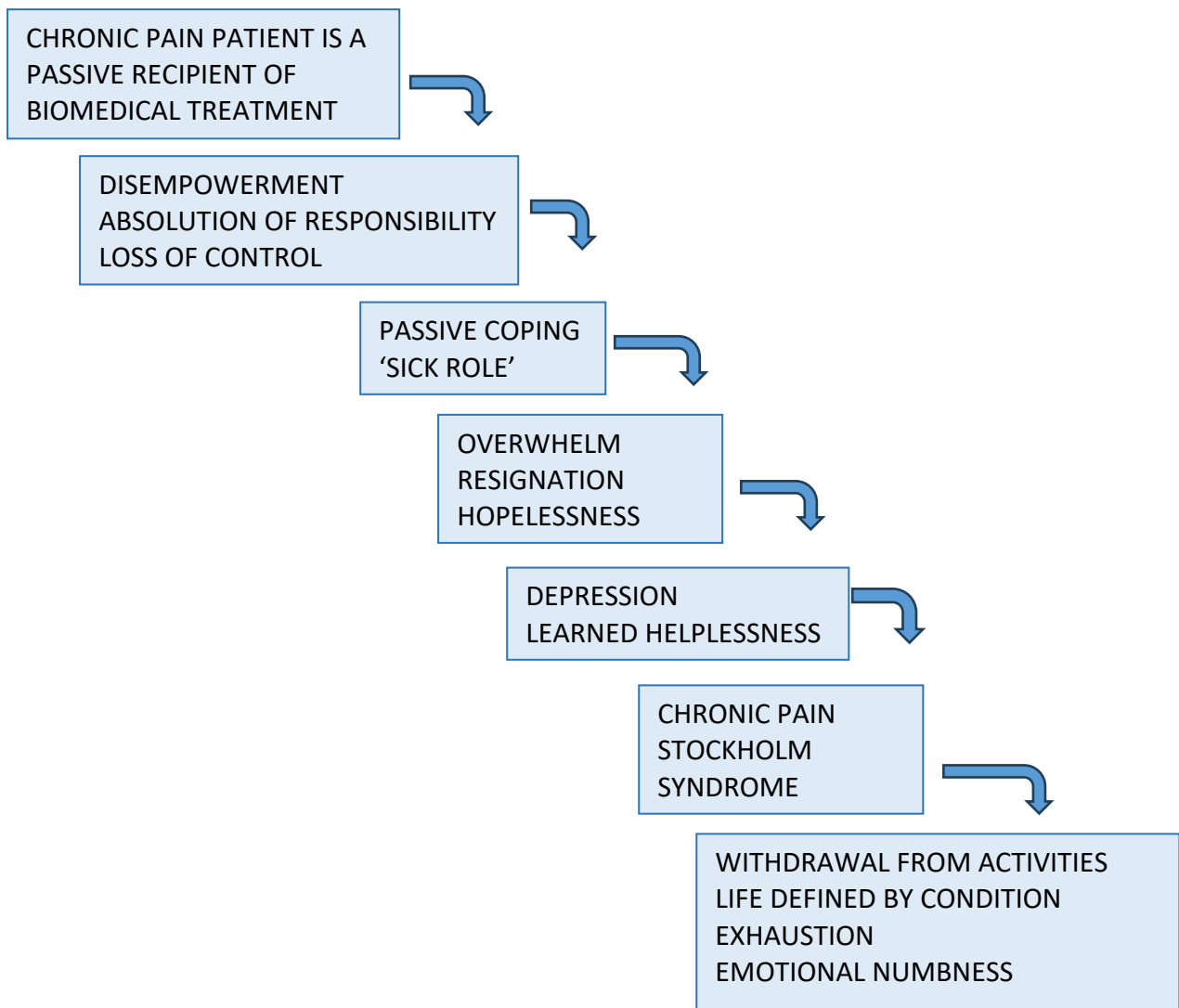
Reported long-term (over five years) success rates from shoulder repair surgery are generally considered good or excellent, often exceeding 80% (Karataglis, 2017; Cherney, 2023; Shin, 2018; Kiritsis, 2025). However, complications may occur in 11-24% of cases (Kim, 2021; Ojeyemi, 2016). For example, surgery can introduce infections (Green, 2024; Desai, 2018), prolong post-operative shoulder pain (Sydora, 2024), cause nerve damage or deep vein thrombosis (DVT) (Cherney, 2023), and necessitate revision procedures (Kim, 2021). Additionally, pain reduction or functional improvement may only be of minimal benefit, comparable to a placebo (Karalainen et al., 2019; Rangan et al., 2020) or exercise (Hoahr, 2018).

Physiotherapy may include ultrasound and exercise (Cota, 2023), but it often no longer incorporates essential, reassuring touch (Bjorbaekmo, 2023; Sandnes, 2022). NHS cost and efficiency savings have shifted some physiotherapy to tele-rehabilitation instead of face-to-face interactions (Gomez-Molina, 2024; CSP 2020; Bullock, 2022), which results in the loss of another vital social component that has been shown to be beneficial for mental health and well-being (Stieger, 2023; Kiesler, 2020; Porges, 2003).

PMPs, CP Rehabilitation Programmes, or Functional Restoration Programmes help patients learn to better tolerate pain rather than simply reducing it

(Bullock, 2022; McAllister, 2022). Fayaz found that ongoing support is crucial for identifying the most effective pain management coping strategies throughout the ever-changing pain journey (Fayaz, 2015, Heikkala 2023), and utilising all pain reduction methods would make more efficient use of limited NHS resources (NHS.UK, 2023). The JIACM protocol provides support and guidance for musculoskeletal CP and could help shorten the duration of CP while enhancing the (QOL) for those who suffer from it.

The biomedical model clinician-patient relationship frequently portrays the patient as a passive treatment recipient, which can disempower or absolve them of responsibility for their health (Connelly, 2020). This approach also functions as a coping strategy: Meints (2018) found that passive coping involves relinquishing control of pain to others. This perspective is further examined within the context of the sick role (Care Learning, 2024). When the sick role proves financially or psychologically advantageous—due to increased state or social support, or insurance payouts—or when the patient feels overwhelmed, without voice, or lacks a clear path forward, it may encourage symptoms of CP syndrome, hostage bargaining syndrome (HBS), learned helplessness, Chronic Pain Stockholm Syndrome (CPSS), foster a victim mentality, or result in the patient's life becoming defined by this role or condition (Wade, 2004; Gulak, 2014; Berry, 2017, Ackerman, 2022, Li, 2025, Appendix F1).



Diag 4: Patient disenfranchisement within a biomedical model. Wendy Middleton-Smith.

In contrast, the Biopsychosocial (BPS) model supports rehabilitative care and provides patient-centred, step-by-step guidance, such as Brief Action Planning (BAP) and Pacing (Appendix F2), to help patients escape this entrapment (Loule, 2021; McAllister, 2022; People in Pain Network, 2021). Active coping strategies, aimed at controlling pain, maintaining function despite pain, or changing the patient's perception of their ability to reduce

pain, have been shown to foster successful outcomes and are incorporated into the JIACM method (Meints 2018, Woby 2004, Heikkala 2023, Zimmerman 1990).

Pain-related studies in medical qualifications are generally low worldwide (9-37 hours within a 4600-hour undergraduate programme) and may be optional (Briggs, 2015; Miro, 2019). Within the JIACM training, hundreds of hours are devoted to chronic conditions and CP (Fairweather and Mari, 2015, Jing BTEC6, 2025).

The Faculty of Pain Medicine of the Royal College of Anaesthetists developed a Four Nation Strategy for Pain Management in 2022 to guide the NHS. This strategy included elements of the BPS model (Engel 1977, Hadi 2017), but it failed to fully integrate this focus into frontline CP care, nor make this mandatory medical training. Despite being categorised as essential by Bjorbaekmo and Sandnes, the strategy also did not emphasise the importance of touch (Bjorbaekmo, 2023, Sandnes 2022). All of these important elements are incorporated into the JIACM model.

EDUCATIONAL THERAPY	NON-OPIOIDS	OPIOIDS	RADIOFREQUENCY
CANNABINOIDS	ADJUVANTS	COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM)	TOPICAL THERAPY
PSYCHOLOGICAL SUPPORT	RELAXING TECHNIQUES	PHYSIOTHERAPY	INTRATHECAL THERAPY
ACUPUNCTURE	PHYSICAL THERAPY	INFILTRATIVE THERAPY	NEUROSTIMULATION

Diag 5: The Analgesic Trolley for Pain Management. An adaptation and evolution to the WHO ladder model, 1986. Multimodal approaches and tailored therapies for pain management; the trolley analgesic model, Cuomo, 2019. © 2019 Cuomo et al <https://pmc.ncbi.nlm.nih.gov/articles/PMC6388734/figure/f1-jpr-12-711/>

In 2023, the World Health Organization reclassified CP in the International Classification of Diseases (ICD-11), acknowledging the magnitude and seriousness of the issue. Research has demonstrated that a comprehensive, holistic, fully integrated dynamic multimodal approach to CP management (Shi 2023, Meyer-Junco, 2024) incorporating the BPS model nurtures the mind, body, and spirit. It includes CAM, alongside the biomedical treatment options, to maximise pain relief and enhance QOL (WHO, 1986; Cuomo, 2019); however, support for therapies that promote stress reduction and calm central sensitisation has not yet reached frontline CP care.

BPS impact assessment tools are available, such as The Örebro Musculoskeletal Pain Screening Questionnaire (ÖMPSQ) and its shorter version (ÖMPSQ-SF), designed to predict individuals likely to develop long-term work

disability issues related to chronic pain and to identify those in need of early multimodal intervention; however, they can be underutilised (Heikkala, 2023, NHS BLMK, 2021, Appendix F1).

Biomedical practitioners may refer patients for treatment by non-allopathic practitioners, but they still retain the clinical responsibility for the patient (WHO, 2001). The reluctance of biomedical model practitioners to embrace CAM is partially due to the lack of scientific evidence from double-blind randomised controlled trials (Tabish, 2008) and lack of regulation or consistency of training. Despite findings that US adults attended more visits to CAM practitioners than to their GPs, as noted by Eisenberg in 1993 (Eisenberg, 1993, Onopa, 1999), their hesitance to refer reflects a lack of familiarity and knowledge about efficacy and risks, lack of randomised double-blind clinical trials, as well as potential future malpractice opportunities if results are not deemed appropriate. (Barnes, 2023, Monalisa, 2022, Dodworth, 2022, Ernst, 2008 Veal, 2004, Onopa, 1999).

There is currently no regulation under UK law, but the JIACM BTEC Level 6 provides consistency at the highest possible level of therapist training, including professional standards. Unfortunately, massage does not lend itself to double-blind trials; however, a wealth of research is now available. The research arm of the Jing Institute has produced over 200 small-scale within-subjects research papers (Appendix A2). Blending the biomedical model with CAM, such as massage, before surgery has been found by Daştan to

improve anxiety, fear, and pain (Dastan, 2024). Additionally, Ibrahim discovered that heat and massage after surgery reduce pain (Ibrahim, 2024). Patient preoperative presentations of stress, poor sleep, or depression have been shown to influence surgical outcomes more than the severity of the injury (Okafor, 2023), underscoring the importance of providing ongoing support for patients and prioritising the management of the patient-centred BPS model, as demonstrated in the JIACM model.

The Jing Method of the treatment of CP with Advanced Clinical Massage

Hands-on manipulation of the body's soft tissues has been shown to provide physical benefits and comfort to those in pain (Nasiri, 2024). It can alleviate muscle pain (Chen et al., 2024), increase the range of movement (ROM) in joints, and improve clients' mental well-being, contributing to better sleep health (Dastan et al., 2024).

Over the past decade, a growing body of work from the Jing Institute of Complementary Medicine (JICM) in soft tissue therapy has been developed, supported by the BPS model. The research arm of the institute has an extensive collection of contributors (O'Connell, 2024; Harte, 2023; Donate, 2023; O'Connell, 2018; Appendix D1).

Previous researchers have shown that Jing Advanced Clinical Massage (JIACM) decreases CP. Notably, studies by Murdoch (2023), Harwood (2018), and Chung (2018) all reported a reduction of over 50% in CSP (Appendix J3).

The Jing Advanced Massage Training School, founded by Rachel Fairweather and Meghan Mari, integrates a broad range of massage techniques from Eastern and Western methodologies into a BTEC Level 6 Clinical Massage qualification (Jing Institute, 2024). The framework for the clinic session includes

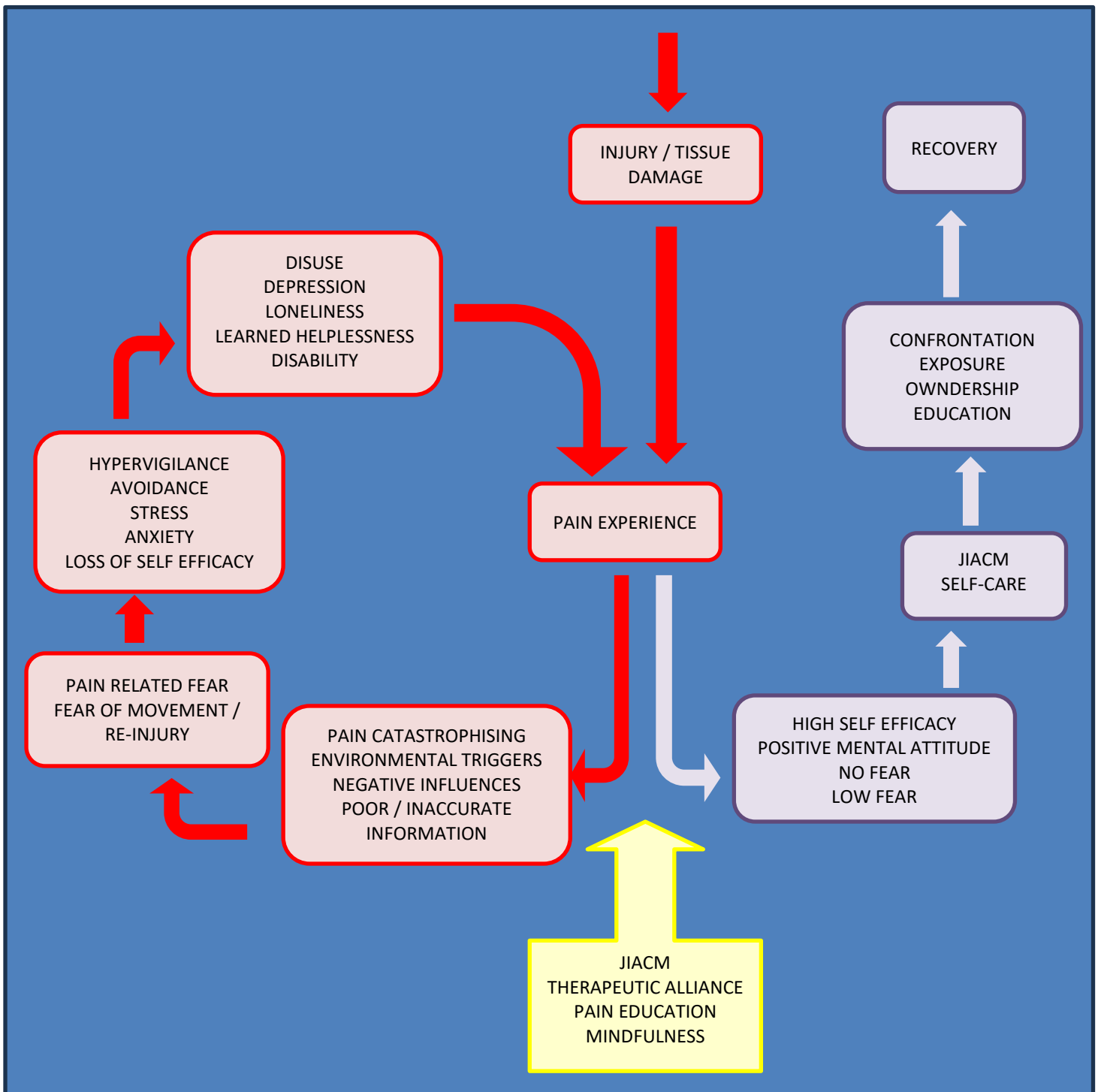
a person-centred, targeted consultation that fosters a therapeutic alliance (Psychology Today, 2025; Cuncic, 2025; BACP, 2021). This model is grounded in the BPS approach, which provides clients the time and a safe space to express how their condition manifests and what they would like to achieve from the session (Fairweather & Mari, 2015, Ch5, p56-70). A comprehensive BPS history is collected regarding the condition and lifestyle, considering physical, mental, and social factors (NHS Scotland, 2023). A thorough ROM assessment and special tests are recorded to pinpoint areas of restriction.

The Jing Method is founded on a positive caring touch. Its soft tissue techniques including **H**eat, **B**reathwork, and soothing Amma work along the bladder meridian to calm the fight-or-flight sympathetic nervous system and activate the parasympathetic nervous system. It incorporates both Direct and Indirect **F**ascial techniques, **M**uscle and **T**rigger Point techniques, **A**cupressure Points, various **S**tretching techniques (Finando, 2005, Frost, 2013, Travell, 2019, Myers, 2020, Ibrahim, 2020, Schleip, 2022, Gibbons, 2022, Tikhile, 2024, Tariq, 2024, Cole 2024), and the **T**eaching of self-care, represented by the acronym **HFMAST** (Fairweather & Mari, 2015 Ch 1, pp6). The National Institute of Complementary and Integrative Health (NICIH, 2019) found that all techniques were beneficial across various health conditions.

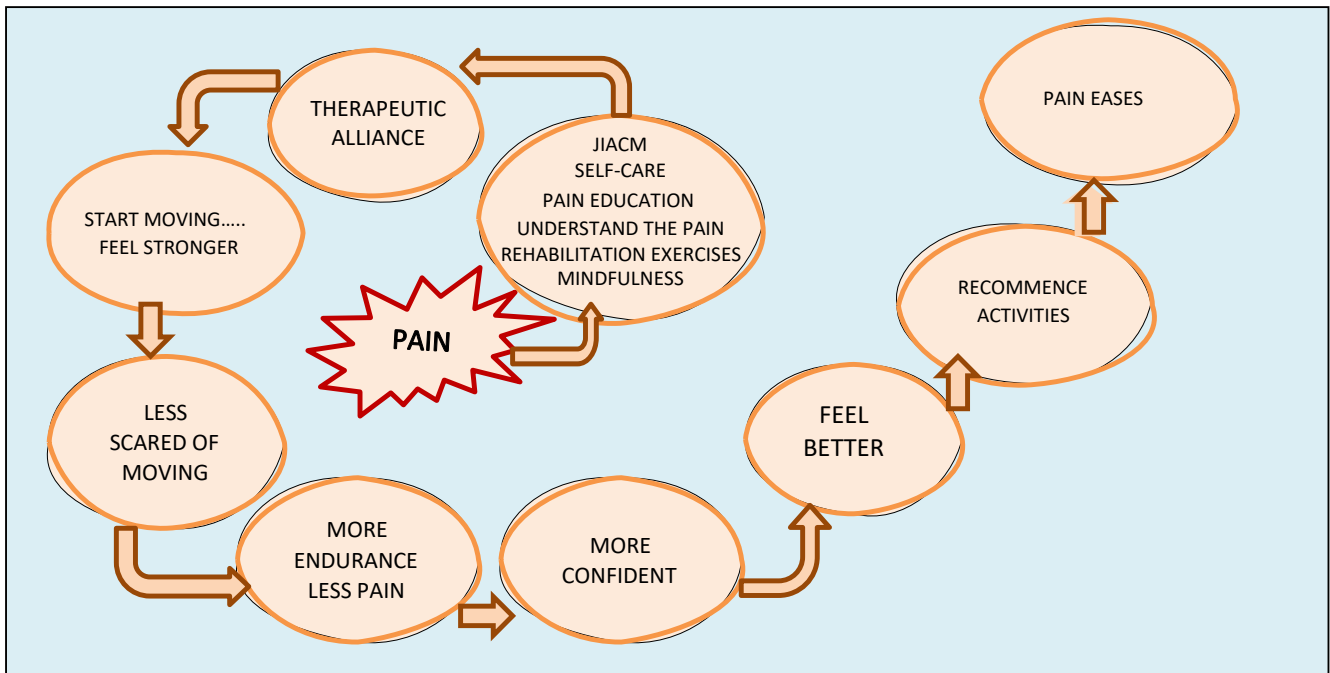
The teaching of self-care includes pain education and support. It incorporates a patient-driven action plan featuring paced rehabilitation

exercises and stretching techniques, mindfulness support, and an ongoing personalised guide to assist with pain management, reduce stress and pain, and enhance health and well-being (Hölzel, 2011, NHS England, 2021, Fayaz 2015, Bernal-Utrera 2020, People in Pain network, 2021, Loule, 2021, NHS Mersey 2022, Day, 2024). This approach empowers the client to actively take control of their health and healing journey and to make the behavioural changes necessary for long-term recovery.

The JIACM training is a published system and fully replicable (Fairweather & Mari, 2015). While all treatments are patient-driven and personalised, qualified JIACM Therapists can deliver the massage protocols and the JIACM method, ensuring that treatments are consistent, effective, and high-quality.



Diag 6: Based on the Chronic pain cycle described by Fairweather & Mari, 2015, developed by Wendy Middleton-Smith, 2025: The intervention of Jing Advanced Clinical Massage, including therapeutic alliance, education, and mindfulness training, can enable the patient to transition from the left-hand chronic pain cycle to the right-hand recovery journey. Drawn by Wendy Middleton-Smith.



Diag 7: The pain recovery pathway based on a drawing by Kent Osteopathic Clinic: Understanding Chronic Pain. Adapted to the JIACM method. Drawn by Wendy Middleton-Smith

This study

This evidence supports the proposed study of an alternative option for individuals suffering from CSP: examining the effects of The Jing Method™ of Advanced Clinical Massage on non-specific chronic SP in adults.

This pilot study explores the combination of caring touch with the Jing holistic treatment model. Utilising a standardised treatment plan known as the Shoulder Girdle Protocol (SGP), as outlined by Fairweather and Mari in 2015 and the expertise of a Jing Institute advanced clinical massage therapist, this study aims to build upon existing evidence regarding the effects of JIACM on measurable clinical symptoms, specifically targeting pain reduction and

improvement in restricted movement. Participants can expect to experience decreased chronic pain and an increased range of motion within six weeks. (Fairweather & Mari, 2015 Ch1, p6, Ch5 p71)

The findings could offer hope to millions suffering from chronic musculoskeletal pain and support the inclusion of JIACM in comprehensive pain reduction strategies.

Method:

Study design

The Jing Institute granted ethical approval to evaluate the Jing method for treating chronic, non-specific SP. Participants were identified and recruited through local advertisements on social media and by asking friends, family, and existing clients of the researcher to spread the word locally. Twenty-five applications were received.

Research was conducted by reviewing books and research papers, including those from the local library, accessed through university students, sourced from the personal libraries of various professionals and teachers, and verified using online resources such as PubMed, Google Scholar, and Mendeley, along with the research papers available at the Jing Institute's library, to ensure the information was relevant.

Shoulder Pain and Disability Index (SPADI) questionnaire

The Shoulder Pain and Disability Index (SPADI) questionnaire was selected as the Patient Reported Outcome Measurement (PROM) tool. It is a well-established research measurement and evaluation instrument, widely used and respected internationally (Venturin et al., 2023). Several students from the Jing Institute have already utilised it (Abbott, 2024; Murdoch, 2023; Harwood, 2018; and Chung, 2018, Appendix J1).

It addresses two outcome areas: pain level and limitations in performing daily activities (Membrilla-Mesa et al., 2015; Breckenridge et al., 2011; Roy, 2009; RCS, 2010, Appendix D2), and can be completed in under three minutes.

Within-subjects design study

The study employs a within-subjects design, which serves as a reliable, well-documented, and powerful research tool (Carroll, 2023; Greenwold, 1976; Sedgewick, 2024).

Research Study

All applicants received an introductory letter (Appendix D2) detailing the study, its purpose, and location. They were also invited to an initial screening to confirm adherence to inclusion criteria (Appendix L1).

A complete health history was obtained regarding the participant's shoulder condition. Participants confirmed their availability for the hands-on treatments section of the study, downloaded the mobile app PhysiApp to complete the SPADI questionnaires, and provided consent for the study.

Twenty-one people volunteered for the study, and fourteen participants were accepted and gave their consent. One participant withdrew during week six of the control phase due to stress, and two were unable to attend all intervention sessions.

Quantitative results were obtained from eleven participants: 5 females and 6 males, aged between 25 and 80. All had suffered from SP for a duration of 8 months to 16 years, and all experienced pain along with active shoulder restriction.

CONDITIONS	Frozen shoulder, strain, stretched ligaments, pinched nerve, pulled muscle, ligament tear, osteoarthritis, broken clavicle (repaired), thickened bursa, supraspinatus tear (repaired), wear and tear and rotator cuff injury
INTERVENTIONS RECEIVED	surgical repair, physiotherapy, exercises, chiropractic treatment, sports massage, aromatherapy massage, yoga, osteopathy, reiki, guided injections, cortisone injections, nerve injections, paracetamol, NSAIDs (Ibuprofen), pain clinic, acupuncture, and heat

Table 1. Conditions that applicants listed as potentially contributing to their discomfort over previous years. Interventions participants had received during the acute phase of their tissue damage.

All conditions occurred at least 8 months before the start of the study, and some participants had experienced CP for years. None of the interventions received by participants had resulted in complete or lasting relief from their symptoms.

Participants reported symptoms including gnawing, deep, constant, or intermittent pain, poor or broken levels of sleep, low mood, depression, restricted ROM, reduced ability to work, and withdrawal from social activities.

The researcher also observed active, passive, and resisted pain; allodynia; fear avoidance and guarding; hypersensitivity; trigger point pain patterns; and hyperalgesia.

Study Phase 1: The Control period. Weeks 1 to 6.

The participants continued their normal daily lives and activities, received no intervention, and were requested not to commence any new treatments for their shoulder to ensure that variables of change were removed from the study. They were to complete the SPADI questionnaire each week for six weeks on PhysiApp.

Study Phase 2: The Intervention period. Weeks 7 to 12.

Each participant received an initial consultation and provided informed consent for massage.

The sessions adhered to the JIACM SGP at the researcher's clinic sites to ensure that treatment variables were eliminated from the study.

The initial and final sessions included detailed ROM testing, special orthopaedic tests, and pain pattern evaluation recording.

Each session included a brief consultation and a 60-minute hands-on massage (Appendix E1 and E2).

The self-help homework exercises were demonstrated and practiced, and a homework instruction sheet was provided (see Appendix C1), along with

details for the videos and images of all the exercises on PhysiApp (Appendix C2). Each participant received two tennis balls and an exercise band.

Participants were asked to complete the exercises on Monday, Wednesday, and Friday each week or as close as their work schedule permitted, to ensure all participants eliminated potential variables from the study. All participants completed a SPADI questionnaire on PhysiApp on Day 5 after the treatment.

Study Phase 3: The Post-Treatment Control period. Weeks 13 to 16.

At the end of the six-week intervention, all participants were asked to continue the self-care exercises for an additional four weeks and to complete the final post-treatment questionnaire at the end of that period to evaluate the long-term or enduring results from the intervention.

All data from all participants was fully anonymised, and results were collated, analysed and considered.

Results

SPADI Combined Scores

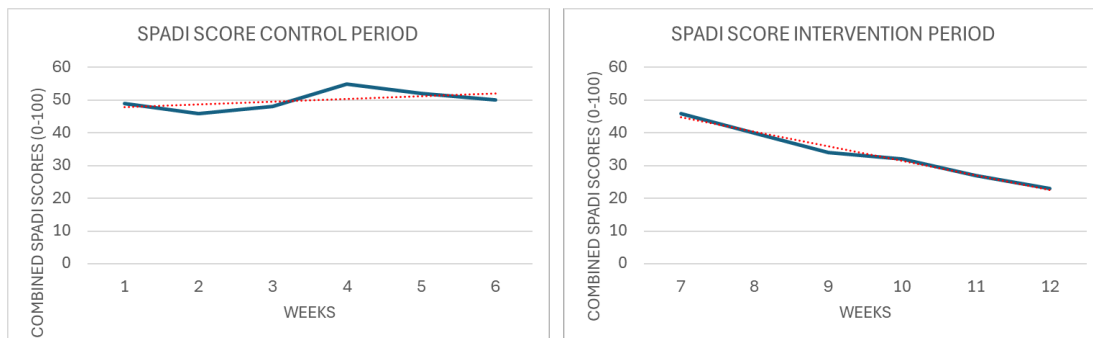


Fig 1: During the control period, there was a slight change (1%) in the average combined SPADI scores. All participants experienced a clinically significant improvement in their SPADI scores during the intervention period, resulting in an overall average improvement of 57% after six treatments.

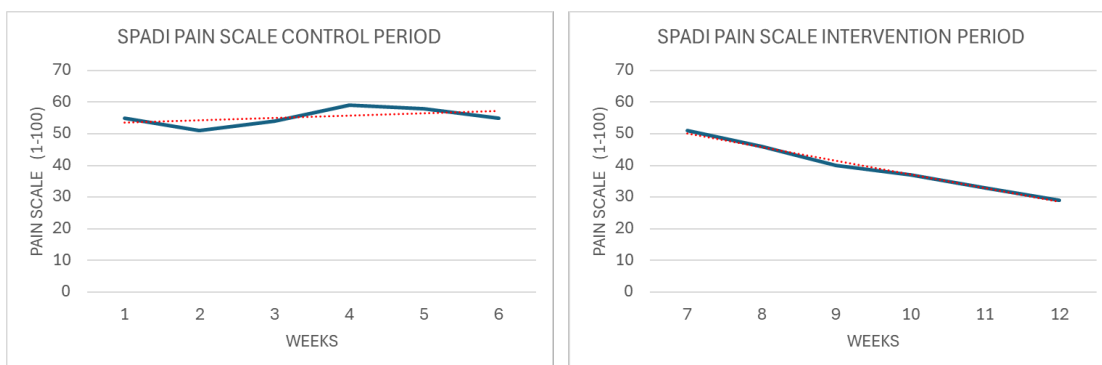


Fig 2: The average Pain SPADI scale displayed no change during the control period. All participants experienced reductions in pain, leading to an overall improvement of 51% after the intervention period.

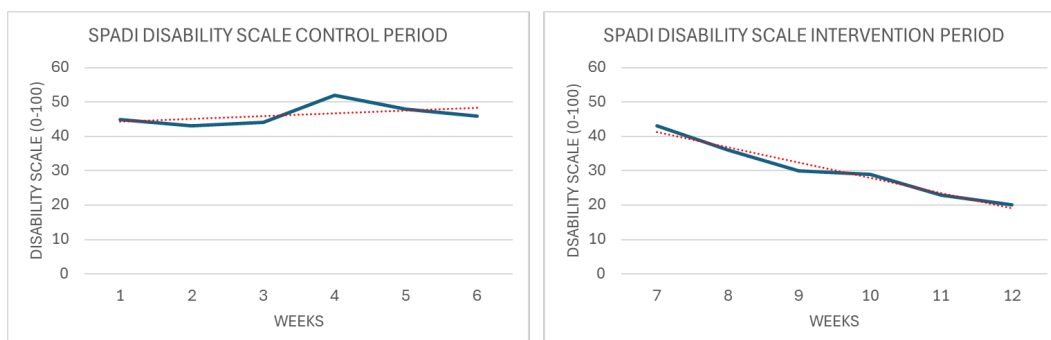


Fig 3: The average Disability SPADI score showed little change (1%) during the control period. Following the 6-week intervention, disability improved by an average of 56%.

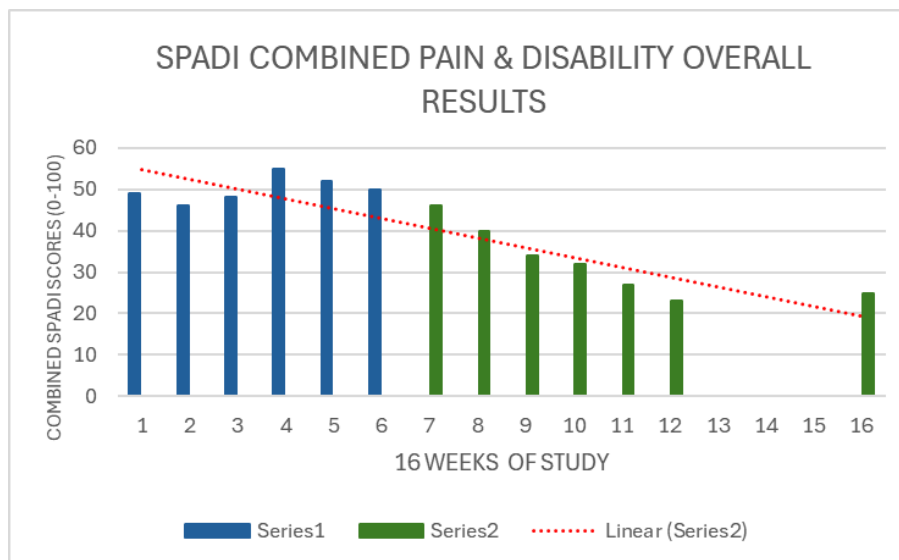


Fig 4 This shows the trend of improvement in combined SPADI scores for all participants during the 6-week intervention period (Series 2 weeks 7-12) and a slight increase (2%) during the 4-week follow-up period (week 16).

Adherence to self-care, mindfulness, and rehabilitation exercises was reflected in improved feelings of well-being and reported sleep quality; however, no correlation was found between adherence and results (Appendix K5 and K7).

The Pain pattern body maps and ROM scores not only reflected but also surpassed the overall quantitative results, providing a more accurate representation of the results. All individual results are shown in appendix K.

Discussion

Summary

The study suggests that adults suffering from Non-Specific CSP benefit from the Jing Method of Advanced Clinical Massage, as evidenced by reduced pain levels, increased range of motion, improved sleep quality, and an enhanced sense of well-being, ultimately leading to a reduction in central sensitisation symptoms and stress levels (Appendix K1 – K7).

Therefore, using the Jing method may be regarded as an effective treatment strategy either alongside or as an alternative to lengthier, less effective, higher-risk or higher-cost interventions such as surgery, NSAIDs, and PMP's (Alaca, 2025; Gruson, 2008; NHS UK, 2023).

The benefits of JIACM come without side effects (Parisien, 2022, Cuomo, 2019, NHS Southern, 2023). It would improve, support, and enhance other treatments as part of a holistic multi-modal patient-centred approach to achieve reduced pain, increased range of movement, and better sleep quality (Cuomo, 2019; WHO, 2019; Talbot IASP, 2024).

The study reinforces previous research, yielding similar results, in which signs and symptoms (S&S) along with overall SPADI results improved for all

participants (Murdoch, 2023, Harwood, 2018, Chung, 2018, Appendix J1). The overall combined improvement in SPADI score was 57% for the entire group.

Two individuals, comprising 18% of the participants, demonstrated a notable improvement in their SPADI score, achieving an average score of 91%. Six individuals, representing 55% of participants, attained good levels of improvement in their SPADI scores, averaging 61%. Three individuals, 27% of participants, experienced a lower, yet still statistically significant improvement in their average SPADI score, of 27%.

Results indicated that the intervention period was crucial in achieving improvements in SPADI, emphasising the significance of the JIACM model, which includes:

- Hands-on manipulation of the soft tissues of the body, for pain reduction and increased ROM (Nasiri, 2024 and Chen 2024), enhanced mental well-being and improved sleep health (Danstan, 2024).
- A positive and caring human touch is vital for reducing pain and stress (Cherkin, 2003; McGlone, 2024; Sandnes, 2022; Terzi, 2025) and offers calming and reassuring benefits (Hippocrates, 400 BC; NHS, 2024; Hauck, 2024).
- HFMAST techniques for pain and stress reduction and increased ROM (Tikhile, 2024, Fairweather & Mari, 2015, NICIH, 2019, Hung 2023, Çetin, 2024, Chen 2024, Delano, 2024).

- Comprehensive BPS history (NHS Scotland, 2023) along with ongoing pain education and support (Fayaz, 2015, NHS England, 2021).
- Therapeutic Alliance (Psychology Today, Cuncic, 2025, BACP, 2021) providing a safe space for clients to describe their experience and what they would like to achieve.
- Self-care – an empowering patient-driven action plan of paced rehabilitation exercises, stretches, and mindfulness challenges (Lewis 2012, Hidalgo, 2018, Antcliff, 2018, People in Pain network, 2021, Loule, 2021, NHS Mersey 2022, Litchfield 2023, Day, 2024).

The Jing Method asserts that combining multiple techniques yields a greater impact than using each one individually, following the principle that the whole exceeds the sum of its parts (Fairweather & Mari, 2015 Ch1, p4; Ibrahim, 2020; Meyer-Junco, 2024; Day, 2024).

Additional benefits emerged when participants engaged in self-care and began taking control of their healing journey, positively embracing the BPS model and therapeutic alliance (Abbot, 2024; Scott, 2024; Harte, 2024; Engel, 1977; Fairweather & Mari, 2015; Meints, 2018).

Lower levels of SPADI score improvement were observed when pacing parameters were exceeded (Antcliff, 2018; NHS Mersey Care, 2022),

potentially due to local irritation and inflammation. Sports injuries sustained by two participants during the intervention period may have affected results.

The study supports previous JIng dissertations investigating the effect of massage on CSP, yielding similar results (Murdoch, 2023; Harwood, 2023; Chung, 2018). It has demonstrated that patients can expect a reduced CP and an increased ROM within six weeks of JIACM treatments , 'Fix in Six' (Fairweather & Mari, 2015 Ch1 , p6). Group average improvements were observed after the first treatment, with a significant 10% decrease in average SPADI scores following the second treatment.

Along with the SPADI results, all participants reported positive advancements in every aspect of well-being (Appendix F). There was no direct correlation between self-help adherence and ROM results; this may be because all participants engaged in some or all self-care practices (NHS England, 2021).

The study utilised a within-subjects design. The significant advantage is that, while all participants undergo the same treatments and variables, each subject is compared only to themselves, thereby eliminating the variable of individual differences. Many other study methods require much larger sample sizes to achieve the same level of statistical significance (Carroll, 2023; Greenwold, 1976; Sedgewick, 2024).

Study limitations and Improvements for the future

This was a small-scale study, so having a larger number of participants would have been helpful and would provide more depth. Further research is needed to support and expand upon this study, thus contributing to the growing body of evidence.

Gross (2024) identified several issues with conducting a systematic review for Cochrane on massage compared to a placebo or dummy massage, however standardisation of massage was not possible. The JIACM method is conducive to further research due to its BTEC Level 6 training, available standardisation and transparency. Established protocols and methods are published and fully replicable by trained JIACM practitioners, with over 200 JIACM research papers available. While all treatments are usually fully patient-led and personalised, a trial involving large-scale standardised JIACM treatments could be organised.

The researcher designed, organized, and recruited for this trial before performing the method; therefore, the gold-standard research methods of randomisation and double-blind procedures were not suitable for this study (Hariton, 2018, Gross, 2024). Additionally, it would not be practical to blind the therapist during a massage session, and the participants would recognise if they received a dummy massage. Thus, a within-subjects design was chosen

(Carroll, 2023; Greenwold, 1976; Sedgewick, 2024) for its high level of statistical significance.

The participants were recruited locally and were required to attend the clinic sites, which introduced some selection bias, both locally and regarding their ability to walk or drive, thereby reducing the opportunity for randomisation.

Since participation in this study was voluntary, participants had to be familiar with technology to apply, and to complete the questionnaires; thus, self-selection bias was likely present.

As the medium was physical massage, participants would need to feel comfortable receiving a massage from someone they did not know, which could contribute to self-selection bias.

Interest in volunteering increased randomisation. Reasons for taking part varied from assisting scientific research, increasing knowledge of CAM methods, interest in the possibility of a successful outcome, despair at the lack of success with previous medical and CAM methods, and being motivated by the transparency of the method and the level of training of the therapist.

The qualitative methodology involves self-reporting, and there is a possibility of competitive bias to achieve a positive result. The ROM testing and the pain

pattern diagrams are more objective and would, to some extent, reinforce or refute this; they did in fact show results that exceeded SPADI. (Appendix K7).

Recording sleep quality, stress, anxiety, and feelings of well-being on a weekly scale on an App could enhance the study and offer more insights.

Having participants record their self-care adherence on PhysiApp would help assess the impact of that adherence on results. After the study was completed, this option was found to be feasible. The signs and symptoms and wellbeing results are included in Appendix K4 and K6.

Participants often exceeded pacing parameters, resulting in irritation and activation of pain receptors, leading to two participants reporting high levels of discomfort and disability on the SPADI throughout the study. Although SPADI highlights any worst-case scenario experienced during the week, ROM tests, pain pattern maps, and increased activity levels suggest greater overall pain pattern reductions than SPADI results indicate (Appendix K4 and K6).

Since all sessions had to be identical, it was impossible to customise treatments for each client. Some participants presented with scarring from old surgery sites, compromised biotensegrity and fascial glide. The results could have improved further with a conventional series of personalised Jing Advanced Clinical client-focused treatments.

Conclusion

This research reinforces existing evidence that clinical massage therapy effectively alleviates symptoms of CSP. The Jing Method of Advanced Clinical Massage could be a valuable, reliable complementary treatment alongside conventional pain management approaches (Four Nation Strategy for Pain Management, 2022, Cuomo, 2019).

In the future, there may be a chance to collaborate on a combined study with other similar shoulder studies or to adapt the research to explore the impact of BPS factors on chronic pain and the pain reduction benefits of complementary medicine.

Beyond the transformative improvement in QOL for chronic pain sufferers, the Jing method offers enormous benefits for everyone.

This study demonstrates that the Jing Method effectively alleviates pain, subsequently reducing stress and allowing patients to return to normal life. Furthermore, industries would benefit from reduced absenteeism and improved employee well-being and happiness. There are also financial advantages for patients who can return to work sooner, as well as for the

NHS, due to decreased appointment times, lower medication expenses, and reduced surgical costs.

The combination of HFMAST techniques within the supportive framework of the Jing holistic treatment model, along with the positive and caring touch of an Advanced Clinical Massage Therapist, offers a valuable enhancement to the treatment options available for CP sufferers. It acts as a significant resource within the CAM category, particularly in the analgesic trolley model for pain management proposed by Cuomo, 2019 (Diag 5, p23). This reinforces the integration of JIACM into a comprehensive approach for pain reduction strategies (Engel 1977, Cuomo, 2019, WHO 1986, Shi 2023, Meyer-Junco 2024).

Since the JIACM method and protocols are tested, proven, published, and fully replicable, evidence-based research supports their efficacy and consistency (Appendix A2). This allows practitioners to confidently refer musculoskeletal CP patients for pain-reduction massage from a JIACM therapist.

Investing funds in a comprehensive multimodal strategy to enhance preparation and recovery care based on the BPS model may be highly beneficial for optimising positive surgical outcomes. (Engel 1977, Okafor 2023, Daştan 2024, Ibrahim 2024, Heikkala 2023, Appendix J1).

Therefore, it would benefit the NHS to establish a nationally promoted, highly visible educational framework to address these BPS issues before considering surgery. This would mean that the comprehensive Jing Institute method of pain reduction massage could automatically be included in the treatment pathway (Fayaz, 2015, McAllister, 2022, Cuomo, 2019, NHS England, 2021, NHS Scotland, 2023) along with ongoing pain education and support. JIACM therapists are well-positioned to provide this.

The findings from this study contribute to the evidence gathered in prior research and offer hope for pain relief to millions experiencing chronic musculoskeletal pain. This also reinforces the importance of including JIACM in all comprehensive pain reduction efforts.

The traditional biomedical model can address serious health issues to keep a patient alive. The BPS model, the JIACM treatment method enables the patient to recover from CP and 'live'.

Appendix A1: References

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Appendix A2: Extract from the Jing Institute Dissertation Library

Therapist	INSTR	Year	Study	LENGTH
Steven Murdoch	SPADI	2023	Effects of Jing Method Advanced Clinical Massage in Adults with Chronic Shoulder Pain	6 WKS CONTROL 6 WKS MASSAGE
Lyndsey Harwood	SPADI	2018	The effectiveness of clinical massage therapy on perceived pain and disability in tennis players with chronic rotator cuff injuries	4 WKS MASSAGE 5 SPADI
Mitshuka Chung (Suki)	SPADI	2018	Effects of the Jing shoulder girdle massage protocol in women with chronic shoulder pain	SPADI WKS 0/3/6/9/12 6 WKS MASSAGE 6 WKS CONTROL
Tracey Abbott	SPADI	2024	A review of pain and injuries attributable to the shoulder girdle; their current treatment methodologies and relevance to massage therapy in triathletes over 18.	6 WKS CONTROL 6 WKS ZOOM REHAB
Ella Scott	SPADI	2024	The Effect of Online Rehabilitation on Non Specific Shoulder Pain in Women Aged 40-60	6 WKS CONTROL 6 WKS ZOOM REHAB
Alex Watson-Bance	SPADI	2021	A comparison of treating clients online with nonspecific shoulder pain using the Jing method of advanced clinical massage	4 WKS CONTROL 4 WKS SELF MASSAGE & SC
Ellie Harte	SPADI	2023	To Investigate the efficacy of The Jing ABSTRACT Method of advanced clinical massage on adults over 30 with chronic non-specific shoulder pain	6 WEEKS ALT HANDS ON AND SELF CARE
Bonney O'Connell	DASH	2024	Evaluating the Jing Method of Advanced Clinical Massage on Shoulder Pain in CrossFit participants	6WKS CONTROL 6 WKS MASSAGE
Laura Doñate Gimeno	DASH	2023	The Effects of the Jing Method Clinical Massage on Rotator Cuff Pain in Strength Training Adults	6 WKS CONTROL 6 WKS MASSAGE
Tracey Cleeve	DASH & COHEN	2021	The Effectiveness of Using Advanced Clinical Massage by Pre-Recorded Video for a Frozen Shoulder in Menopausal Women	6 WKS CONTROL 6 WKS VIDEO SELF MASSAGE / STRETCH ETC
Leyla Kudmany	DASH	2020	Assessing The Effectiveness Of Online Guided Self Care For Those With Persistent Shoulder Pain	6 WKS CONTROL 6 WKS VIDEO SELF MASSAGE / STRETCH ETC
Susie Johnston	DASH	2020	The effects of a sixweek course of treatment using the Jing Method of clinical massage on shoulder pain in women after breast cancer surgery	6 WKS CONTROL 6 WKS VIDEO SELF MASSAGE / STRETCH ETC
Eoin O'Connell	TIMED SWIM	2018	Does Myofascial Release of the Neck and Shoulder Girdles Increase Speed for freesyle Swimmers over 100m	6 WKS CONTROL 6 WKS MASSAGE
Frances Birch	DASS	2024	Evaluating the Jing stress and chronic pain protocol for wellbeing in women aged 40-60.	67 WKS CONTROL 6 WEEKS ALTERNATING HANDS ON AND ONLINE
Jonathan Caruana	NPDIQ	2024	Evaluating the effects of the Jing method of clinical massage on non-specific neck pain in florists	6 WKS CONTROL 6 WKS MASSAGE
Nicky Clarke	GCPS	2024	aged 25-65	6 WKS CONTROL 6 WKS MASSAGE
Clare Desroches		2024	The role of massage in the treatment of chronic pain	ANALYSIS
Jayne Drew	BRISTOL IMPACT	2024	Evaluating the effects of the Jing method of clinical massage on joint pain in people with Hypermobility	6 WKS CONTROL 6 WKS MASSAGE
Cecile Dumont	DASS	2024	Evaluating the effects of the Jing Method of manual therapy on the mental well-being of women with a history of breast cancer	6 WKS CONTROL 6 WKS MASSAGE
Ely Lindsay	GCPS	2023	Evaluating an Online Advanced Clinical Massage Treatment on Pain in Adults with Temporomandibular Joint Disorder	6 WKS CONTROL 6 WKS SELF TREAT VIDEOS
Karen Smith	DASH	2023	Assessing the effectiveness of the online Jing Method of clinical massage for treating reflexologists with forearm/wrist/hand pain	6 WKS CONTROL 6 WKS MASSAGE
Anastasia Babbs	NDI & VAS	2019	Effects of myofascial release techniques in treating individuals with chronic whiplash disorders	6 WKS CONTROL 6 WKS MASSAGE
Gail Dawe		2024	Evaluate the Effects of the Jing Method Clinical Massage on the Quality of Life in Women aged 40+, diagnosed with Fibromyalgia	
Gill Jarrett		2024	Evaluating the effect of the Jing Method of clinical and sports massage on depression, anxiety, and stress in healthcare professionals	
Mandy Le Messurier		2024	The effect of rehabilitation exercises on ankle instability in non-professional footballers	
Lucia Lloyd-Clokie		2024	Evaluating the effects of the Jing Method of Clinical Massage on adults with asthma.	
Sian O'Flynn		2024	Evaluating the effects of The Jing Method™ of Advanced Clinical Massage on stress, anxiety, depression, and low mood in those with desk-based work/sedentary lifestyles	
Sheree Phelps		2024	Evaluating the effects of The Jing Method™ of Advanced Clinical Massage on stress, anxiety, depression, and low mood in those with desk-based work/sedentary lifestyles	
Elizabeth Snook		2024	Evaluating the effects of using the Jing Method of Advanced Clinical Massage to improve well-being in women with Fibromyalgia Syndrome	
Katrin Steed		2024	The effects of the Jing Method of Massage on the activity levels of women aged 40-70 with chronic hip pain	
Casey Stewart-Smith		2024	Assessing an online Jing Method Advanced Clinical Massage Protocol to treat stress in unpaid carers of children or adults with disability	
Danielle Weaver		2024	Evaluating the efficacy of Jing Advanced Clinical Massage in treating tension-type headaches in adults	
Katerina Stojanovic		2023	Evaluating the Jing Method™ of Advanced Clinical Massage on improving hand dexterity and grip function in individuals with Spinal injuries	
Gini North		2021	Can the Jing Method of Self Care Advanced Clinical Massage Have a Beneficial Effect On 'Non-Specific' Neck Pain in A Group Setting on the 'Working From home' Environment Due to Covid 19	
Angelica Forero-Rodriguez		2020	The effects of the Jing neck and shoulder protocol on the sagittal plane postural alignment of the head and shoulder	
Amelia Darlington		2018	Effects of neck and shoulder massage on male manual labour workers suffering with wrist pain	
Zuzana Young	NDI / VAS	2018	The efficiency of myofascial release in clinical massage therapy tested on chronic neck and shoulder pain	

Table 2

Appendix B1: Shoulder Pain and Disability Index (SPADI)

Research and example of the Shoulder and Disability Index (SPADI):
Shoulder Outcome Measurements: Shoulder Pain and Disability Index (SPADI) (2023) <https://www.matassessment.com/blog/shoulder-pain-and-disability-index-spadi>

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 analogue 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 is divided by 130, to give a percentage, or SPADI points score ranging from 0 to 100, with higher scores indicating more pain and disability.

The SPADI can be used in various 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 a clinically significant improvement.

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.

An online easy to use sliding cursor scale SPADI can be filled in online in a few minutes. [https://www.thecalculator.co/health/Shoulder-Pain-And-Disability-Index-\(SPADI\)-Calculator-959.html](https://www.thecalculator.co/health/Shoulder-Pain-And-Disability-Index-(SPADI)-Calculator-959.html)

Score interpretation

Given that the two components have 5 and respectively 8 items, the preliminary results range between 0 to 50 and 0 to 80, the overall result ranging from 0 to 130. The SPADI score is often presented as a percentage thus the following calculations are performed.

- Pain score in points / 50 x 100.
- Disability score in points / 80 x 100.
- Total SPADI score in points / 130 x 100.

The original SPADI research and the subsequent validations do not provide specific cut off points to separate the results into limited, medium, high or extreme disability. It is considered that the higher the score in each scale, the higher the impairment to the shoulder function.

The Minimal Detectable Changes at 90% confidence are 18% for the first scale, 13% for the second scale and 11% for the total score.

A 10 point or percentage change is usually said to be clinically relevant in distinguishing between relevant improvements after treatment in patients with shoulder conditions.

Appendix B2: SPADI Example Table

Shoulder Pain And Disability Index (SPADI)													
Assesses functional impairment of the shoulder in patients diagnosed with painful conditions.													
Pain Scale													
Please circle which point on the scale from 0 = no pain at all to 10 = worst pain imaginable, best defines the pain you are experiencing in each of the following situations:													
		No pain at all	1	2	3	4	5	6	7	8	9	10	Worst pain imaginable
1	At its worst		1	2	3	4	5	6	7	8	9	10	
2	When lying on the involved side		1	2	3	4	5	6	7	8	9	10	
3	Reaching for something from a high shelf		1	2	3	4	5	6	7	8	9	10	
4	Touching the back of your neck		1	2	3	4	5	6	7	8	9	10	
5	Pushing with the involved arm		1	2	3	4	5	6	7	8	9	10	
Disability scale													
Please circle the degree of difficulty on a scale from 0 = no difficulty to 10 = so difficult it requires help while performing the following activities:													
		No difficulty	1	2	3	4	5	6	7	8	9	10	So difficult it requires help
6	Washing your hair		1	2	3	4	5	6	7	8	9	10	
7	Washing your back		1	2	3	4	5	6	7	8	9	10	
8	Putting on a teshirt otr jumper		1	2	3	4	5	6	7	8	9	10	
9	Putting on a shirt that buttons down the front		1	2	3	4	5	6	7	8	9	10	
10	Putting on your trousers		1	2	3	4	5	6	7	8	9	10	
11	Placing an object on a high shelf		1	2	3	4	5	6	7	8	9	10	
12	Carrying a heavy object of 10lbs/4.5kg?		1	2	3	4	5	6	7	8	9	10	
13	Removing something from your back pocket?		1	2	3	4	5	6	7	8	9	10	

Appendix C1: Self-Care Handouts

Summary of Self-Care Handouts Week 1 to 6

Handout 1 (Weeks 1 and 2)

Exercise	Frequency	Repetitions
Mindfulness Breathing	3 times per week	Once a day for 3 – 5 mins
Chin Retractions	3 times per week	1 x 8-10 reps
Wall finger walking.	3 times per week	1 minute

Handout 2 (Week 2)

Exercise	Frequency	Repetitions
Mindfulness Breathing	3 times per week	Once a day for 3 – 5 mins
Chin Retractions	3 times per week	1 x 8-10 reps
Wall finger walking/ball circles	3 times per week	1 x minute
Arm Pendulum	3 times per week	1 x 8-10 reps
Rotator Cuff Strengthening	3 times per week	1 x 6-8 reps
Ball punches	3 times per week	1 x 8-10 reps
Overhead Single Arm Press	3 times per week	1 x 8-10 reps
Proprioception for shoulder	3 times per week	Once a day

Handout 3 (Weeks 3 and 4)

Exercise	Frequency	Repetitions
Mindfulness Breathing	3 times per week	Once a day for 3 – 5 mins
Mindful Walking	3 times per week	Once a day for 10-15 mins
Chin Retractions / tucks	3 times per week	1 x 8-10 reps
Wall walking / circles	3 times per week	30 secs each arm
Arm pendulum	3 times per week	30 secs each arm
Rotator cuff strengthening	3 times per week	1 x 8-10 reps
Ball punches	3 times per week	1 x 8-10 reps
Overhead Single Arm Press	3 times per week	1-2 x 8-10 reps
Scapula presses	3 times per week	1 x 8-10 reps
Lat raises seated	3 times per week	1 x 8-10 reps
Pec stretch	3 times per week	2-3 repetitions

Handout 4 (Weeks 5 and 6)

Exercise	Frequency	Repetitions
Mindfulness Breathing	3 times per week	Once a day for 3 – 5 mins
Mindful Walking	3 times per week	Once a day for 10-15 mins
Chin Retractions with band	3 times per week	1 x 8-10 reps
Arm pendulum to side	3 times per week	30 secs each arm
Rotator cuff strengthening (ext/int)	3 times per week	1 x 6-8 reps
Lat pull down band over door	3 times per week	1-2 x 8-10 reps
Ant/Lat/Post raises seated with tennis balls or band	3 times per week	1-2 x 4-5 reps
Flying. Fwd press with Pec Stretch on rolled mat with tennis balls or band	3 times per week	2 x 6-8 reps
Seated rows with band	3 times per week	2 x 8-10 reps
Squat, Reach for the Stars stretch	3 times per week	1-2 x 5-6 reps
Proprioception for the shoulder	3 times per week	30 seconds each arm

Table 3: Handout Summary

Self-Care Handouts 1-4

Handout 1 Week 1

WENDY MIDDLETON-SMITH BTEC LEVEL 6: Self-Identified, Non Specific, Chronic Shoulder Pain Breathwork and Self-Care Handout 1 (Week 1)			
Exercise	ALWAYS STAY WITHIN YOUR COMFORTABLE AREA OF MOVEMENT	Frequency	Repetitions
Self care	<p>***NOTHING SHOULD HURT**</p> <p>You may have found during your massage session that there were several trigger points, which melted away during the session. The muscles where these were found may have felt tense, painful or numb for some time. Now the muscles are more supple and free and to prevent any discomfort, it is important to keep the area moving.</p> <p>Some heat on the area each day (wheat bag, hot water bottle, warm wet flannel), then mobilising will help.</p>	Daily as needed	As often as required
Mindfulness Breathing Control	<p>Stand, sit or lie comfortably with ears stacked over shoulders, shoulders over hips.</p> <p>Take a deep breath in, lifting from the sternum, the upper chest area. Allow the tummy to completely relax and pop out.</p> <p>Breathe out from the scapula, drawing the shoulder blades down into the back pockets.</p> <p>Breathe in for a count of 4. Hold for 2. Breathe out for a count of 4.</p>	3 times per week or as needed	Once a day for 3 – 5 mins
A wonderful moment of peaceful 'me' time!			
Chin Retractions / Tucks	<p>Stand or sit tall. Push the chin backwards horizontally. Keeping looking forwards. If you are seated, push the lower part of the back of your head back into the cushions. Then think of lifting at the back of the head to lengthen the neck</p> <p>You should feel a wonderful relaxing stretch down the back of the neck and into the shoulders</p>	3 times per week	1 x 8-10 reps

Table 4: Week 1 Handout

Handout 2 Week 2

WENDY MIDDLETON-SMITH BTEC LEVEL 6: Self-Identified, Non-Specific, Chronic Shoulder Pain Breathwork and Self-Care Handout 2 (Week 2)

Exercise	ALWAYS STAY WITHIN YOUR COMFORTABLE AREA OF MOVEMENT **NOTHING SHOULD HURT**	Frequency	Repetitions
Self care	You may have found during your massage session that there were several trigger points, which melted away during the session. The muscles where these were found may have felt tense, painful or numb for some time. Now the muscles are more supple and free and to prevent any discomfort, it is important to keep the area moving. Some heat on the area each day (wheat bag, hot water bottle, warm wet flannel), then mobilising will help.	Daily as needed	As often as required
Mindfulness Breathing Control A wonderful moment of peaceful 'me' time!	Stand, sit or lie comfortably with ears stacked over shoulders, shoulders over hips. Take a deep breath in, lifting from the sternum, the upper chest area. Allow the tummy to completely relax and pop out. Breathe out from the scapula, drawing the shoulder blades down into the back pockets. Breathe in for a count of 4. Hold for 2. Breathe out for a count of 4.	3 times per week or as needed	Once a day for 3 – 5 mins
Chin Retractions / Tucks	Stand or sit tall. Push the chin backwards horizontally. Keeping looking forwards. If you are seated, push the lower part of the back of your head back into the cushions. Then think of lifting at the back of the head to lengthen the neck. You should feel a wonderful relaxing stretch down the back of the neck and into the shoulders	3 times per week	1 x 8-10 reps
Arm /finger wall walking shoulder flexion. Ball circling	Facing the wall, stand about 6-8 inches away or as comfortable. Walk your fingers out from the centre of an imaginary clock to each of the numbers on the clock, going outwards as far as you can comfortably go. Then repeat with the other hand. Week 2: add ball circles on the wall with tennis ball. Too easy? Keep your core engaged with tummy in, bottom tucked under, so you never arch your back, move an inch nearer the wall and repeat. Or try turning side on to wall.	3 times per week	1 minute
Arm Pendulum / Pendular exercises	Stand one foot forwards, lean forwards putting hand on thigh or elbow on table to take the weight of the upper body. Stand so the working arm is clear of the leg. Initially start with arm relaxed and long and allow a gentle slow pendulum motion back and forth, then side to side, then take the hand in small circles, allowing the weight of the arm to create space in the shoulder joint. Stay pain free and relaxed	3 times per week	1 minute
Rotator cuff strengthening / Resisted shoulder ext rotation	Seated, feet on the floor. Bend elbows so forearms are horizontal in front of you. Lock one elbow in close to side and keep the arm still as an anchor. Hold band in both hands and rotate the free arm slowly out to the side, hold for a second and then slowly rotate back to start	3 times per week	6-8 repetitions
Ball punches / (Video: Lunge with bilateral resisted. NB we are not doing the lunge, initially we concentrate on the stretch)	Stand with feet hip distance apart. Holding the balls up in front of your shoulders, step the right leg forwards diagonally across in front of the left leg, whilst 'punching' slowly forwards with the right arm, twisting the palm to the floor and allowing a good stretch and opening across the upper back allowing the right scapula to glide forwards. Slowly return to standing with arms in front of chest. Repeat the other side. The video is a much more advanced move than we need for this rehab program. We are not doing a lunge in the start of this rehab, we concentrate on the stretch, but this can progress to using a band as per the video.	3 times per week	8-10 repetitions
Overhead / single arm shoulder press	Standing or seated. Start seated to protect the back. If seated, feet flat on the floor so a good stable base. Sit on the band. Hold the band with both hands by the shoulders. Slowly and steadily push the arms overhead as far as comfortable, one at a time. This can progress to both hands together.	3 times per week	8-10 repetitions
Proprioception of the shoulder	Gently throw the ball against the wall in different directions and heights and catch in one hand. If this is easy, and you can do it, you could progress to juggling two balls. If this is too challenging for your injury, gentle stretches with a band in similar different directions will also work by encouraging the muscles to strengthen and perform in different	3 times per week	8-10 repetitions

Table 5: Week 2 Handout

ADD IN EXERCISES AS YOU CAN AND ALWAYS WORK WITHIN YOUR RANGE OF COMFORTABLE MOVEMENT.
THIS IS REHABILITATION. IT IS OK TO WORK THE MUSCLES, BUT NOTHING SHOULD HURT

Handout 3 Weeks 3 and 4

WENDY MIDDLETON-SMITH BTEC LEVEL 6: Self-Identified, Non Specific, Chronic Shoulder Pain Breathwork and Self-Care Handout 3 (Week 3 & 4)

Exercise	ALWAYS STAY WITHIN YOUR COMFORTABLE AREA OF MOVEMENT **NOTHING SHOULD HURT**	Frequency	Repetitions
Self care	Once again, some heat and mobilising each day to help keep those muscles relaxed and comfortable. Plus keep drinking plenty of water.	Daily as needed	As often as required
Mindfulness Breathing Control	Stand, sit or lie comfortably with ears stacked over shoulders, shoulders over hips. Hands on sides of lower ribs. Take a deep breath in, lifting from the sternum, think of the ribs expanding outwards into your hands. Allow the tummy to completely expand and help draw in more air into the lungs. Exhale by dropping the ribs and fully exhale. Inhale for 4-5 seconds, hold for 1-2 seconds and exhale for 4-5 seconds.	3 times per week or as needed	Once a day for 3 - 5 mins
Mindful Walking	Find somewhere with good ground. Relax the shoulders and retract chin, lift neck tall stretching the back of your neck before you start. Then walk purposefully, allowing arms to swing naturally. Think of your breathing first. In for 4-5, hold for 1-2, out for 4-5. Then its time to observe mindfully. Listen to the sounds of birds or leaves, notice the colours, patterns or shapes of nature. Smell the different foliage as you pass. Feel the wind on your skin, the clothes, difference textures.	3 times per week	10-15 mins
Chin Retractions / Tucks	Stand or sit tall. Push the chin backwards horizontally. Keeping looking forwards. If you are seated, push the lower part of the back of your head back into the cushions. Then think of lifting at the back of the head to lengthen the neck. Use this as the starting position for all exercises	3 times per week	1 x 8-10 reps
Arm /finger wall walking shoulder flexion.	Warming up the area. Facing the wall, and side on to vary position and challenge. Then repeat with the other hand. Repeat with ball circles or ball bouncing on the wall with tennis ball	3 times per week	30 seconds each arm
Arm Pendulum / Pendular exercises	More warm up/mobilisation. Do a few pendulum and or circles very slowly to continue create space in the shoulder joint.	3 times per week	30 seconds each arm
Rotator cuff strengthening Resisted shoulder ext rotation See video on ball Resisted Ext rotation	Seated, feet on the floor. Bend elbows so forearms are horizontal in front of you. Lock one elbow in close to side and keep the arm still as an anchor. Hold band in both hands and rotate the free arm slowly out to the side, hold for a second and then slowly rotate back to start. If you are ready for more challenge, have a go holding a can of beans or half empty small (500ml) water bottle This can gradually progress to the two handed version Resisted Ext rotation on a ball, shown in the last video	3 times per week	8-10 repetitions
Ball punches / Lunge bilateral resisted Ball punches / Lunge with bilateral resisted	Step this up by holding band in both hands and punching forwards with band, rotating thumb to floor. To make this a little harder, repeat with a can of beans, a half full small water bottle or a very small dumbbell (250g - 500g). The movement is more important than weight. And of course you can progress this and step forwards in to a lunge if you wish to! This adds some cardio and leg strength. But the important bit is thumb to floor to get the movement.	3 times per week	8-10 repetitions
Overhead / single arm shoulder press	Standing or seated, feet flat on floor. Safe back position. I prefer seated to protect the back. This can progress to both hands together, but be ultra careful to keep tummy engaged and bottom tucked under to protect the back. Never lean back.	3 times per week	8-10 repetitions
Scapula presses / protraction at 90 degrees	Start against the wall, lean in arms straight. The arms do not move. Keep knees soft. Push away from the shoulders allowing shoulder blades to slide apart, then drop the body back through towards the wall allowing the shoulder blades to squeeze together. This can be progressed further if desired, by repeating whilst kneeling on hands and knees	3 times per week	8-10 repetitions
Lateral raises seated (shown with weights in standing)	Seated, sitting on a band held in both hands. Straighten arms but keep elbows soft. Lift arms together slowly out to the sides as far as comfortable and slowly lower against the resistance of the band. This can progress to raises with cans of beans or half filled 500ml water bottle	3 times per week	8-10 repetitions
Pec stretch	Take a rolled towel or yoga mat, or a pillow folded lengthwise and put it on the bed or floor as comfortable. Then lie with the towel lengthwise down your spine. Take arms straight up to the ceiling, elbows slightly soft. Open arms out slowly and allow the arms to lower towards the bed/floor as far as is comfortable out to the sides, feeling the stretch gently through the chest and upper arms. Hold the stretch for 25-30 seconds. Stay within pain free area.	3 times per week	2-3 repetitions

USE 2 UNWEIGHTED EXERCISES AS YOUR WARM UP - EG WALL WALKS / PENDULUM / NO WEIGHT PUNCHES

ALWAYS PERFORM EXERCISES WITHIN YOUR RANGE OF COMFORTABLE MOVEMENT

PLEASE INCLUDE THE PEC STRETCH TO FINISH

Table 6: Week 3&4 Handout

THIS IS REHABILITATION FOR THE SHOULDER. IT IS OK TO WORK THE MUSCLES, BUT NOTHING SHOULD HURT
WE WOULD LIKE TO PERFORM THE HOMEWORK ON MONDAY, WEDNESDAY AND FRIDAY
PLEASE RECORD ON THE PHYSIAPP WHEN YOU COMPLETE EXERCISES

Handout 4 Weeks 5 and 6

WENDY MIDDLETON-SMITH BTEC LEVEL 4: Self-Identified, Non Specific, Chronic Shoulder Pain Breathwork and Self-Care Handout 4 (Week 5 & 6)

Exercise	ALWAYS STAY WITHIN YOUR COMFORTABLE AREA OF MOVEMENT **NOTHING SHOULD HURT**	Frequency	Repetitions
Self care	Once again, some heat and mobilising each day to help keep those muscles relaxed and comfortable. Plus keep drinking plenty of water.	Daily as needed	As often as required
Mindfulness Breathing	Stand, sit or lie comfortably Inhale for 4-5 seconds, hold for 1-2 seconds and exhale for 4-5 seconds.	3 times per week	Once a day for 3-5 mins
Mindful Walking	Walk purposefully, allowing arms to swing naturally. Breathing first. In for 4-5, hold for 1-2, out for 4-5 Observe mindfully. Listen. Look. Smell. Feel.	3 times per week	10-15 mins
Chin Retractions with band	Sit tall. Place band behind your head. Push the lower part of the back of your head back into the band. Hold for 2-3 seconds, then release, keeping ears back over shoulders	3 times per week	1 x 8-10 reps
Arm Pendulum / Pendular exercises	More warm up/mobilisation. Get close to table, in safe back position as usual to start, then rotate to side, allowing arm to lower out to side, down towards the floor. Do a few pendulum and or circles very slowly to continue create space in the shoulder joint.	3 times per week	30 seconds each arm
Rotator cuff strengthening Resisted shoulder ext & int rotation	Seated, feet on the floor. Bend elbows so forearms are horizontal in front of you. Lock one elbow in close to side and keep the arm still as an anchor. Hold band in both hands and rotate the free arm slowly out to the side, hold for a second and then slowly rotate back to start. Then reverse. Tie band to chair/door/ something solid. Tuck elbow in tight to side, and rotate hand across in front of you towards tummy	3 times per week	1 x 6-8 reps
Lat pull down over door	Place band over door (or loose knot over a closed door). Keep chest same distance (6in / 150cm) from door throughout. Hold band with both hands overhead. Bending arms a little as you pull down. Gradually pull down towards your armpits. Think of pulling your shoulder blades down into your back pockets and feel the large back muscle work, staying in safe back position. Back stays straight and safe.	3 times per week	1-2 x 8-10 reps
Anterior/ Lateral/ Posterior raises seated with tennis balls/ band	Seated, sitting on a band held in both hands. Straighten arms but keep elbows soft. First do this exercise for three days with tennis balls to get good form, if it is pain free and easy, progress to band. Lift arms together slowly out to the front as far as comfortable and slowly lower against the resistance of the band. Then raise to the front as far as comfortable and slowly lower. And then raise the arms back behind you. All three directions make one repetition.	3 times per week	1-2 x 4-5 reps
Flying. Forward press with pec stretch over rolled mat with tennis balls / band	Lie with the towel/mat/roller lengthwise down your spine. Tennis balls or band in hands by chest. Press arms straight up to the ceiling, elbows slightly bent. Allow the shoulder blades to round forwards to work the chest muscles. Open arms out to sides slowly and allow the arms to lower slowly towards the bed/floor as far as is comfortable, bending the arms or slide along to loosen the band as needed to reduce the workload and allow the stretch. Feel the stretch gently through the chest and upper arms, for 1-2 seconds. Stay within your pain free range. Then repeat. Hold last stretch for 25-30 seconds	3 times per week	2 x 6-8 reps
Seated rows with band	Seated on chair or floor as comfortable with band around feet. Always keeping back straight. Lean forwards, straighten arms, allow shoulders to round forwards, and take hold of band with both hands. Band arms as you pull hands back to side of waist band and work the back muscles	3 times per week	1-2 x 8-10 reps
Squat, Reach for the Stars stretch	It can help to have a narrow book or wooden block beneath heels to start with. Hold on to chair or table to keep your balance. Standing with feet hip distance apart. Keep looking forwards with back straight and safe. Squat down, pushing bottom backwards and down, nose over knees, bringing hands together by your nose. Allowing a stretch down the back of the calves towards the heels. Then stand up reach up to the stars, spreading fingers wide and allowing the full long stretch down one side of your body, then the other staying within your pain free zone. Two slow stretches each side, then back to squat. Progress - make it tough by standing on cushion or soft pillow for the squat. Or raise toes on a small book or block, or a step and rise up on to your toes. Always hold on for balance when trying a new move.	3 times per week	1-2 x 5-6 reps
Proprioception for shoulder	Gentle throwing against the wall or with a partner, or why not try some juggling. Some gentle racquet sport if the shoulders allow. Keep yuppies against the wall with a soft ball. Swapping hands with the racquet. Keeping it gentle and pain free, not competitive!	3 times per week	30 secs to 1 minute per arm

USE 2 UNWEIGHTED EXERCISES AS YOUR WARM UP - EG WALL WALKS / PENDULUM / NO WEIGHT PUNCHES

ALWAYS PERFORM EXERCISES WITHIN YOUR RANGE OF COMFORTABLE MOVEMENT

PLEASE INCLUDE THE PEC STRETCH TO FINISH

THIS IS REHABILITATION FOR THE SHOULDER. IT IS OK TO WORK THE MUSCLES, BUT NOTHING SHOULD HURT
WE WOULD LIKE TO PERFORM THE HOMEWORK ON MONDAY, WEDNESDAY AND FRIDAY
PLEASE RECORD ON THE PHYSIAPP WHEN YOU COMPLETE EXERCISES

Table 7: Week 5&6 Handout

Appendix C2:

Physiapp Home Care Weeks 1 to 4

BTEC SHOULDER RESEARCH PROGRAMME WEEK 1-4

****ALWAYS STAY WITHIN YOUR PAIN FREE RANGE****

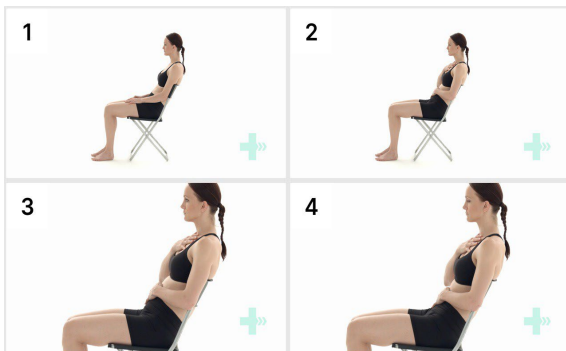
Wendy Middleton-Smith

1 Set / 8 Reps / 2 s hold

uk.physiapp.com
PhysiApp code:
lwdwtkmi



1. Breathing Control 4:2:4



Sit in a chair or lie on a bed with your head and legs supported by pillows. Place one hand on your upper chest and one hand on your stomach, just below your ribs.

Breathe in for the count of 4 seconds in through your nose, feeling your stomach rise. Hold for 1 or 2 seconds.

Breathe out for the count of 4 seconds through your nose, feeling your stomach fall gently away from your hand.

At the end of breathing out, pause for the count of 1 second before you breathe in again.

Breath in lifting the chest up towards the upper hand

Breath out by drawing the scapula (shoulder blades) down into the back pockets

1 Set / 6 Reps / 3 s hold

2. Chin tuck/chin retractions



Stand straight, looking ahead, and place two fingers on your chin.

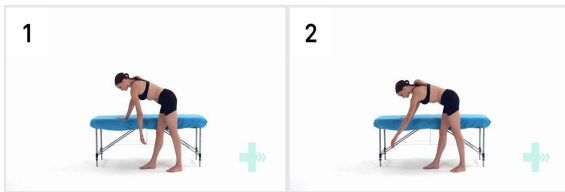
Push your chin so that your head goes straight back, lengthening through the back of your neck, and keeping your eyes forwards.

Hold, and then relax.

Alternative position - sitting in car, sitting on sofa, pushing back into the head rest Think of lifting up and back to feel a lovely stretch down the back of the neck

1Set / 10 Reps

3. Pendular exercises



Lean onto a table with your good arm, letting your affected arm dangle forwards in front of you.

Using gentle movements of the body, let this arm swing backwards, forwards, side to side, and in circles.

The more you lean your body forwards, the more you will exercise the arm. Swap arms and do the other side.

An exercise to do slowly. Allow gravity to create space in the shoulder joint to relax and decompress the joint

As we progress to week 3 and 4, turn your body sideways to allow the joint to open to the side as we discussed, to help relieve the discomfort when you raise your arm to the side

1 Set / 10 Reps



4. Arm wall walks shoulder flexion

Take your hand out in front of you and place it up against the wall. Walk your fingers all the way up the wall as high as you can go.

Make sure your shoulders are pointing straight towards the wall and you do not hunch your shoulders.

Walk your fingers back down to the starting position.

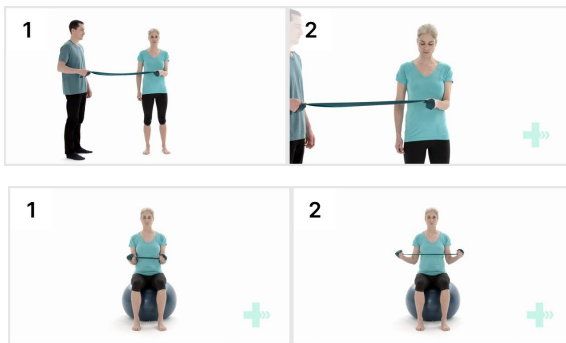
Walk the hands out each time to the numbers on the face of a clock and back to centre

If this is an easy exercise for you, you could move in an inch closer to the wall, making sure you tuck in your tummy and tuck your bottom under to ensure you never lean back, then do the clock face again

To make it more difficult again, you can turn sideways on to the wall

During weeks 3 and 4, if this is an easy exercise, you can add challenge by doing slow, small circles on the wall with the tennis ball.

1 Set / 10 Reps / 2s hold



5. Resisted shoulder external rotation seated / standing / on ball

Sit with both feet firmly on the floor (can be on a stability ball if you are well balanced on it) Hold a resistance band between both hands.

Find your neutral sitting posture and hold this position. Bend your elbows to ninety degrees.

Keep your elbows by your side as you pull your hands away from each other to make the band taught.

Control the movement as you bring your hands back to the starting position.

Slow movement in and out against the resistance of the band Perform the exercise safely seated initially

Tie the band to a chair or hold the opposite arm still, with elbow tucked in to side

Using one hand at a time, fix one arm in place and rotate the other, or rotate both outwards together as per the video

1 Set / 10 Reps



6. Step diagonally across in front – with bi-lateral resisted serratus anterior punch

Stand up straight with a resistance band looped around your upper back, holding one end in each hand.

Maintain a neutral spine and engage your deep abdominal and shoulder blade muscles throughout this exercise.

Simultaneously step diagonally forwards onto one leg as you punch one hand forwards rotating thumb to floor and round your shoulder blade. Ensure you keep your upper back straight.

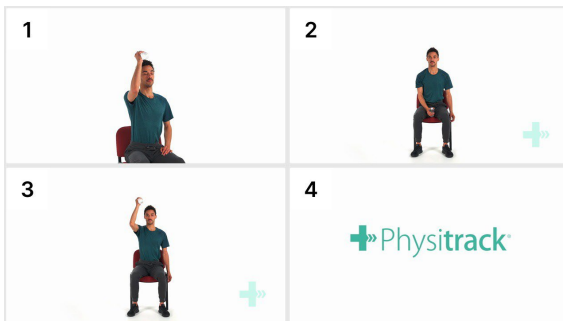
Pause, then return to the start position with control. Repeat, leading with your other leg.

Start without a band and step across in front holding the tennis balls to start with, to give a long punch pushing the scapula forwards, hold at the end 2 seconds. Feel the opening stretch across the whole surround to the shoulder blade area

This can progress to using a band for a harder exercise if desired. You can also step into a lunge for added cardio - for our rehab we are just diagonally stepping across in front as per our practice session

Set / 10 Reps / 0.1kg weight

7. Single-arm shoulder press in sitting with water bottle



Sit in a chair with your arms by your sides holding a water bottle in one hand. Bend the elbow to 90 degrees and lift your arm to shoulder level elbow pointing forwards.

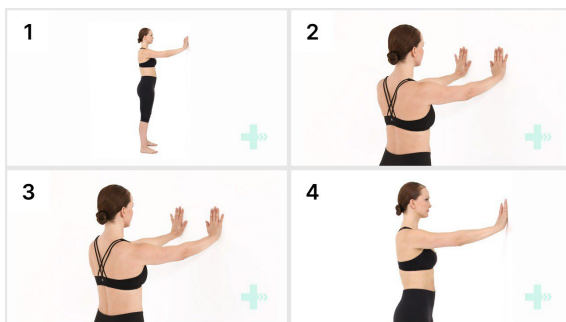
This is your starting position.

Then press the water bottle up over your head and straighten your elbow. Return back to starting position and repeat.

Holding two balls and then progressing to two half full 500ml water bottles, use alternate arms To step up the difficulty, both hands raise together, ensuring your back is in safe position: Tummy engaged, bottom tucked under to prevent arching back

1 Set / 10 Reps / 2 s hold

8. Scapula protraction at 90 degrees against wall



Stand up straight facing a wall.

Place your hands onto the wall around shoulder height but slightly wider. Your fingers should point towards the ceiling.

Push the heels of your hands into the wall, flattening your shoulder blades against your back.

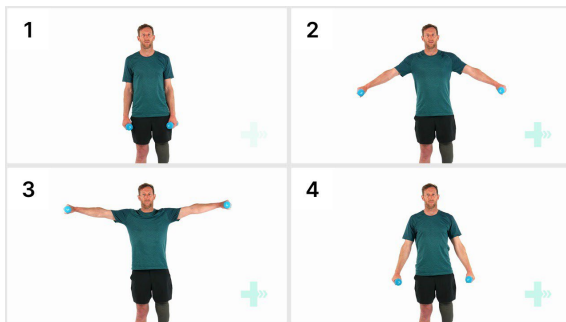
Your neck should remain long so ensure you do not hunch your shoulders up. Hold this position, relax and then repeat.

Ensure you do not bend your arms at any point during this exercise - *it takes a little getting used to!*

You can progress to leaning on a table, or doing this on all fours on the floor

The main thing is slow and steady, arms straight, only moving the shoulder blades

1 Set / 10 Reps / 0.1kg weight



9. Lateral raises in seated or standing - bilateral (adaptive)

Sit with feet firmly on the floor, or stand with your feet hip-width apart and arms by your sides. Sit on the band, or stand on the band. Or progress to holding a weight in each hand.

Back in safe position: : *tummy engaged, bottom tucked under to prevent arching back*

Lift your arms out to your sides to shoulder height. Return to the starting position in a controlled manner.

Using an exercise band. Resist against the band as you lift, pause for 1-2 seconds, then resist against the band as you lower to get double the rehab.

1 Set / 3 Reps / 30 s hold



10. Longitudinal thoracic extension stretch over foam roll

Place a large firmly rolled towel or yoga mat or foam roll on the bed or on the floor.

Lie back with the foam roll running directly down the centre of your spine. Reach your arms out to the sides, and bend your elbows to 90 degrees.

Relax your forearms back towards the floor behind you, stopping when you feel the stretch, and hold this position in a stretch.

It is important to slowly lower and control your arms as they open to the sides until you feel a gentle stretch - and always stay within pain free range.

You can then progress to straightening the arms slowly and even holding the tennis ball and then a half filled small water bottle in each hand to add a little extra gravity to the stretch.

11. Mindful walking



Think first of posture: chin retracted, lengthening up through the back of the neck and relaxing the shoulders down towards your back pockets.

Then walk with intent, allowing the arms to swing.

Next think of your breathing. In for 4, hold for 1-2, out for 4,

Then relax and observe, really take it all in – any thoughts that come in from outside, acknowledge them and let them pass on by

Listen: for the birds and insects and the rustling of leaves, the wind picking up and dropping

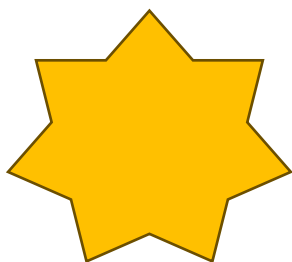
Look: at the colours, shapes and patterns of nature, the beautiful spirals, the symmetry and the lack of symmetry

Smell: the different foliage, the different fragrances of the trees and plants as you pass by.

Feel: the texture of the different clothing on your skin, the brush of your arms as they pass by your sides, the roll of your feet as you push along on the ground

If you need a little more help to become fully present and mindful, rub your thumb and forefinger together and feel the texture and abrasiveness as your fingerprint lines pass across each other

Relax and enjoy!



12. Exciting challenge

Well done on keeping up with the self care, thank you

What next? What do you not do now, that you would love to do?

It could be physical: fully relaxing, reaching a shelf, cactus pose, doing up your bra

It could be a cycle trip around the reservoir, or being able to drive to Wales

Bring your idea to the next massage session

We are making great progress with physical discomfort and movement. Let's make a plan to help you achieve that challenge

Appendix D1: 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:	WENDY MIDDLETON-SMITH
Student number:	RC84179
BTEC Year-group:	MARCH 2023-2025
Date of application:	28/3/24
Student e-mail address:	WMS@4SHIRESBUILDERSMERCHANTS.CO.UK
Title of research project:	<i>Evaluating the effects of the Jing method of Clinical Massage on Non-Specific, Chronic Shoulder Pain in Adults</i>

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. The Shoulder Pain and Disability Index (SPADI) questionnaire		

Section 3: Research premises

Where is your research being undertaken? MY CLINIC BRIO 12A SOMERS RD RUGBY WARKS CV22 7DH	
If your research is being undertaken outside of your own premises, do you have written confirmation from the establishment involved? If yes, please provide evidence.	Not applicable

Section 4: Recruitment

How will you recruit subjects for this research study?

Posters in local venues, businesses, support groups, clubs

Local social media/Facebook adverts

Text/WhatsApp/email family and friends and other contacts to request they ask anyone they know locally, with chronic shoulder pain, if they would be interested in taking part in a massage study, to contact me

Talk to people at work and at any opportunity to see if they have, or know anyone locally who has, chronic shoulder pain

Section 5 Outline your project procedure

This study aims to investigate the effect of the Jing method of clinical massage on self-identified non-specific shoulder pain

Participants will be recruited for this within-group design study, using adverts on local social media, posters in local businesses, asking family, friends, and work contacts if they know anyone locally with chronic shoulder pain

There will be an initial face-to-face or Zoom information session with participants to ensure that they meet the inclusion criteria, that they have a chance to ask any questions to ensure they fully understand the research study, and that they provide consent to take part in the research study by signing the consent form

Throughout the study, there will be 13 Shoulder Pain and Disability Index (SPADI) questionnaires to complete online. The SPADI questionnaire collects information in two categories:

Pain level

Limitations experienced in functional activities

Weeks 1-6 will comprise the control period, establishing the baseline of the participants' pain level and daily range of motion limitations

- During weeks one to six inclusive, participants will complete the first six SPADI questionnaires each Monday, online
- There will be no intervention during this time

Weeks 7-12 will comprise the period of intervention

- Once a week for 6 weeks, participants will receive an in-person 45-minute massage
- The first treatment session will be 90 minutes to allow time for an initial consultation, 45 minutes of massage treatment, and 15 minutes to teach the self-care homework, for the participants to practice, ask any questions, and receive any extra instruction, or form correction of the homework
- After each session, clients will be given a self-care video to follow, describing the five minutes homework of breathwork and self-care, to be completed 3 times per week
- Following treatments will be for 60 minutes, of which 15 minutes will be to check the self-care homework and to demonstrate the next homework, and 45 minutes of hands on treatment
- Each session will be held at the same time and day each week, at my clinic in Rugby
- Each massage session will follow the Jing Method Shoulder Girdle protocol (see *Massage Fusion*, pp247-269)
- There will be relaxing background music playing during each treatment
- On day 5 after the intervention massage session, the SPADI questionnaire will be sent to the participants for completion online
- At each subsequent session, or on day 7 after the final massage intervention treatment, the participants will be asked how many times they completed the breathwork and self-care during the week

Week 16, four weeks after the study ends

- During this week, a follow up SPADI questionnaire will be sent to participants for completion to assess the longer-term effect or changes as a result of the six week intervention period of the Jing method of clinical massage on self-identified non-specific shoulder pain

Section 6: Describe what your participants need to do

Participants should first check that they meet the inclusion criteria

Participants are required to attend an initial face-to-face or online Zoom meeting

- To assess inclusion and exclusion criteria, and the suitability of the candidate for the study
- Receive an explanation of the study, so they can give consent to take part in the study
- Provide the information required for the consultation process
- Participants are required to notify the researcher of any injury, medication, treatment, manual therapy, or other relevant information they are receiving for the neck and shoulder area
- Give consent to take part in the study

Weeks 1-6

- Participants will be required to complete an online questionnaire once a week for six weeks, which will be received by email each Monday, with no intervention

Weeks 7-12

- Participants will be required to attend one 90 minute treatment appointment, followed by five weekly 60 minute appointments at 12a Somers Road, Rugby CV22 7DH.
- The initial 90 minute treatment will comprise a 30 minutes consultation establishing range of movement and areas of restriction or discomfort. Then participants will receive a standardised 45 minutes of Jing Clinical massage treatment, and 15 minutes of learning the self-care techniques for homework
- Subsequent treatments will be for 60 minutes. This will include 45 minutes of massage and 15 minutes of checking home-care instruction and learning.
- Each session will be held at the same time and day each week, at my clinic in Rugby
- The treatment will be a standardised treatment following the Jing Shoulder Girdle protocol. This includes Breathwork, Amma, direct and indirect Fascial techniques, Muscle and Trigger point techniques, Acupressure points, and Stretching. The protocol can be found in Massage Fusion (pp 247-269).
- Participants will have to follow a 5 minutes self-care and breathwork routine 3 times per week during weeks 7-12. Correct exercise form is paramount. Progress will be assessed each week and the exercise routine will be checked and corrected or demonstrated and practiced at each treatment session. They will be given a printed handout and copy of the PDF and a video will be available within 24 hours of the intervention
- Participants will inform the researcher how many times they performed the self-care routine during the 6 days following the intervention treatment
- Participants will complete an online SPADI questionnaire on Day 5 after the appointment. This will be received by email
- Participants will complete one final online SPADI questionnaire on the Monday of week 16, FOUR weeks after the end of the study period

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 will be held in accordance with GDPR
- Participant information will not be seen, be available to, or accessed by anyone else
- All participants will be assigned a number
- All written data will be held in an individual file, filed under the number only, to ensure anonymity.
- All written data will bear the assigned number only, no identifiable personal information, for example, name, address, DOB, etc will be written down
- All participants will be asked to keep all information regarding the study and all other participants fully confidential at all times
- No recording of any information regarding the study or other participants will be permitted should there be any online group sessions
- At the end of the study, all details will be deleted
- There is full transparency, participants are welcome to ask questions at any time
- There is no deception or placebo
- There is minimal risk of injury, all self-care exercises are to be performed within a pain free range of movement
- There could be some temporary muscle aches and discomfort, which can occur after massage or manual therapy. This can be discussed before participants consent to the study
- Participants will receive an introductory letter describing all aspects of the study before they decide to enroll in the programme
- Participants will then receive a PDF containing all information about the project once enrolled in the programme
- All participants are over 40, there are no children involved in the study
- No vulnerable adults are involved with the study
- There are no questions of a personal nature, for example, mental health or sexuality

Section 8: Inclusion and exclusion criteria

What sort of people will the subjects be?

The study will include:

- Adults over the age of 18
- Participants who can commit to the 16-week study and travel to my clinic in Rugby for the 6 weeks of hands-on treatment
- Participants who have been suffering from shoulder pain for over three months
- Participants who score over 20 on the SPADI questionnaire

The study will exclude:

- Participants who have had surgery in the neck and shoulder area in the previous 12 months
- Participants who are pregnant
- Participants undergoing other manual therapy for the condition
- Any regular medication should have been taken for a minimum of 6 weeks before the commencement of the study to ensure any reaction to the medication has stabilised
- Any new medication, injury, or serious change in circumstances must be notified to the therapist immediately as this needs to be assessed regarding any effect on the results of the study and may affect the subject being able to continue in the study

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: WENDY MIDDLETON-SMITH

Date:

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

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

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

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

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

EITHER:

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

Signature: **date:**

OR:

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

YES / NO 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 / NO 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 / NO 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 / NO I am confident the participants' confidentiality will be preserved.

YES / NO I consider that any risks involved to the student, the participants, and any third party are minimal.

YES / NO I consider that Departmental approval should be given, since ethical risks have been appropriately addressed in the proposal and I am confident that steps will be taken to minimise any risks.

Signature: **date:**

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 D2: Letter to applicants

STUDENT NAME: WENDY MIDDLETON-SMITH

STUDENT NUMBER: RC84179

STUDY LOCATION: 12a Somers Road, Rugby Warks CV22 7DH

Tel: 07712 131430

e-mail: wendy@brio.rocks

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

www.jingmassage.com

01273 628942

**Re: Evaluating the effects of the Jing method of Clinical Massage on
Non-Specific, Chronic Shoulder Pain in Adults over 40**

Dear participant,

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

I am looking for people who are over 18 years old and experience two or more of the following symptoms:

- *Shoulder pain that lasts over 30 minutes per day*
- *Pain that has been ongoing for over 3 months*
- *Pain and tight muscles in the back and/or shoulders affecting moving your arms*
- *Pain that radiates down your arms or into your hands, perhaps causing pins and needles*
- *Pain that feels uncomfortable enough to be troublesome and restricts your upper body movement*
- *Pain that interferes with your daily activities at work*
- *Pain that interferes with your daily activities at home*

Unfortunately, this study will not be suitable for you if you have had an operation in the last 12 months in the neck and shoulder area, if you are pregnant, or if you are under 18.

If you decide to participate in the study, it will begin around late June. 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.

Appendix D3: Participant Consent Form



Title of study: Evaluating the effects of the Jing method of Clinical Massage on Non-Specific, Chronic Shoulder Pain in Adults over 40

Name of student: WENDY MIDDLETON-SMITH

Student Number: RC84179

	Yes	No
I have read and understand the information letter about this study	X	
I have had an opportunity to ask questions and discuss this study	X	
I have received satisfactory answers to all my questions	X	
I have received sufficient information about this study	X	
I understand that I am free to withdraw from this study: <ul style="list-style-type: none"> • At any time until such date as this will no longer be possible, which is once all anonymised data has been merged • Without giving a reason for withdrawing • That I am free to refuse to answer any question without saying why • That the services I am receiving will not be affected whether I participate or not. 	X	
I understand that my research data may be used for a further project in an anonymous form, but I am able to opt out of this if I so wish, by ticking 'No' here.	X	
I confirm I am able to commit to the times and dates agreed for the online questionnaires and the hands-on sessions	X	
I understand the online sessions may not be recorded, might involve other participants and I will respect the confidentiality of the group and not share information with others	X	
I will not discuss the study with other participants for the duration of the study	X	
I agree to take part in this study	X	
Signature (participant) Date: 1/7/24		
Name: (BLOCK LETTERS)		
Signature (parent/guardian/other, if under 18) Date:		
Name: (BLOCK LETTERS)		
BTEC student Wendy Middleton-Smith Tel no: 07712 131430 Email: wendy@brio.rocks	contact details:	

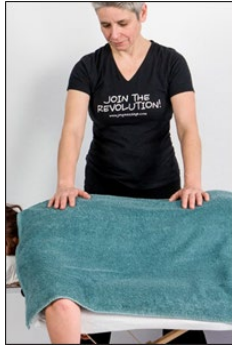
Appendix D4: Sent to applicants with letter

This is an example of the Shoulder Pain and Disability Index (SPADI) questionnaire

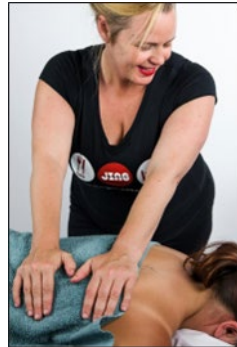
SHOULDER PAIN AND DISABILITY INDEX (SPADI)												
Assesses functional impairment of the shoulder in patients diagnosed with painful conditions												
Pain scale												
Please circle which point on the scale from 0 = no pain at all, to 10 = worst pain imaginable, best defines the pain you are experiencing in each of the following situations:												
	No pain at all	1	2	3	4	5	6	7	8	9	10	Worst pain imaginable
1 At its worst		1	2	3	4	5	6	7	8	9	10	
2 When lying on the involved side		1	2	3	4	5	6	7	8	9	10	
3 Reaching for something from a high shelf		1	2	3	4	5	6	7	8	9	10	
4 Touching the back of your neck		1	2	3	4	5	6	7	8	9	10	
5 Pushing with the involved arm		1	2	3	4	5	6	7	8	9	10	
Disability scale												
Please circle the degree of difficulty on a scale of 0 = no difficulty at all to 10 = so difficult it requires help when performing the following activities												
	No pain at all	1	2	3	4	5	6	7	8	9	10	Worst pain imaginable
6 Washing your hair		1	2	3	4	5	6	7	8	9	10	
7 Washing your back		1	2	3	4	5	6	7	8	9	10	
8 Putting on a teeshirt or jumper		1	2	3	4	5	6	7	8	9	10	
9 Putting on a shirt that fastens down the front		1	2	3	4	5	6	7	8	9	10	
10 Putting on your trousers		1	2	3	4	5	6	7	8	9	10	
11 Placing an object on a high shelf		1	2	3	4	5	6	7	8	9	10	
12 Carrying a heavy object of 10lbs/4.5kg		1	2	3	4	5	6	7	8	9	10	
13 Removing something from your back pocket		1	2	3	4	5	6	7	8	9	10	

Appendix E1: Jing Advanced Clinical Massage Shoulder Girdle Protocol

SHOULDER GIRDLE PROTOCOL - RECAP PRONE WORK >



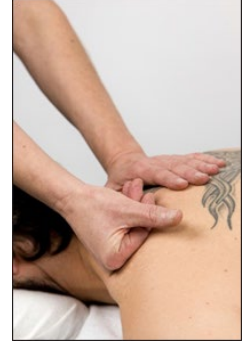
1. Still work and grounding



2. Palming the erector spinae (bladder channel) - standing



3. Direct fascial work with fists to erector spinae



4. Direct fascial work with fist to trapezius and supraspinatus



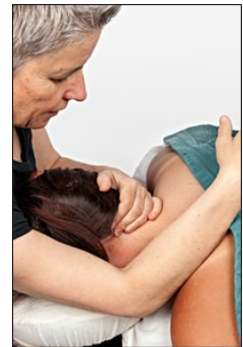
5. Fascial finger work to upper back



6. Skin rolling over scapula, rhomboids and upper back



7. Cross hand stretch across shoulder blades



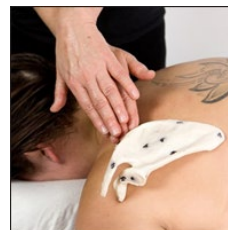
8. Creative work: Forearm and fist work to trapezius



9. Creative work: Forearm and work triceps



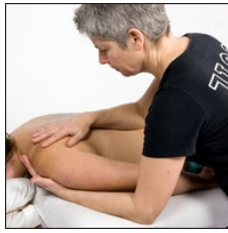
10. Stripping Supraspinatus



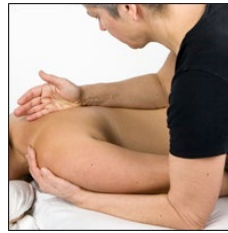
11. Stripping Rhomboids



12. Stripping Infraspinatus



13. Scapula mobilisation



14. Scapula sawing



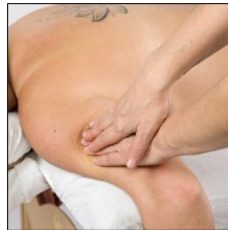
15. Deltoids: trigger point work to posterior and middle deltoid



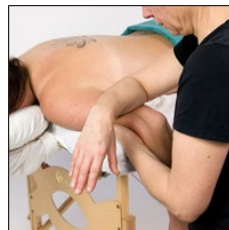
16. Deltoids: Cross fibre friction to deltoid tuberosity



17. Deltoids: trigger point work to anterior deltoid



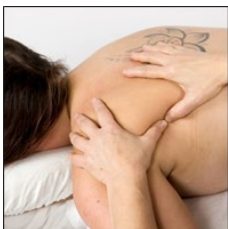
18. Stripping deltoid – broad/ specific/broad



19. Triceps broad work



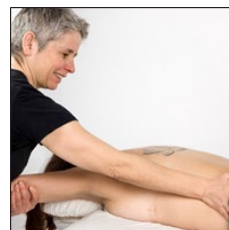
20. Triceps: specific stripping



21. Teres major and teres minor – compression and cross fibre friction



22. Cross fibre friction SITS attachments on head of humerus



23. Triceps: specific stripping



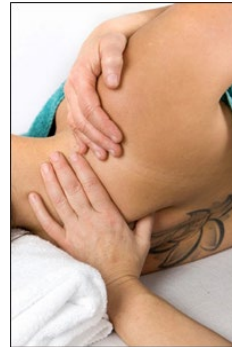
SHOULDER GIRDLE PROTOCOL - RECAP SIDE LYING WORK >



24. Side-lying trapezius stretch



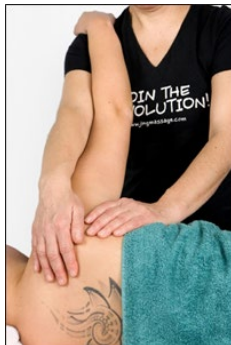
25. Supported shoulder circumduction



26. Working The vertebral border of the scapula



27. Latissimus dorsi and axillary border of the scapula: compression and 'money sign'



28. Sidelying subscapularis



29. Serratus Anterior



30. Latissimus dorsi stretch



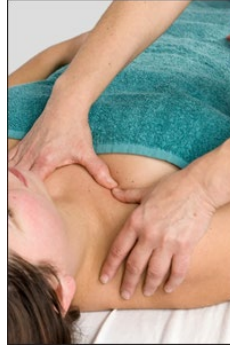
31. 'Devil' pec stretch



SHOULDER GIRDLE PROTOCOL - RECAP SUPINE WORK >



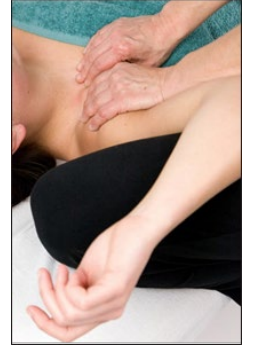
32. Sternal attachments of pectoralis major: cross fibre friction



33. Subclavius and pectoralis major attachments: supported thumbs or fingers



34. Stripping pectoralis major and intercostals - broad/specific/broad



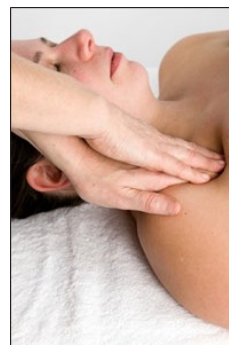
35. Working belly of pectoralis major



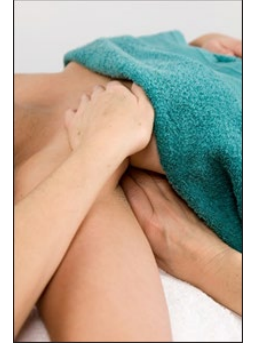
36. Palmar Effleurage to pectorals



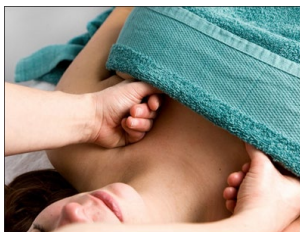
37. Soft tissue release (STR) to pectorals



38. Pectoralis minor - Working through pec major from head of table



39. Pectoralis minor - working under pec major from side of table



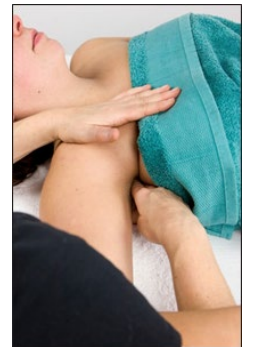
40. Integration work to pectorals



41. Cross fibre friction SITS attachments on head of humerus



42. Trigger point work to anterior deltoid



43. Treating subscapularis



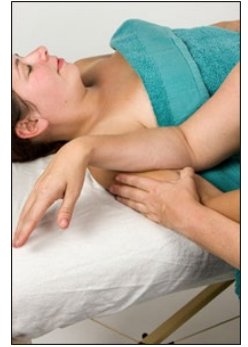
44. Range of motion to shoulder girdle



45. Range of motion to glenohumeral joint



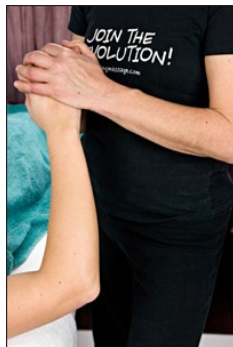
46. Stripping coracobrachialis



47. Broad work to biceps



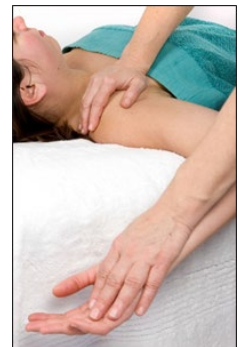
48. Petrissage to biceps



49. Mobilisations



50. Stretch pectoralis major and triceps



51. Stretch subscapularis



51. Stretch teres minor and infraspinatus



51. Finishing and still work

Appendix E2: 6 Week treatment plan: focus areas

Jing Shoulder Protocol

The sessions are based on the Jing HFMAST method

HEAT

FASCIA

MUSCLES

STRETCH

TEACH

All sessions to include:

Recap of all areas where TPs found previous week

Hot water bottle on upper back / shoulder area - except when summer heat prevents this for comfort

Still work, Amma Cross hand stretches and broad work to whole area.

Then focus areas as per table for direct fascial work, TP stripping.

Then broad work, stretching, broad work.

Finishing all positions with still work before changing position.

Amma, broad work, or leg pulls to areas not worked to include whole body.

Finish each session with beautiful effleurage pulls through Cervical Lamina groove and then with manual cephalic traction at the Occiput and caudally at the Sternum, followed by an MFR still point under the occiput and at the heart

WEEK 1	A/R/P ROM testing Cervical spine, GH Joint, ST Joint
Prone	Work/strip Erector Spinae, Trapezius, Rhomboids, Supraspinatus & Infraspinatus Broad work deltoids, Cross fibre friction SITS attachments Skin rolling whole Traps area
Side lying	Work/Strip Vertebral border Scap, Traps, Lev Scap, Lat dorsi, Axillary border Scap, Subscapularis, Serratus Ant Stretch Lat dorsi, positional release with assistance, Traps STR lock & stretch
Supine	Work/Strip Pec Major sternal att, Subclavius, Pec Minor. Include neck SCM, Scalenes. Passive Stretches Upper Traps, Scalenes, Lev Scap stretch.

<p>WEEK 2</p> <p>Prone</p> <p>Side lying</p> <p>Supine</p>	<p>Recap week 1 areas. Skin rolling add Cervical spine</p> <p>Add fascial work to Supraspinatus, Teres Minor & Major, Quadratus Lumborum</p> <p>Work posterior cervicals, Paddy paw traps, strip intercostals</p> <p>Recap week 1, add Jing triangle traps, focus work to deltoids, triceps, biceps. Add Traps PNF / Lev Scap AIS distraction combo</p> <p>Observe assessment Pec Minor from anterior aspect GHJ. Recap week1, add deeper work pec major, pec minor, SITS att humerus, ant deltoids. Add cervical transverse processes</p> <p>Introduce conscious relaxing through the muscles chin to chest during final still point</p>
<p>WEEK 3</p> <p>Prone</p> <p>Side lying</p> <p>Supine</p>	<p>Add special tests JOBES EMPTY CAN/SPEEDS/FOWLERS/CROSSOVER IMPINGMENT</p> <p>Upper trapezius, attachments costal surface of scapula, intercostals. Pec stretch</p> <p>Recap week 2. Trap stretch / distraction combo. Add QL. Develop assisted Lat stretch into side lying full stretch</p> <p>Observe assessment Pec Minor from anterior aspect GHJ. Establish if Coracobrachialis or Biceps Brachii. Supported circumduction of shoulder.</p> <p>Supine assessment and mobilisation Subscapularis & Infraspinatus. Add Subscapularis work with assisted arm across chest</p> <p>Work with the breath, deepening lift into hands either side rib cage</p> <p>Introduce softening of tongue, allow tongue to float during final still point</p>
<p>WEEK 4</p> <p>Prone</p> <p>Side lying</p>	<p>Add Special tests ADDISON'S TOS/LAT & MED EPICONDYLYTIS, GERBERS LIFT OFF, APLEYS SCRATCH</p> <p>Include Shu points. Recap areas from weeks 1-3, broad, focused, broad, check for TP's. Add uncoil trapezius.</p> <p>Add acupuncture points GB21 Shoulder Well, Lg16 great Bone</p> <p>Fascial work around Sacrum</p> <p>Pec stretch.</p> <p>Repeat PROM Shoulder abduction in side lying. with traction & ext rotation, apply caudal pressure to humerus to aid glide. Then resisted adduction at 45deg</p> <p>Add fascial work around Ischial crest, Coxal joint, Psoas. Develop assisted Lat stretch into side lying full stretch with upper leg hanging off side of table</p>

Supine	<p>Diaphragm release, MFR Arm pulls and vibration/oscillation</p> <p>Posterior Sub Occipitals. Add Acupressure point GB20 Wind Pool. Add Subscapularis, Teres Minor and Infraspinatus stretch & mobilise, STR or RI/PIR</p> <p>Build on tongue softening, lower jaw softening</p>
WEEK 5	Add Special test SPURLINGS FACET LOADING & DECOMPRESSION & O'BRIEN ACJ test
Prone	<p>Deep forearm work from head of table</p> <p>Add acupressure points SI11 Celestial gathering</p> <p>Assess arm movement/restrictions in adduction and from arms by sides to arm press overhead whilst prone – all those which affect sleep quality. Add prono mobilisations to GHJ. Passive mobilisations to Scapula all directions</p>
Side lying	Assisted shoulder circumduction, AIS Pec Stretch. Positional release and resisted distraction. Coxal joint. Full side lying stretch
Supine	Add forearms. Acupressure point on hand Lgl4 Great Eliminator and near occiput GB20 Wind Pool. Add work to masseter
Seated	<p>MFR Positional release/Active gliding Supraspinatus – gliding along fossa whilst client adducts arm</p> <p>MFR Positional release/Active gliding Upper traps & Lev Scap – gliding along med Trap/Lev Scap whilst client turns head opposite direction, then turns and flexes towards chest</p>
WEEK 6	
Prone	Recap quality slow fascia work and creative work all areas. Effleurage and fascial work up backs of legs
Side lying	Recap quality slow fascia work and creative work all areas. Side lying stretch, reducing assistance and adding AIS.
Supine	Effleurage and fascial work up fronts of legs. MFR Leg pulls
Seated	<p>Repeat MFR Positional release/active glide stretches</p> <p>Finish with A/R/P ROM testing Cervical spine, GH Joint, ST Joint & Special Tests</p>

Table 8: Method Weekly Plan

Appendix F1: Chronic Pain

Chronic Pain Development

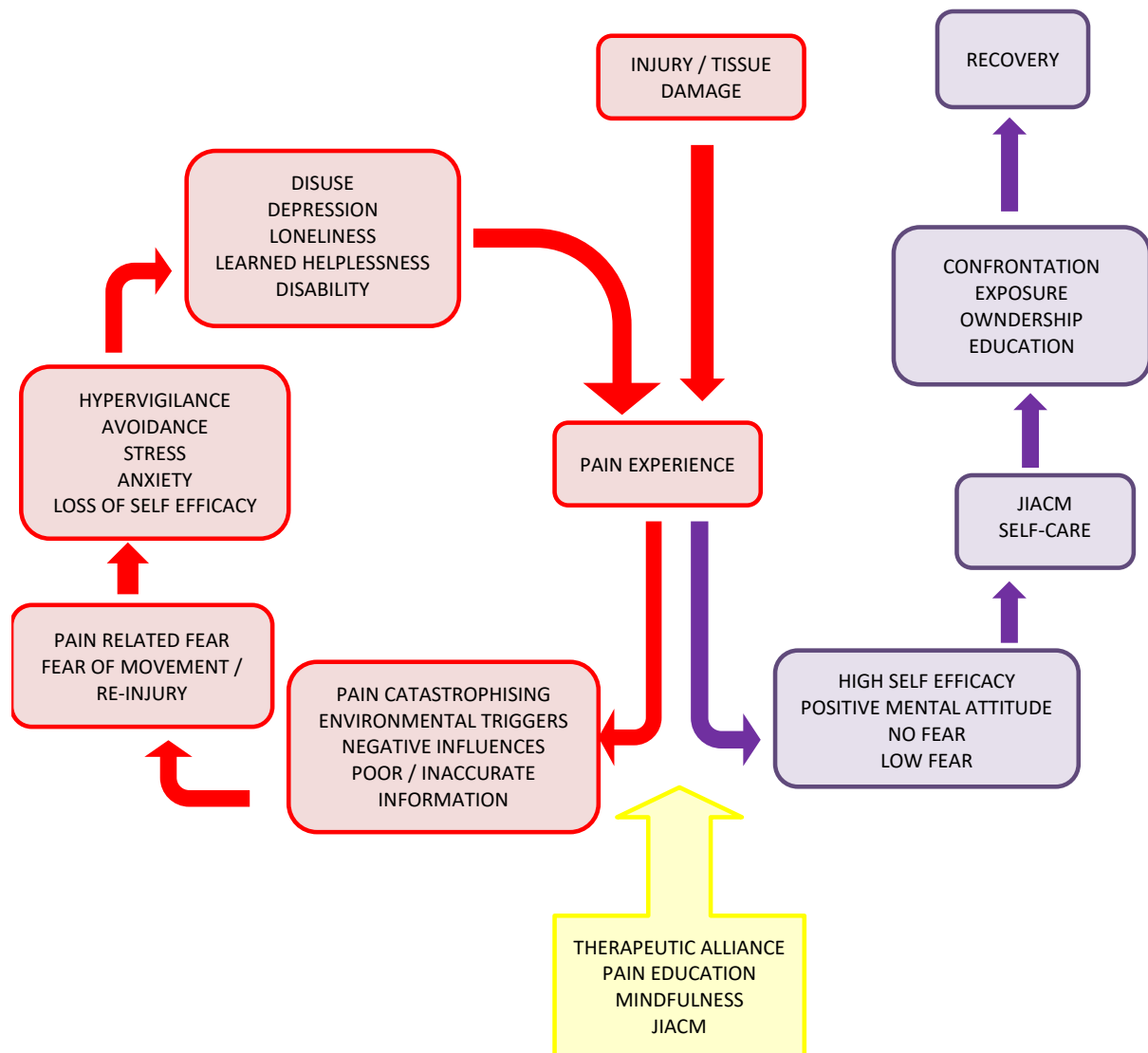


Diagram 8: Based on the Chronic pain cycle described by Fairweather & Mari, 2015, developed by Wendy Middleton-Smith 2025: The therapeutic alliance, education, and mindfulness training of JIACM method can move the patient from the left-hand cycle to the right-hand cycle.

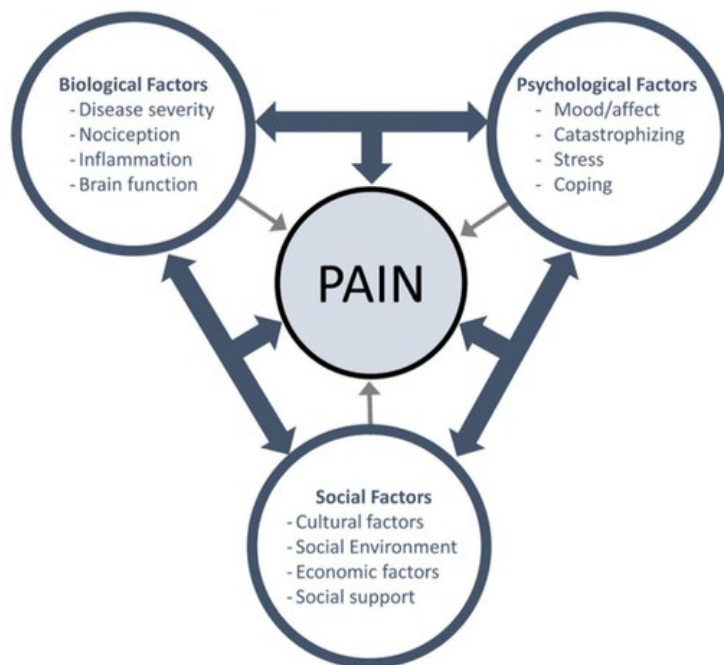


Diagram 9: NIH, US Dept Health & Human Services, 2021. Available at: <https://www.nccih.nih.gov/health/complementary-alternative-or-integrative-health-whats-in-a-name> (Accessed 11/1/25)

After an injury, danger signals are sent to the brain and the brain can create pain. This pain is a protective sensory experience and an emotional response. The area local to the damage or injury is sensitised to aid healing and reduce movement. The pain is designed to prevent further injury and repetition of the causal event. This is known as peripheral sensitisation (Physio-pedia, PNE 2025, Neurolaunch, 2024).

Remodelling and repair processes take up to 3 months to deliver optimum tissue strength and mobility, when pain should cease. If pain persists after 3 months, it is then described as chronic pain, persistent pain 'syndrome', or non-specific pain (Nijs, The Lancet, 2021, Ristori, 2018), as the pain no longer has a specific known cause. The brain has decided pain should continue.

Physiological maladaptive changes can cause the brain to consider there is still danger present and to continue sending out or amplifying pain signals to the body (Woolf, 2011). This causes the perceived pain to linger, move around, spread from the primary site of pain, and increase, often in waves. This is known as secondary hyperalgesia and is the cause of great distress to sufferers.

CP can be exhausting and can affect memory. It can cause brain atrophy, anxiety, stress, poor sleep, low mood, and even depression (Pasmore 2014, Fritz 2016, Yao, 2023, Brindisino, 2022, Tang 2022, Apkarian 2003). The longer the pain continues, the less predictable the pain pattern and experience can become (PNE, 2025).

Central Sensitisation

Pain Neuroscience Education (PNE) (2024) Available at: [https://www.physio-pedia.com/index.php?title=Pain_Neuroscience_Education_\(PNE\)&oldid=362546](https://www.physio-pedia.com/index.php?title=Pain_Neuroscience_Education_(PNE)&oldid=362546)
[https://www.physio-pedia.com/Pain_Neuroscience_Education_\(PNE\)](https://www.physio-pedia.com/Pain_Neuroscience_Education_(PNE))
Pain Neuroscience Education (PNE) (Accessed 16/2/2025)

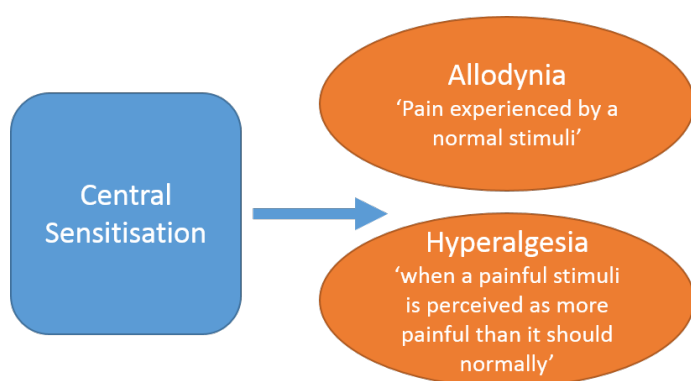


Diagram 10: PNE [https://www.physio-pedia.com/Pain_Neuroscience_Education_\(PNE\)](https://www.physio-pedia.com/Pain_Neuroscience_Education_(PNE))

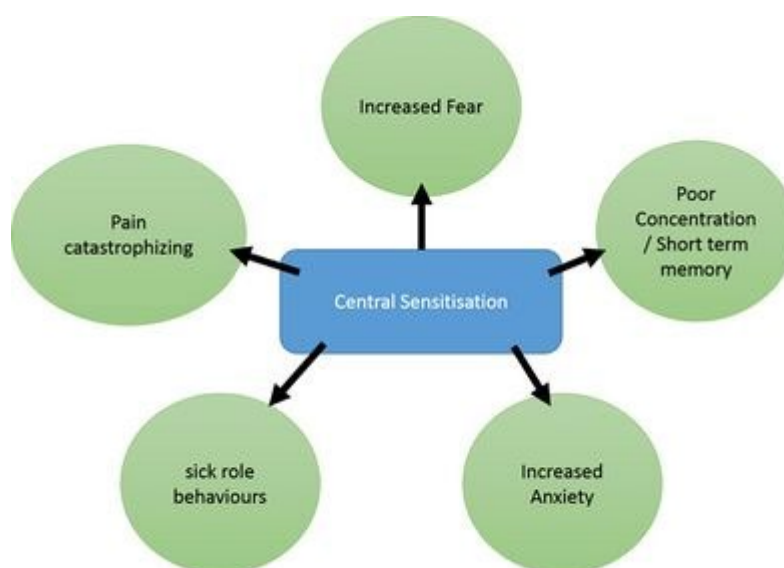


Diagram 11: PNE [https://www.physio-pedia.com/Pain_Neuroscience_Education_\(PNE\)](https://www.physio-pedia.com/Pain_Neuroscience_Education_(PNE))

Part of the puzzle in non-specific SP resolution is central sensitisation.

After an injury or damage, the brain immediately sensitises the local area to prevent further immediate harm (for example, by stimulating muscles to pull the hand away from a hot object, the harmful or noxious stimulus), to aid

healing, protect the area, and prevent additional injury. This process, known as Peripheral Sensitisation, serves as a protective response of the organism against harm. A complex array of chemicals is rapidly released, increasing sensitivity in the area to heat and touch (noxious stimuli). Inflammation, redness, heat, and pain subsequently develop.

The chemicals stimulate nociceptors, which transmit signals up the spinal cord to the brain, leading to the transmission of pain signals. The inflammation present can cause the nerve root ganglion to release chemicals that stimulate nociceptive receptors, resulting in increased sensitivity and pain, known as primary hyperalgesia.

The physiological systems and processes in the body are all designed to restore optimal conditions within strict parameters, ensuring the maintenance of life and homeostasis. After an injury, the healing processes continue to remodel and repair the tissue, bringing it back to optimal strength and mobility. This process typically takes up to three months.

In some cases, the presence of inflammation and chemicals in the damaged area causes nociceptive receptors to respond even more strongly to minor chemical stimuli, and the spinal cord increases the size and number of pain receptors. As a result, a much lower level of noxious stimuli is required to produce a pain response that is higher than normal. This pain can migrate or spread from the original site, referred to as secondary hyperalgesia.

Additionally, there may be allodynia, a pain response triggered by a minor stimulus that does not typically cause pain. All of this constitutes Central Sensitisation. This pain is not helpful; it represents a physiological maladaptation. The original pain, which was meant to provide protection, has evolved into a condition that causes stress and suffering.

The stress and suffering of chronic pain force the brain to overwork, interrupting normal brain function and thought processes. This can be exhausting and distressing. Further maladaptations may occur, such as anxiety, stress, and depression.

Stress and anxiety stimulate our 'fight or flight' responses, an evolutionary physiological cascade of chemicals, including adrenaline, designed to help us escape danger. Blood is diverted from the intestines to the muscles, particularly those in the legs, back, shoulders, and neck, preparing them for action. Modern society tends to keep us more sedentary, often seated, making the opportunity to run and burn off those chemicals- and return to homeostasis- rarely available. Consequently, our stress response chemical soup continues to signal to our brain that we are under stress. This heightened burden on the brain to remain alert can lead to exhaustion and depression, causing the muscles in the shoulders and neck to become fatigued.

Prolonged signs and symptoms experienced by patients suffering from CSP can lead to anxiety, depression, hypertension, poor sleep (Cho, 2012), and emotional stress, while also being caused by these conditions (Garland, 2012). This creates a perfect storm: the Central Sensitisation feedback cycle (Nijs, The Lancet, 2021), as illustrated in the Mayo Clinic diagram below and diagrams 3, 8, and 9.

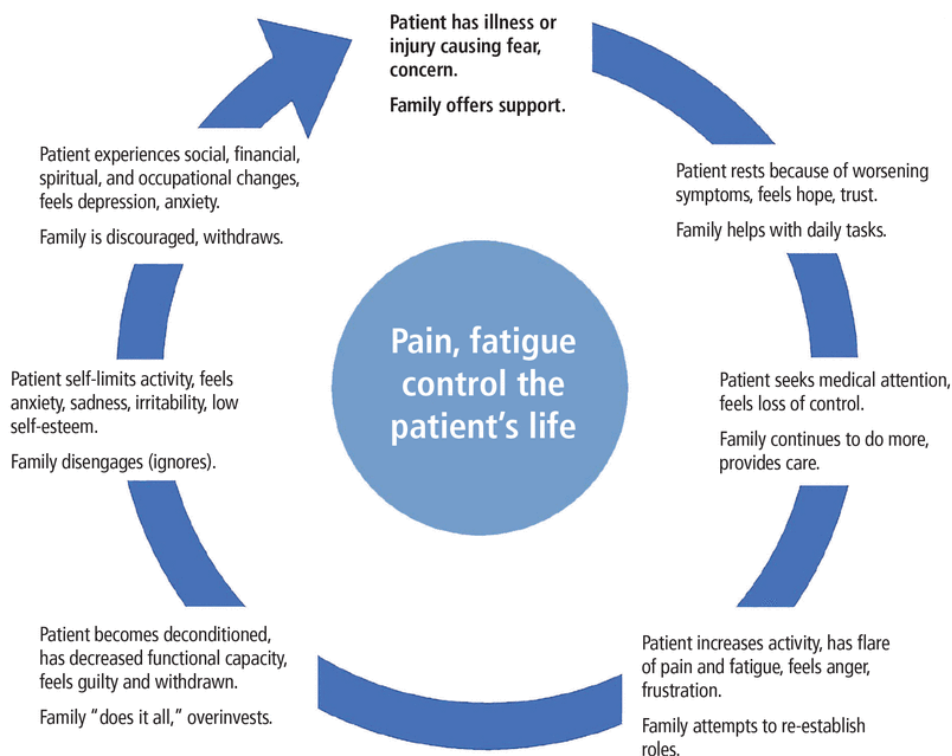


Diagram 12: The cycle of pain and fatigue in central sensitization, showing patient behaviours and emotions and family response. From Mayo Clinic Patient Education. Managing your Fibromyalgia (MC2593-100). Rochester, MN: Mayo Clinic, 2017

Vogel (2022) found that the complete loss of function in a limb is perceived as a particularly significant threat to bodily function, further stimulating our sympathetic nervous system and increasing our stress levels, as our ability to defend ourselves or even perform basic personal care can be compromised (Garland, 2012).

Research by Sheikhzadeh in 2021 has shown that whether SP becomes chronic is influenced by psychological factors, clinical management, and comorbidities. Moreover, utilising the BPS model (Engel, 1977) during all phases of treatment and patient contact, as taught in the Jing method, is conducive to a swift and successful recovery.

In chronic pain, the issues are not always in the tissues, as regularly quoted by Jing Institute lecturer Rachel Fairweather (Fairweather & Mari, 2015, Ch4,

p34). While the original damage, disease, or injury had a biological cause, once tissue healing has occurred, psychological and social factors contribute to the recovery journey outcome.

Many medics, researchers, and pain sufferers face daily challenges due to the changing pain patterns experienced by those with Chronic Pain and Central Sensitisation. The International Association for the Study of Pain (IASP) notes that researchers have yet to fully explore, identify, and understand physical and clinical resolutions (Talbot, 2024). In 2019, in response to the need for a better understanding of chronic pain, the Global Alliance of Pain Patient Advocates (GAPPA) Presidential Task Force was established, co-chaired by a researcher and a chronic pain sufferer.

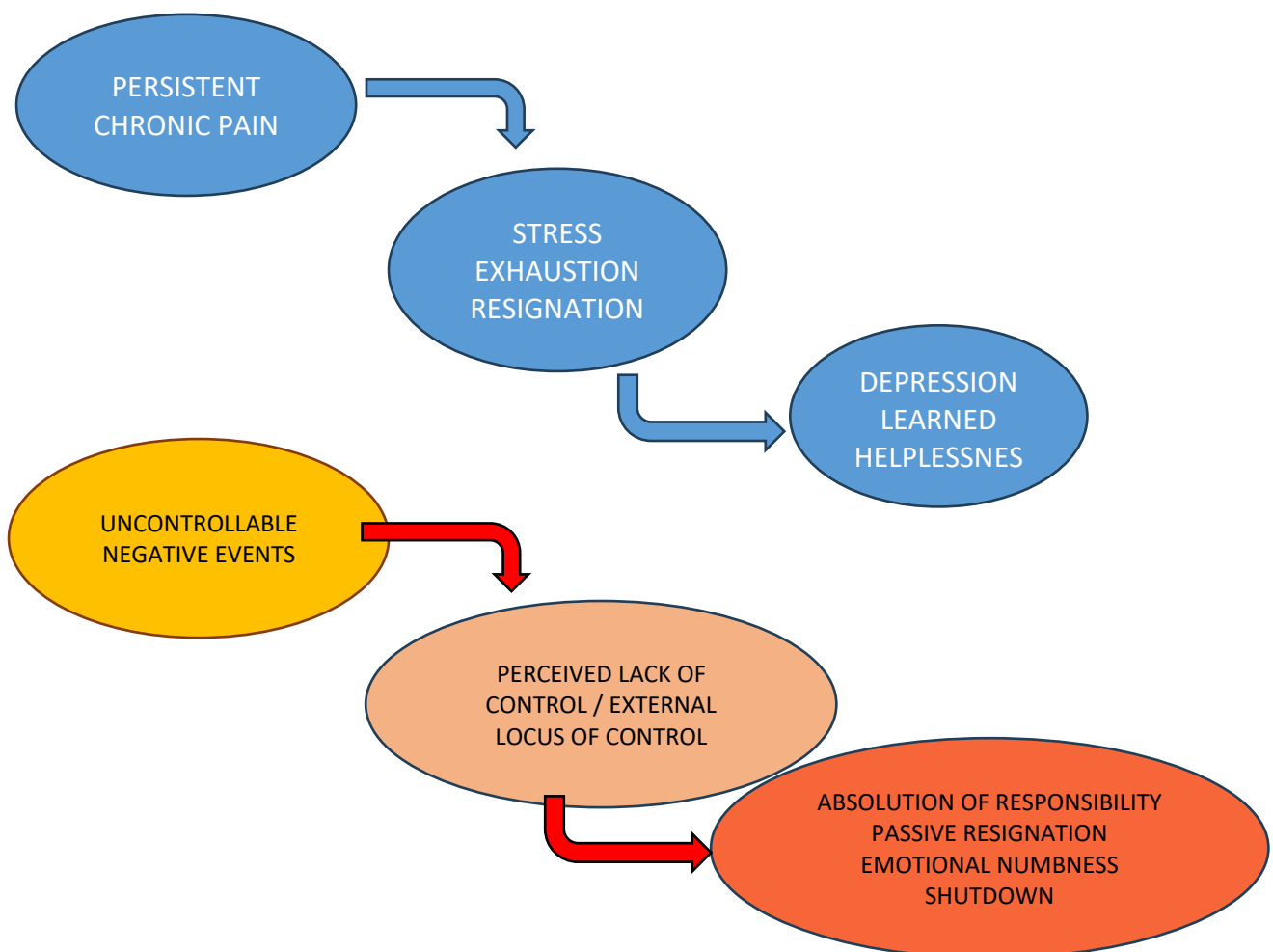
There are hundreds of NHS websites offering assorted signposting suggestions for self-help videos to cope with living with pain and Central Sensitisation (Appendix H1).

Emotions such as stress, anxiety, and depression can negatively affect pain levels. Pain-related beliefs, particularly fear avoidance and catastrophising, also adversely impact pain intensity. If an individual believes that movement will worsen the injury and increase pain, they are likely to move less. This contributes to the chronic pain/stress cycle and can lead to CPSS, withdrawal and depression (Crombez, 1999).

However, movement is essential for maintaining joint and tissue health, so developing the right action plan to help the patient achieve this is an important aspect of the therapeutic alliance and the JIACM method.

The Victim Mentality: Chronic Pain Stockholm Syndrome, Hostage Bargaining Syndrome, Learned Helplessness.

Locus of Control: the amount a person believes they can influence their journey, the outcomes and events in their life.



Diag 13: Steps leading to learned helplessness in the persistent CP cycle, showing the similarity with PTSD, where patients feel they have no control over their condition or events. By Wendy Middleton-Smith.

Patients who feel they have an external locus of control and do not believe they can manage their CP condition, pain level, or treatment may struggle to assert themselves. The biomedical physician's high skill level and extensive

knowledge command respect, creating an imbalance in power dynamics, as patients may hesitate to challenge their expertise due to this perceived superiority. This process is insidious; they may become inhibited from engaging in the care pathway or raising concerns (Berry 2017, Wade 2004, Firmin, 2004).

The NHS is under pressure. There is less time for face-to-face appointments because medical practitioners must devote extra time to digitally maintaining health records and completing desk work. Some research has found that they require two hours of record-keeping and desk work for each hour of face-to-face clinic time. This can make CP patients feel rushed or lead to concerns about minimised time, causing important health matters to be trivialised or overlooked. Biomedical practitioners face significant challenges in sifting through what the patient is saying to ensure that no serious underlying issues are omitted.

Waiting times for CP treatment have lengthened, often stretching into months or even years. All of these pressures, which are outside the patient's control, along with concerns about their health issue, can lead patients and their families to feel powerless, vulnerable, confused, and scared. This perceived loss of control also affects CP sufferers because, while initially the CP may have been debilitating and troublesome, once central sensitization kicks in, the longer the sufferer endures CP, the greater the negative impact on their stress levels and mental health. Patients may experience hostage bargaining syndrome (HBS), where they hesitate to challenge the expert for fear that it might affect the care they receive. They might not express all their concerns, neglect to ask for what they need, or even remain silent. They may feel like a nuisance and feel compelled to demonstrate their deservingness of treatment.

If this situation continues, the patient may lose hope, give up, and withdraw into learned helplessness, feeling that they can do nothing and no longer participating in decision-making. Physicians may interpret the patient's emotional numbness or disengagement as a lack of interest in the process when they are actually under great stress (Ackerman, 2022), and this is a coping mechanism.

A danger of descending into learned helplessness is that the patient learns to be a victim and relinquishes all their power to someone else, acquiring victim syndrome. There is a tendency to blame others for their prolonged CP or the medical profession for failing to successfully relieve their pain, which leads to the belief that this situation will never improve. Overcoming this addictive mindset can take years. The steps for recovery and the challenges of adhering to the healing journey action plan are similar (7Mindsets, 2024, Psychgrid, 2024, Firmin, 2004, Peterson, 1993, Zimmerman, 1990).

Early intervention and preventative treatment are possible using existing BSP or attitude prediction assessment tools (Hruschak, 2018 & 2021, Linton 2003, Westman, 2008, NHS BLMK 2021, NICE 2024)

Shared decision-making (SDM) and effective communication from the entire medical team, starting early in the process, can help prevent HBS, CPSS, learned helplessness, and victim syndrome, while maintaining patients' trust in the medical team. Explaining the available options and providing patients with choices that align with their values keeps them engaged.

Helping patients develop a self-care action plan to improve their situation, take responsibility, and initiate rehabilitative movement with safe pacing thresholds is part of the JIACM method (Psychgrid, 2024, Fairweather & Mari, 2015).

A positive mindset is powerful and has been shown to significantly influence the achievement of a successful pain reduction pathway and a return to health (Meint, 2018, Berry 2017, Zimmerman 1990). All efforts to assist the patient in attaining this are immensely valuable and are included in the Jing method (Fairweather & Mari, 2015).

Appendix F2: Self-Care, Brief Action Planning (BAP) and Pacing

Self-Care

Patients often need reminders about self-care and putting themselves first. Caring for the mind, body, and spirit is essential for fostering tranquillity, but hectic lives and chronic pain can elevate stress levels.

Self-care includes any enjoyable activity or goal, whether it's mindful meditation, a walk on the beach, or rehabilitative shoulder exercises as detailed in Appendix C1 and C2. Patients often need reminders about self-care and prioritising themselves.

Brief Action Plans (BAP)

Brief action plans are written documents divided into very small and manageable increments. Activities and exercises are chosen by or in collaboration with the patient. This approach helps build a forward-thinking, positive, and optimistic outlook.

As illustrated in the self-care handouts for this study, all activities, whether mindfulness or rehabilitative exercise, progress incrementally week by week, in terms of style, difficulty, time, repetition, complexity, loading, or focus (Appendix C1, C2).

To effectively develop positive thought patterns and practices and initiate beneficial movement, all steps of the self-care action plan are more effectively broken into smaller steps in this manner.

According to People in Pain network, (People in Pain Network, 2021): research has proven that using a brief action plan (BAP) will help you to increase your successful outcomes by 25 to 50%.

(Loule, 2021, McAllister, 2022, People in Pain Network, 2021)

Pacing

Initially, a base level of the activity is established that is practical to do, causes no pain, but requires some effort or provides benefit. Then, the incremental steps will be agreed upon (time, repetitions, etc.) and documented.

The patient can practice the base level activity for 1 or 2 days. If there is no discomfort or irritation caused, then the difficulty can be increased slightly in accordance with the incremental plan, and the new level is followed for 1 or 2 sessions. If any irritation or discomfort occurs, then the patient reverts to the previous level that did not cause discomfort and continues at that level until they are ready to increase again.

This process can continue to be repeated until the next check-in session, when the patient and therapist can modify the plan to align with what the patient would like to achieve next in the next phase, considering what the patient has learned about their body and their healing journey in the interim (Jing BTEC6 Course Notes, Module 7 Rehab and Module 8 Sports Training and Exercise: Pacing).

Appendix G1: CAM

Examples of complementary health approaches that fall within the categories: Psychological, Physical, and Nutritional

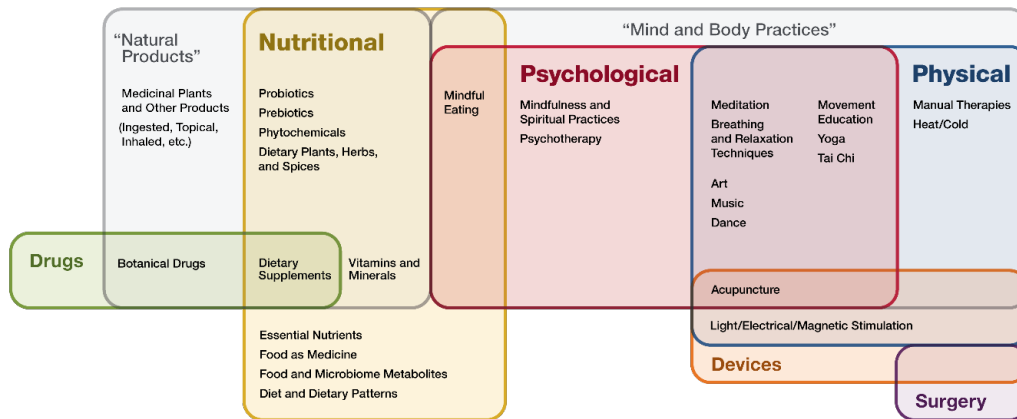
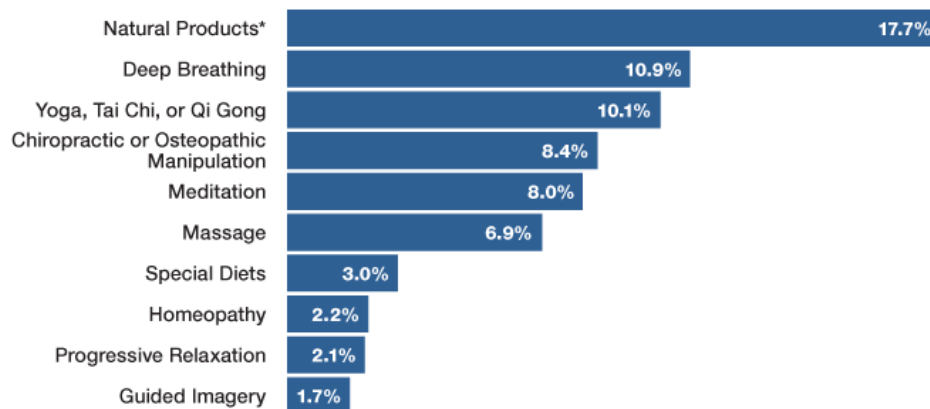


Diagram 14: National Center for Health Studies, 2015

10 most common complementary health approaches among adults—2012



*Dietary supplements other than vitamins and minerals.

Source: Clarke TC, Black LI, Stussman BJ, Barnes PM, Nahin RL. Trends in the use of complementary health approaches among adults: United States, 2002-2012. National health statistics reports, no 79. Hyattsville, MD: National Center for Health Statistics; 2015.

Diagram 15: National Center for Health Studies, 2015

Psychological and Physical Approaches

Complementary physical and/or psychological approaches include tai chi, yoga, acupuncture, **massage therapy**, spinal manipulation, art therapy, music therapy, dance, mindfulness-based stress reduction, and many others.

Other psychological and physical approaches include relaxation techniques (such as breathing exercises and guided imagery), qigong, hypnotherapy, Feldenkrais method, Alexander technique, Pilates, Rolwing Structural Integration, and Trager psychophysical integration.

Multimodal Treatment MSK Chronic Pain offerings

Therapy	Function impacted	Improvement Trend %	Side effects	Scientific Evidence
Cognitive Behavioural Therapy	Social & Physical Pain reduction	25% ability to cope Effective addition to multimodal pathway		Moderate
Paracetamol Acetaminophen	Mild to moderate arthritic pain	Somewhat alleviates		Strong
Combined with Tramadol or similar weak opioid	Combination	More effective		Strong
COX-2 Inhibitors NSAID's	Osteo arthritis and arthritis	30% pain reduction	NSAIDs increase risk of cardiovascular (CV) events	Strong
Combined with Tramadol or other weak opioids	Combination	More effective		Strong
Strong opioids	Severe osteoarthritis pain	30% pain reduction	Constipation, dizziness, vomiting, nausea in >50% patients	Strong
Weak opioids	Mild to moderate osteoarthritis pain & low back pain	40% pain reduction		Strong
Tramadol as effective as mild opioids	MSK pain		Adverse effects as per mild & strong opioids	Strong
Capsaicin (NNT8 of 0.25% topical)	MSK Small joint & neuropathic pain	50% reduction	Skin irritation (minimal)	Strong
Glucosamine	Osteoarthritis	Pain reduction		Inconclusive
Radiofrequency denervation (RF)	Chronic neck and back (inc whiplash related) pain	Short term relief	Serious complications	Limited
Physical Activity, exercise combined with standard primary care	Chronic low back pain	More cost-effective in achieving some additional pain reduction when combined		Limited
Physical Activity, exercise, relaxation, biofeedback, massage, manipulation, physical therapy, professional supervised exercise	Chronic pain	20-30% more pain effective reduction then treatment without physical activity		Strong
Acupuncture	Chronic low back pain	More effective at alleviating pain than placebo		Strong

	Low back pain, lateral epicondylitis, neck and shoulder pain	As effective as other treatments		Strong
Balneotherapy mud or mineral baths	Chronic MSK pain	20-30% pain reduction		Limited
Cannibis	Osteoarthritis, low back pain		Nausea, dizziness	No clear effects
Postural exercise programme	MSK pain & QOL	Notable pain reduction and improvement in QOL		Strong
Massage	MSK pain & anxiety	More effective than conventional medicines		Notable
Spinal manipulation	MSK back pain	Effective	Moderately severe adverse effects and less frequent serious risks	

Table 9: Summary table based on systematic or comparative effectiveness reviews and randomised control trials from authors: Swedish Council HTA 2006, Öztürk, McDonagh (2020), Ernst, 2008

Appendix H1: Useful Resources and Signposting

NHS websites and other resources

- Signposting and advice literature currently available regarding service development and delivery

International

- ▶ ICD-11 – the international standard for systematic recording, reporting, analysis, interpretation and comparison of mortality and morbidity data. Pain is now incorporated into this system. <https://icd.who.int/en>
- ▶ Global Alliance of Partners for Pain Advocacy (GAPPA) <https://www.iasp-pain.org/advocacy/global-alliance-ofpartners-for-pain-advocacy-gappa/>

National

Faculty of Pain medicine

- ▶ Core Standards for Pain Management Services (CSPMS) 2021. <https://fpm.ac.uk/standards-guidelines/corestandards>
- ▶ Outcome Measures. 2019. <https://fpm.ac.uk/sites/fpm/files/documents/2019-07/Outcome%20measures%202019.pdf>
- ▶ Improving the Lives of People with Complex Chronic Pain: How to Commission Effective Pain Management Services in England. 2020. https://fpm.ac.uk/sites/fpm/files/documents/2020-06/Commissioning%20guidance%20draft%20design%20FINAL_0.pdf
- ▶ Commissioning of Chronic Pain Services and Covid-19 (March 2021). Addendum to Improving the Lives of People with Complex Pain: How to Commission Effective Pain Management Services in England. <https://fpm.ac.uk/sites/fpm/files/documents/2021-03/commissioning-and-covid-19.pdf>
- ▶ Framework for Pain Services for Cancer and Life-Limiting Disease. 2019. [https://fpm.ac.uk/sites/fpm/files/documents/2019-07/Framework for pain services cancer and life limiting disease 2019.pdf](https://fpm.ac.uk/sites/fpm/files/documents/2019-07/Framework%20for%20pain%20services%20cancer%20and%20life%20limiting%20disease%202019.pdf)
- ▶ Practical Pain Management in Specialist Care: How to help people with chronic pain when population based national guidance fails to help. 2022. https://fpm.ac.uk/sites/fpm/files/documents/2022-02/Practical%20Pain%20Management%202022_0.pdf

GIRFT

- ▶ Spinal Services GIRFT Programme National Specialty Report. January 2019. <https://gettingitrightfirsttime.co.uk/wp-content/uploads/2019/01/Spinal-Services-Report-Mar19-L1.pdf>
- ▶ Rheumatology GIRFT Programme National Specialty Report. <https://www.gettingitrightfirsttime.co.uk/wpcontent/uploads/2021/08/Rheumatology-Jul21h-NEW.pdf>

NICE

- ▶ National Institute for Health Care Excellence. Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain. NICE Guideline [NG193]. 2021 <https://www.nice.org.uk/guidance/ng193>
- ▶ National Institute for Health Care Excellence. Low back pain and sciatica in over 16s: assessment and management. NICE Guideline [NG59]. 2016. Available from <https://www.nice.org.uk/guidance/ng59>

► Trauma Programme of Care: NHS England National Low Back Pain and Radicular Pain pathway 2017. Including Implementation of NICE Guideline NG59. Available from https://www.ukssb.com/_files/ugd/dd7c8a_caf17c305a5f4321a6fca249dea75ebe.pdf

► National Institute for Health Care Excellence. Endometriosis: diagnosis and management. NICE Guideline [NG73]. [fpm.ac.uk](https://www.nice.org.uk/guidance/ng73) | 9 Four Nation Pain Strategy | 2022 2017. Available from <https://www.nice.org.uk/guidance/ng73>

► National Institute for Health Care Excellence. Neuropathic pain in adults: pharmacological management in nonspecialist settings. NICE Clinical Guidance [CG173]. 2020. Available from <https://www.nice.org.uk/guidance/cg173>

► National Institute for Health Care Excellence. SCS for treatment for chronic pain of neuropathic or visceral origin. NICE Technology Appraisal Guidance [TA159]. 2008. Available from <https://www.nice.org.uk/guidance/ta159>

SIGN

► SIGN 136 Management of chronic pain https://www.sign.ac.uk/media/1108/sign136_2019.pdf

NHSE

► Adult Specialised Pain Service specification. <https://www.england.nhs.uk/wp-content/uploads/2019/08/AdultSpecialised-Pain-Service-Specification.pdf>

► Designing integrated care systems in England. <https://www.england.nhs.uk/wp-content/uploads/2019/08/AdultSpecialised-Pain-Service-Specification.pdf>

British Pain Society <https://www.britishpainsociety.org/british-pain-society-publications/professional-publications/>

Physiotherapy Pain Association <https://ppa.csp.org.uk/>

Chartered Society of Physiotherapy <https://www.csp.org.uk/conditions/managing-pain-home>

Personalised Care Institute <https://www.personalisedcareinstitute.org.uk/>

Social Care Institute for Excellence <https://www.scie.org.uk/integrated-care>

Arthritis and Musculoskeletal Alliance (ARMA)

► Pain and musculoskeletal conditions <http://arma.uk.net/pain-and-msk/>

Versus Arthritis

► Chronic pain in England unseen unequal unfair. 2021. <https://www.versusarthritis.org/media/23739/chronic-painreport-june2021.pdf>

Live Well with Pain <https://livewellwithpain.co.uk/>

Flippin Pain <https://www.flippinpain.co.uk/>

Action on Pain <https://action-on-pain.co.uk/>

British Pain Society <https://www.britishpainsociety.org/>

BPS Patient help pdfs: <https://www.britishpainsociety.org/people-with-pain/patient-publications/>

Pain Concern <https://painconcern.org.uk/>

Pain Toolkit <https://www.paintoolkit.org/>

Appendix H2: Diagnosis of Shoulder Problems Diagram

Rees et al, 2022: Diagnosis of Shoulder problems in Primary Care

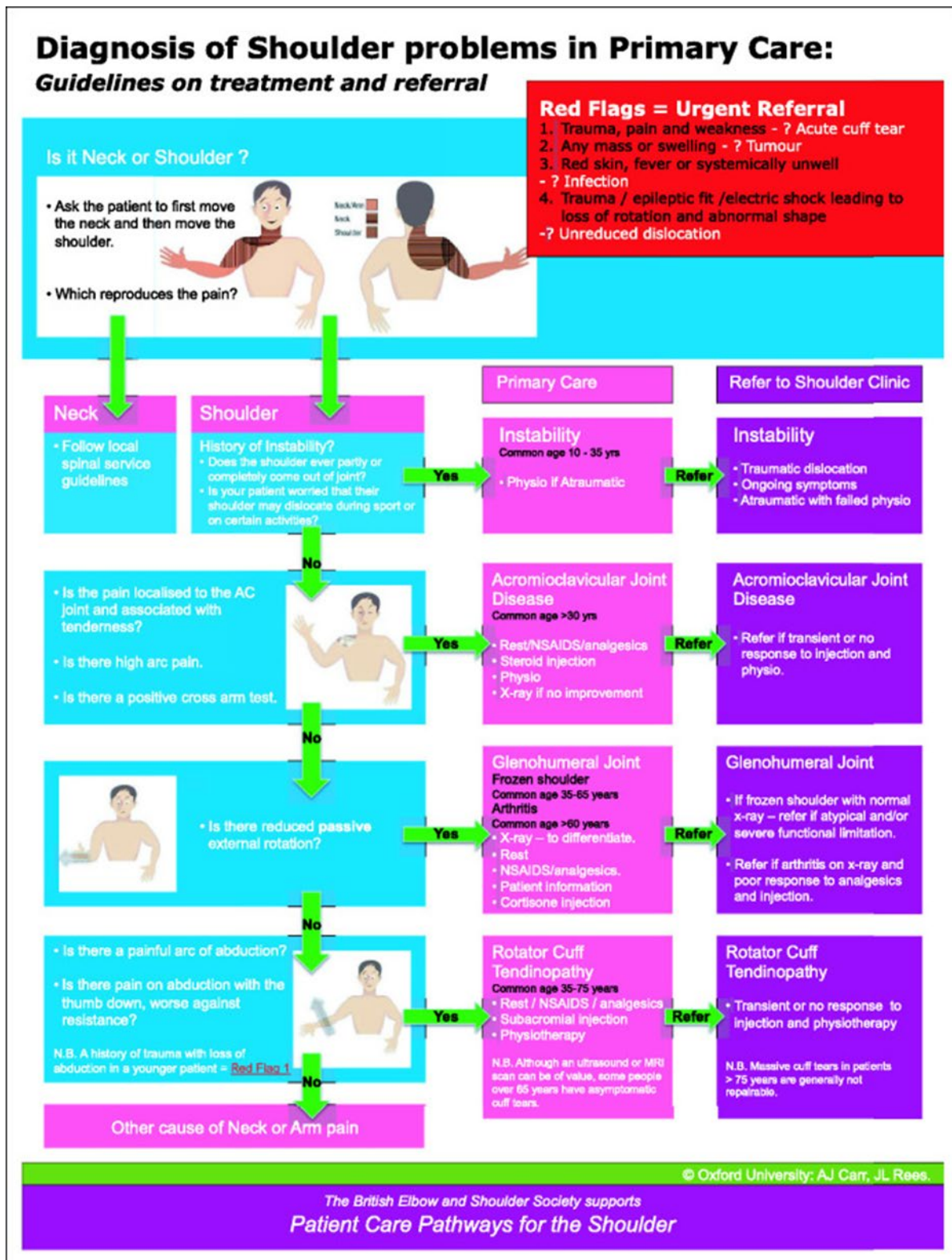


Diagram 16; Jonathan L. Rees, Rohit Kulkarni, Amar Rangan, et al. (2021). Shoulder Pain Diagnosis, Treatment, and Referral Guidelines for Primary, Community, and Intermediate Care. PMID: 33747136 PMID: PMC7905504 DOI: 10.1177/1758573220984471

Appendix J1:

Jing Institute Dissertation Library: Shoulder Dissertations 2018-2024

Therapist	INSTR	Year	Study	PROTOCOL	STYLE	IMP %
Steven Murdoch	SPADI	2023	Effects of Jing Method Advanced Clinical Massage in Adults with Chronic Shoulder Pain	SH GIRD	HANDS ON	54
Lyndsey Harwood	SPADI	2018	The effectiveness of clinical massage therapy on perceived pain and disability in tennis players with chronic rotator cuff	SH GIRD	HANDS ON	81
Mitshuka Chung	SPADI	2018	Effects of the Jing shoulder girdle massage protocol in women with chronic shoulder pain	SH GIRD	HANDS ON	52
Tracey Abbott	SPADI	2024	A review of pain and injuries attributable to the shoulder girdle; their current treatment methodologies and relevance to massage therapy in triathletes over 18.	REHAB	ONLINE	76
Ella Scott	SPADI	2024	The Effect of Online Rehabilitation on Non Specific Shoulder Pain in Women Aged 40-60	REHAB	ONLINE	28
Alex Watson-Ban	SPADI	2021	A comparison of treating clients online with nonspecific shoulder pain using the Jing method of advanced clinical massage	SH GIRD	ONLINE	40
Ellie Harte	SPADI	2023	To Investigate the efficacy of The Jing ABSTRACT Method of advanced clinical massage on adults over 30 with chronic non-specific shoulder pain	SH GIRD	BLENDED	22
Bonney O'Connell	DASH	2024	Evaluating the Jing Method of Advanced Clinical Massage on Shoulder Pain in CrossFit participants	SH GIRD	HANDS ON	44
Laura Doñate Gira	DASH	2023	The Effects of the Jing Method Clinical Massage on Rotator Cuff Pain in Strength Training Adults	PRT SH GIRD	HANDS ON	25
Tracey Cleeve	DASH &	2021	The Effectiveness of Using Advanced Clinical Massage by Pre-Recorded Video for a Frozen Shoulder in Menopausal Women	VIDEO GUIDE	ONLINE	20
Leyla Kudmany	DASH	2020	Assessing The Effectiveness Of Online Guided Self Care For Those With Persistent Shoulder Pain	VIDEO GUIDE	ONLINE	80
Susie Johnston	DASH	2020	The effects of a sixweek course of treatment using the Jing Method of clinical massage on shoulder pain in women after breast cancer surgery	REHAB	ONLINE	34
Eoin O'Connell	TIMED	2018	Does Myofascial Release of the Neck and Shoulder Girdles Increase Speed for freestyle Swimmers over 100m	MFR	HANDS ON	4SECS

Table 10: Shoulder Dissertations utilising SPADI or DASH Patient Reported Outcome Measurement (PROM)

Studies showing study style: Hands on or Online

Therapist	INSTR	Year	Study	PROTOCOL	STYLE	IMP %
Ellie Harte	SPADI	2023	To Investigate the efficacy of The Jing ABSTRACT Method of advanced clinical massage on adults over 30 with chronic non-specific shoulder pain	SH GIRD	BLENDED	22
Bonney O'Connell	DASH	2024	Evaluating the Jing Method of Advanced Clinical Massage on Shoulder Pain in CrossFit participants	SH GIRD	HANDS ON	44
Laura Doñate Gira	DASH	2023	The Effects of the Jing Method Clinical Massage on Rotator Cuff Pain in Strength Training Adults	PRT SH GIRD	HANDS ON	25
Steven Murdoch	SPADI	2023	Effects of Jing Method Advanced Clinical Massage in Adults with Chronic Shoulder Pain	SH GIRD	HANDS ON	54
Lyndsey Harwood	SPADI	2018	The effectiveness of clinical massage therapy on perceived pain and disability in tennis players with chronic rotator cuff injuries	SH GIRD	HANDS ON	81
Mitshuka Chung	SPADI	2018	Effects of the Jing shoulder girdle massage protocol in women with chronic shoulder pain	SH GIRD	HANDS ON	52
Eoin O'Connell	TIMED	2018	Does Myofascial Release of the Neck and Shoulder Girdles Increase Speed for freestyle Swimmers over 100m	MFR	HANDS ON	4SECS
Leyla Kudmany	DASH	2020	Assessing The Effectiveness Of Online Guided Self Care For Those With Persistent Shoulder Pain	VIDEO GUIDE	ONLINE	80
Susie Johnston	DASH	2020	The effects of a sixweek course of treatment using the Jing Method of clinical massage on shoulder pain in women after breast cancer surgery	REHAB	ONLINE	34
Tracey Cleeve	DASH &	2021	The Effectiveness of Using Advanced Clinical Massage by Pre-Recorded Video for a Frozen Shoulder in Menopausal Women	VIDEO GUIDE	ONLINE	20
Tracey Abbott	SPADI	2024	A review of pain and injuries attributable to the shoulder girdle; their current treatment methodologies and relevance to massage therapy in triathletes over 18.	REHAB	ONLINE	76
Ella Scott	SPADI	2024	The Effect of Online Rehabilitation on Non Specific Shoulder Pain in Women Aged 40-60	REHAB	ONLINE	28
Alex Watson-Ban	SPADI	2021	A comparison of treating clients online with nonspecific shoulder pain using the Jing method of advanced clinical massage	SH GIRD	ONLINE	40

Table 11: Shoulder Study Method Style

Studies showing Jing Protocol used

Therapist	INSTR	Year	Study	PROTOCO	STYLE	IMP %
Eoin O'Connell	TIMED	2018	Does Myofascial Release of the Neck and Shoulder Girdles Increase Speed for freestyle Swimmers over 100m	MFR	HANDS ON	4 SECS
Susie Johnston	DASH	2020	The effects of a sixweek course of treatment using the Jing Method of clinical massage on shoulder pain in women after breast cancer surgery	REHAB	ONLINE	34
Tracey Abbott	SPADI	2024	A review of pain and injuries attributable to the shoulder girdle; their current treatment methodologies and relevance to massage therapy in triathletes over 18.	REHAB	ONLINE	76
Ella Scott	SPADI	2024	The Effect of Online Rehabilitation on Non Specific Shoulder Pain in Women Aged 40-60	REHAB	ONLINE	28
Bonney O'Connell	DASH	2024	Evaluating the Jing Method of Advanced Clinical Massage on Shoulder Pain in CrossFit participants	SH GIRD	HANDS ON	44
Laura Doñate Giménez	DASH	2023	The Effects of the Jing Method Clinical Massage on Rotator Cuff Pain in Strength Training Adults	SH GIRD	HANDS ON	25
Steven Murdoch	SPADI	2023	Effects of Jing Method Advanced Clinical Massage in Adults with Chronic Shoulder Pain	SH GIRD	HANDS ON	54
Lyndsey Harwood	SPADI	2018	The effectiveness of clinical massage therapy on perceived pain and disability in tennis players with chronic rotator cuff injuries	SH GIRD	HANDS ON	81
Mitshuka Chung	SPADI	2018	Effects of the Jing shoulder girdle massage protocol in women with chronic shoulder pain	SH GIRD	HANDS ON	52
Alex Watson-Ban	SPADI	2021	A comparison of treating clients online with nonspecific shoulder pain using the Jing method of advanced clinical massage	SH GIRD	ONLINE	40
Ellie Harte	SPADI	2023	To Investigate the efficacy of The Jing ABSTRACT Method of advanced clinical massage on adults over 30 with chronic non-specific shoulder pain	SH GIRD	BLENDED	22
Leyla Kudmany	DASH	2020	Assessing The Effectiveness Of Online Guided Self Care For Those With Persistent Shoulder Pain	VIDEO GUIDE	ONLINE	80
Tracey Cleeve	DASH &	2021	The Effectiveness of Using Advanced Clinical Massage by Pre-Recorded Video for a Frozen Shoulder in Menopausal Women	VIDEO GUIDE	ONLINE	20

Table 12: Protocol utilised

Studies showing improvement %

Therapist	INSTR	Year	Study	PROTOCO	STYLE	IMP %
Lyndsey Harwood	SPADI	2018	The effectiveness of clinical massage therapy on perceived pain and disability in tennis players with chronic rotator cuff injuries	SH GIRD	HANDS ON	81
Leyla Kudmany	DASH	2020	Assessing The Effectiveness Of Online Guided Self Care For Those With Persistent Shoulder Pain	VIDEO GUIDE	ONLINE	80
Tracey Abbott	SPADI	2024	A review of pain and injuries attributable to the shoulder girdle; their current treatment methodologies and relevance to massage therapy in triathletes over 18.	REHAB	ONLINE	76
Steven Murdoch	SPADI	2023	Effects of Jing Method Advanced Clinical Massage in Adults with Chronic Shoulder Pain	SH GIRD	HANDS ON	54
Mitshuka Chung	SPADI	2018	Effects of the Jing shoulder girdle massage protocol in women with chronic shoulder pain	SH GIRD	HANDS ON	52
Bonney O'Connell	DASH	2024	Evaluating the Jing Method of Advanced Clinical Massage on Shoulder Pain in CrossFit participants	SH GIRD	HANDS ON	44
Alex Watson-Ban	SPADI	2021	A comparison of treating clients online with nonspecific shoulder pain using the Jing method of advanced clinical massage	SH GIRD	ONLINE	40
Susie Johnston	DASH	2020	The effects of a sixweek course of treatment using the Jing Method of clinical massage on shoulder pain in women after breast cancer surgery	REHAB	ONLINE	34
Ella Scott	SPADI	2024	The Effect of Online Rehabilitation on Non Specific Shoulder Pain in Women Aged 40-60	REHAB	ONLINE	28
Laura Doñate Giménez	DASH	2023	The Effects of the Jing Method Clinical Massage on Rotator Cuff Pain in Strength Training Adults	PRT SH GIRD	HANDS ON	25
Ellie Harte	SPADI	2023	To Investigate the efficacy of The Jing ABSTRACT Method of advanced clinical massage on adults over 30 with chronic non-specific shoulder pain	SH GIRD	BLENDED	22
Tracey Cleeve	DASH &	2021	The Effectiveness of Using Advanced Clinical Massage by Pre-Recorded Video for a Frozen Shoulder in Menopausal Women	VIDEO GUIDE	ONLINE	20
Eoin O'Connell	TIMED	2018	Does Myofascial Release of the Neck and Shoulder Girdles Increase Speed for freestyle Swimmers over 100m	MFR	HANDS ON	4 SECS

Table 13: Improvement %

Appendix J2: Jing Shoulder Dissertations Graphs

STUDENT DISSERTATIONS % IMPROVEMENT DURING STUDY

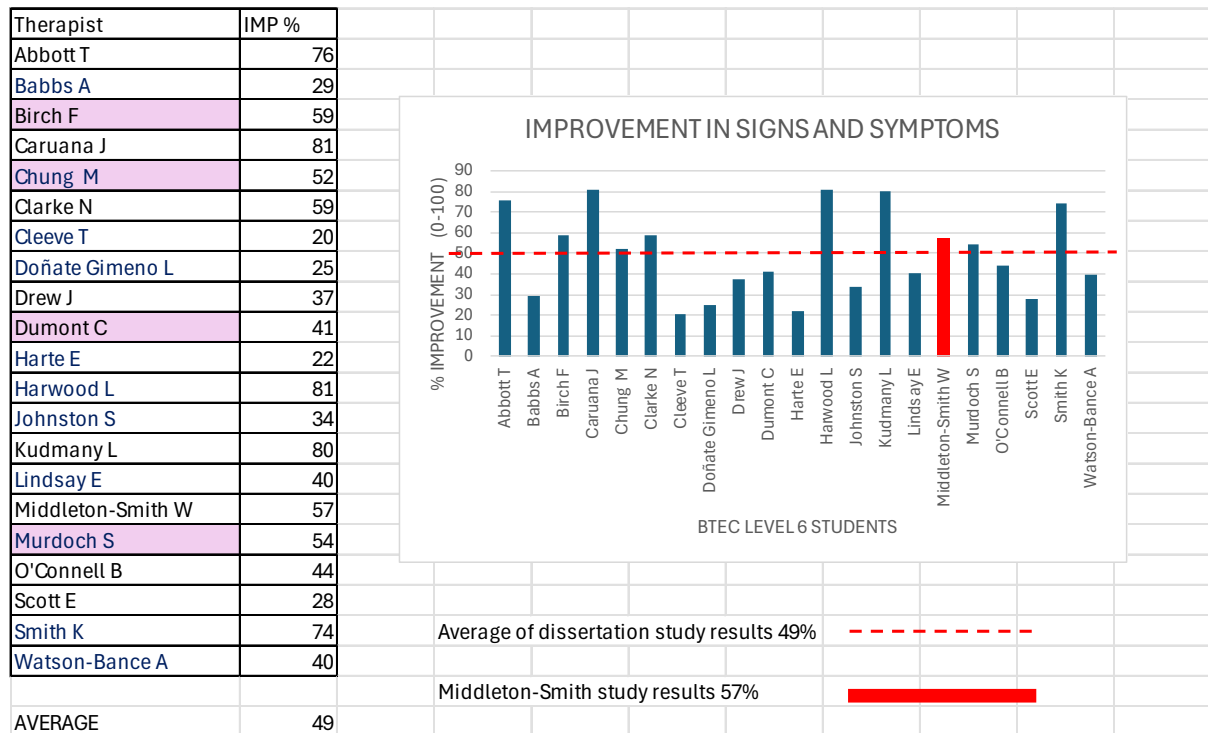


Table 14: Improvement %

Fig 5: Dissertations Improvement %

Fig. 5: Percentage improvements shown by Jing BTEC studies.

The highlight in red shows this study's results by Middleton-Smith, which falls in the mid-range compared with previous Jing Institute Dissertation studies.

Appendix K1:

Results Participant 1



Fig 6: Participant 1 Results

Results Participant 2

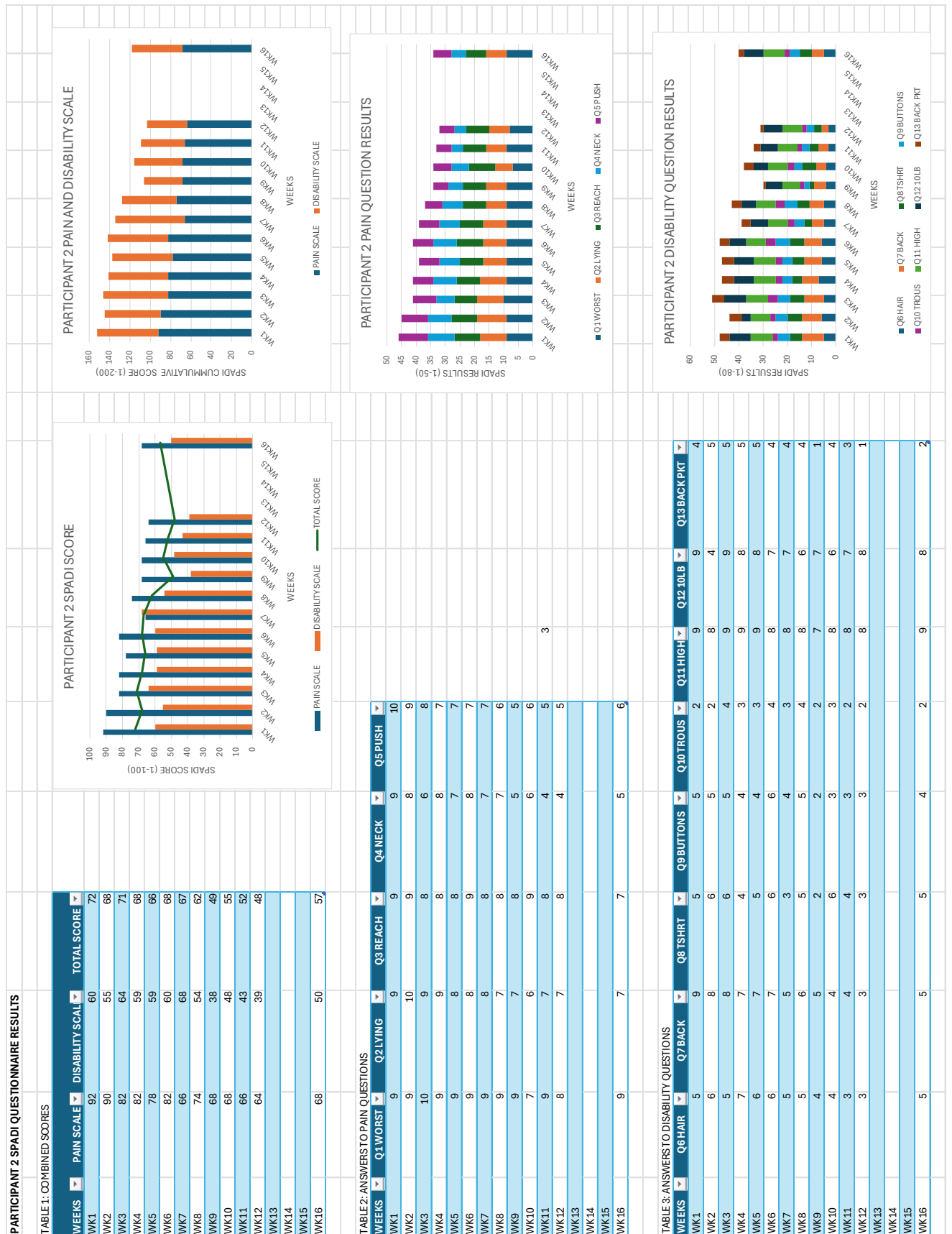


Fig 7: Participant 2 Results

Results Participant 3



Fig 8: Participant 3 Results

Results Participant 4



Fig 9: Participant 4 Results

Results Participant 5

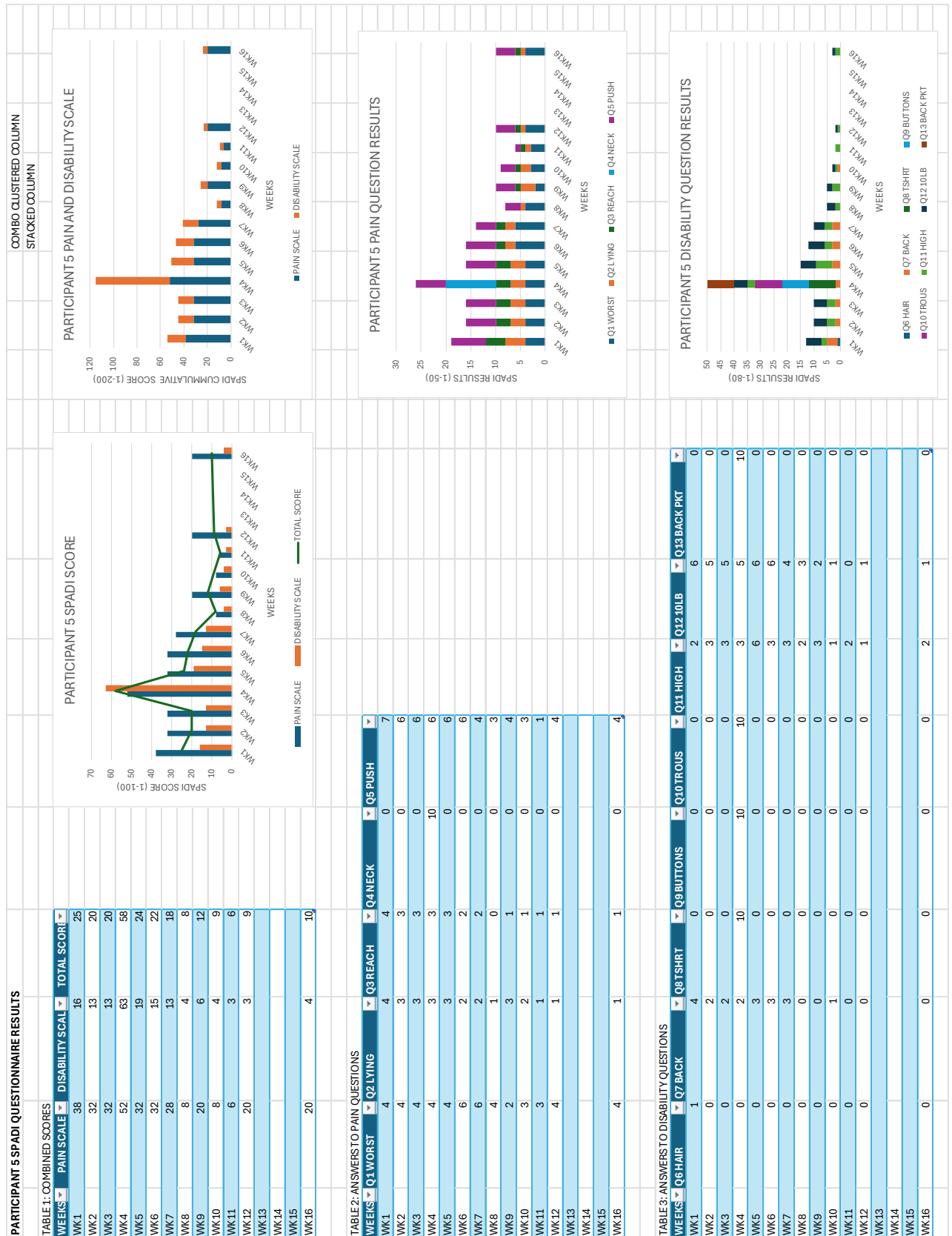


Fig 10: Participant 5 Results

Results Participant 6

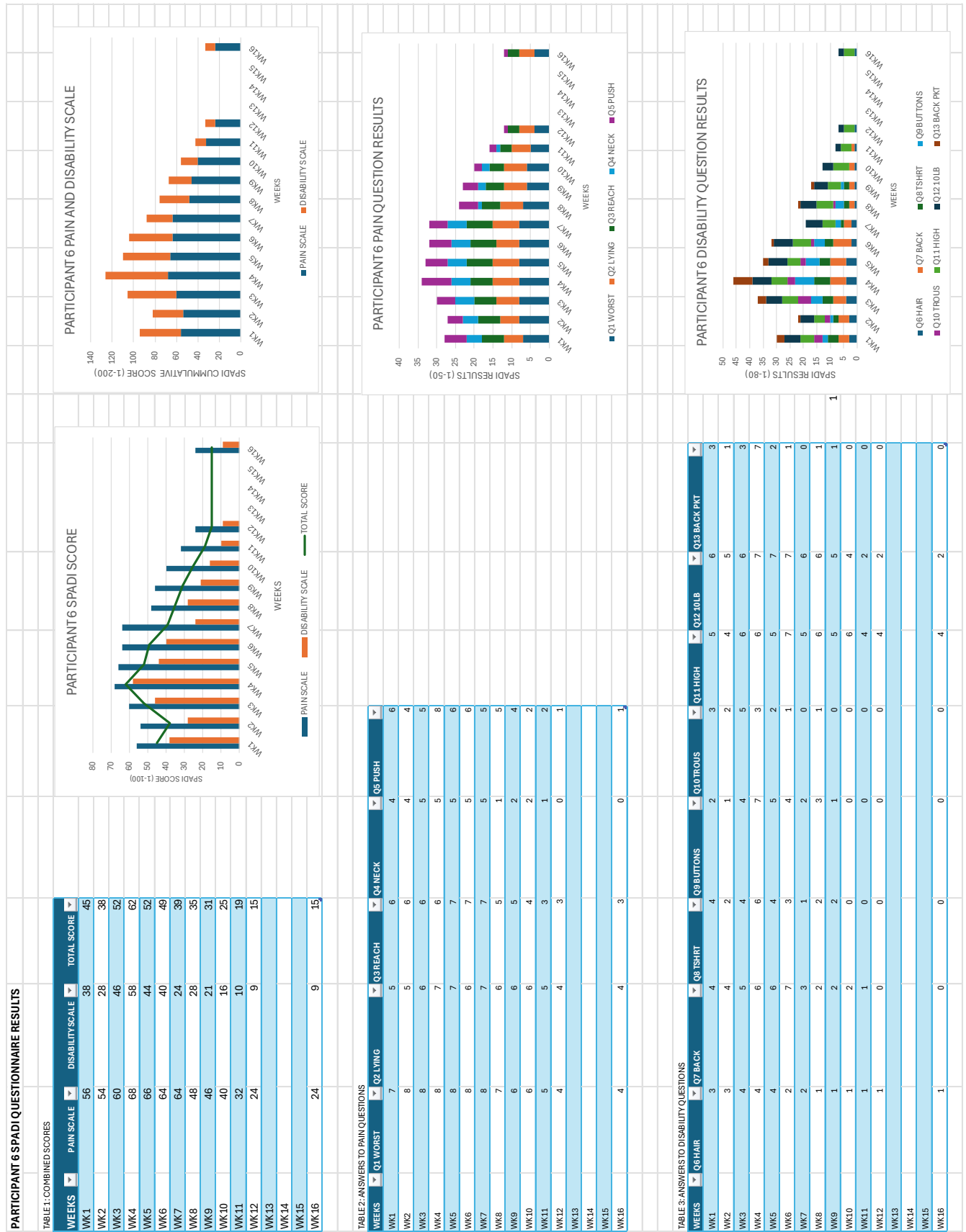


Fig 11: Participant 6 Results

Results Participant 7



Fig 12: Participant 7 Results

Results Participant 8

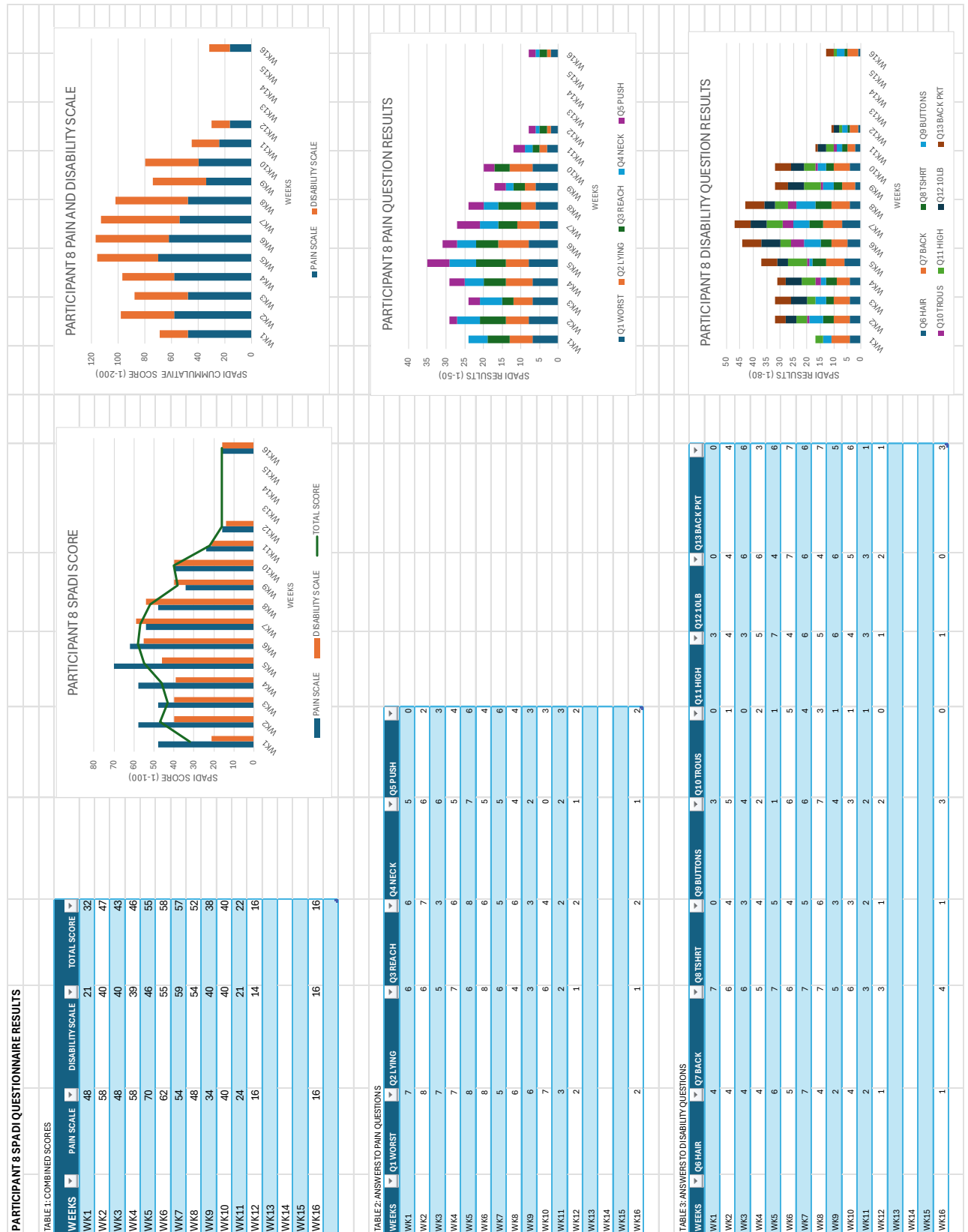


Fig 13: Participant 8 Results

Results Participant 9

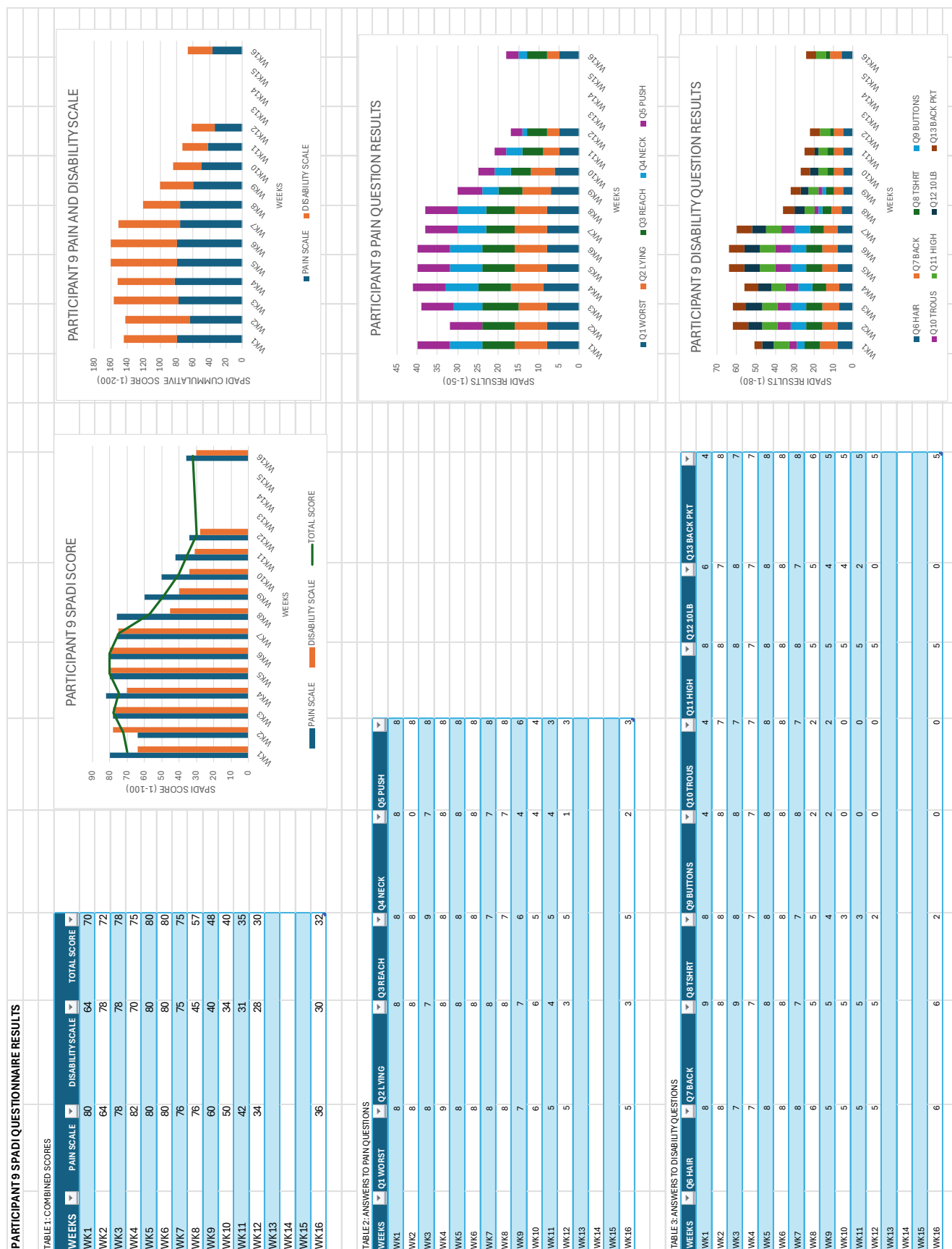


Fig 14: Participant 9 Results

Results Participant 10

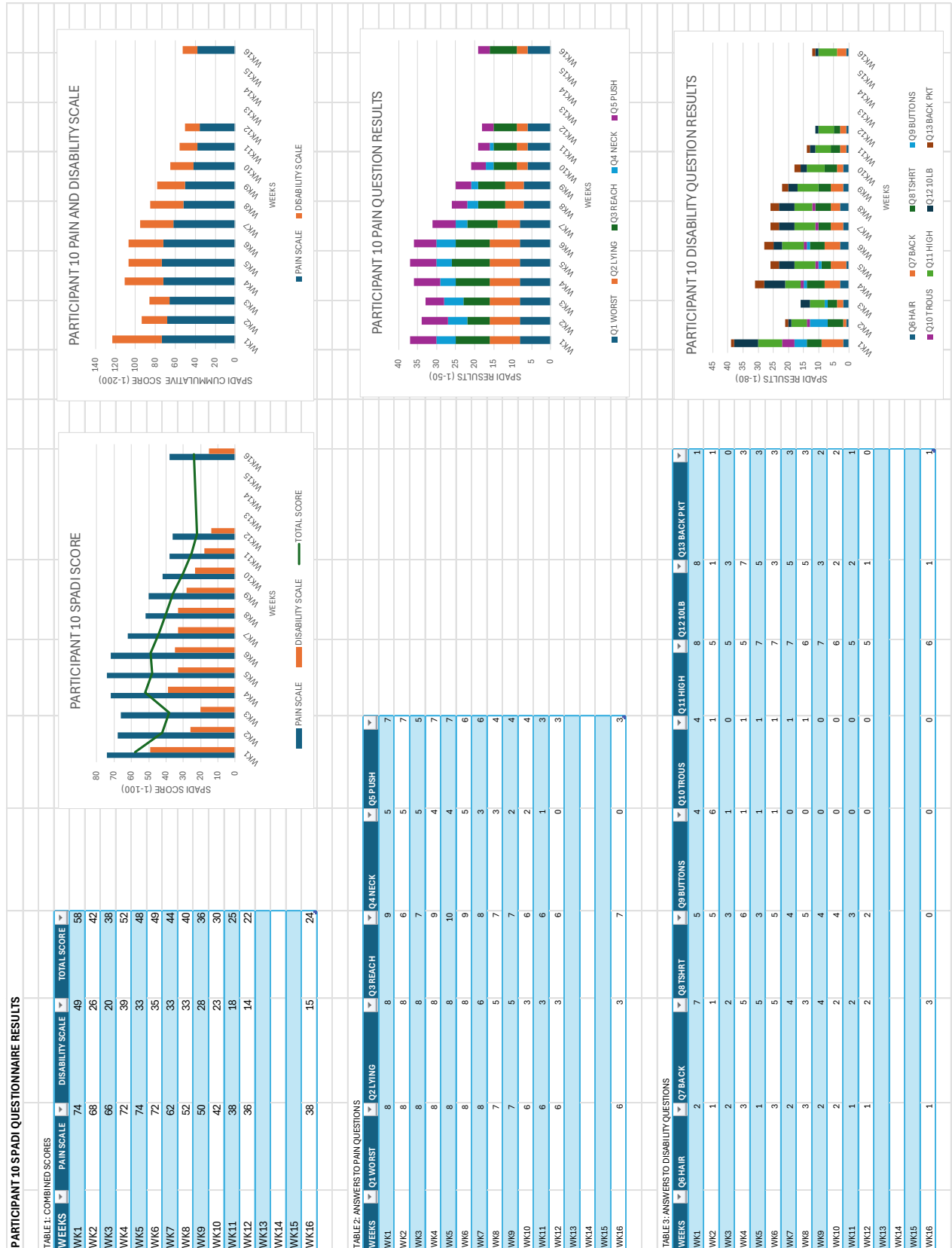


Fig 15: Participant 10 Results

Results Participant 11

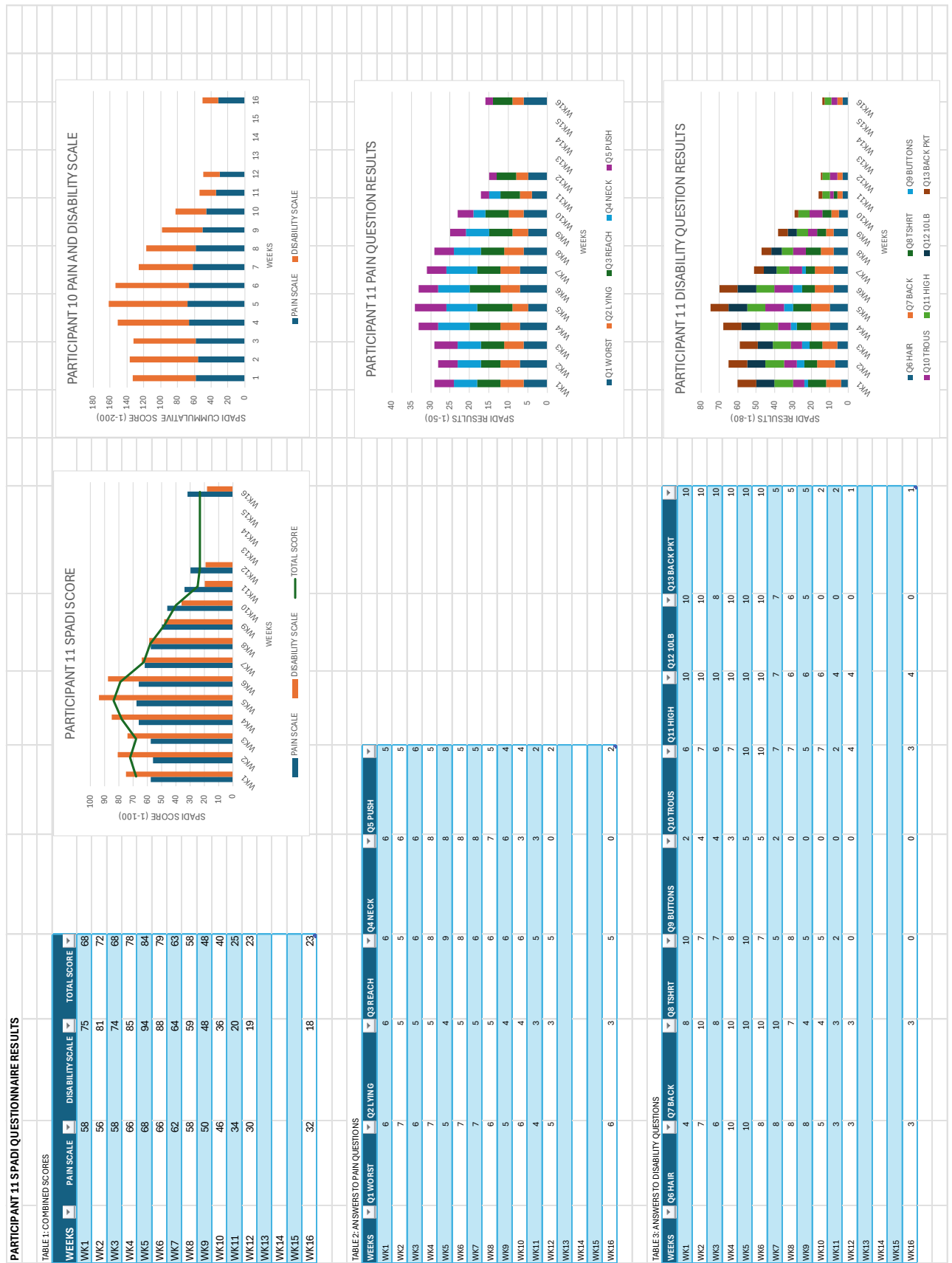


Fig 16: Participant 11 Results

Appendix K2: Participants - combined results

Combined results

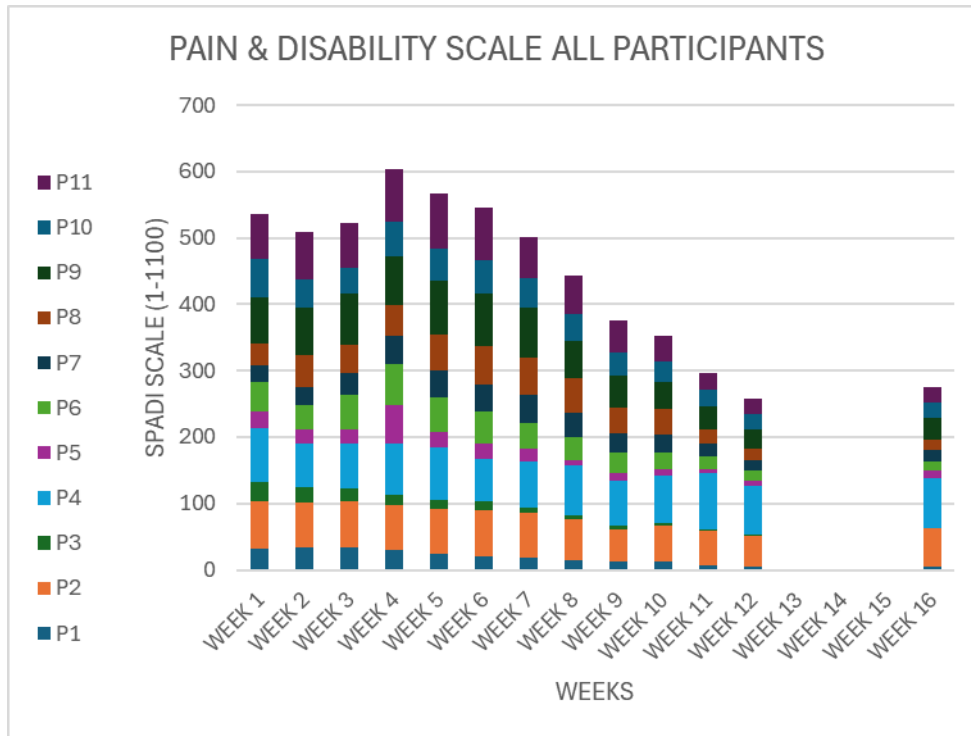


Fig 17: Combined Results – All Participants

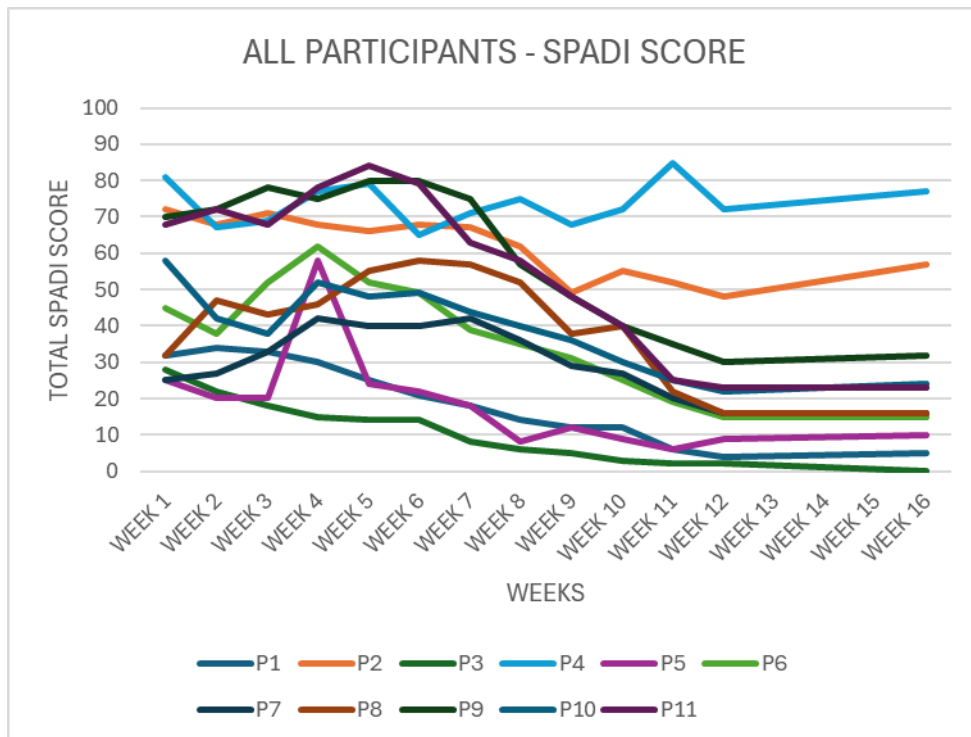


Fig 18: SPADI Score – All Participants

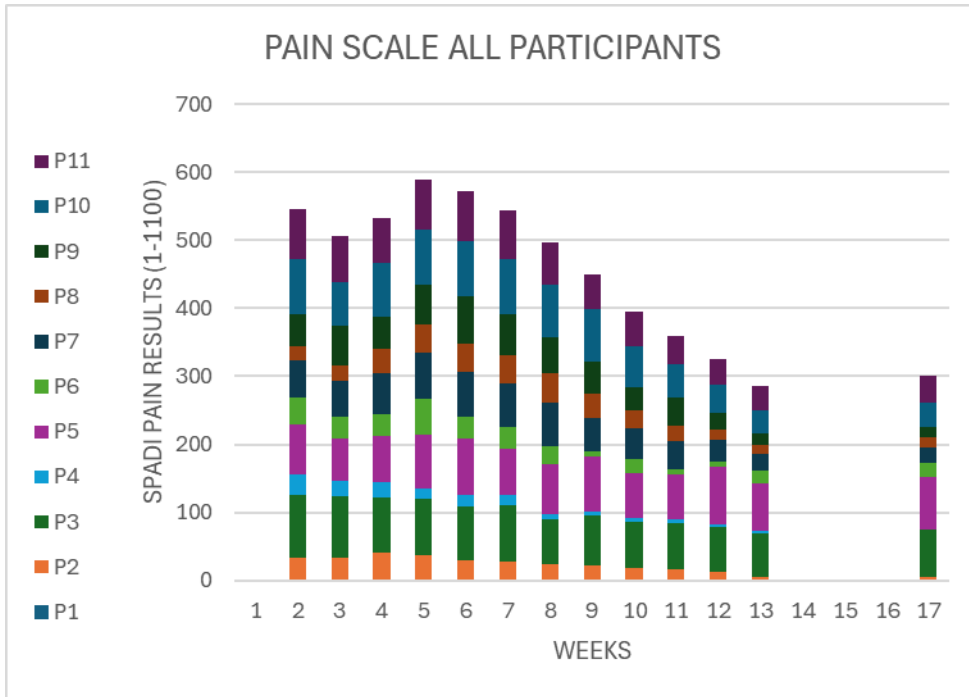


Fig 19: Pain Scale – All Participants

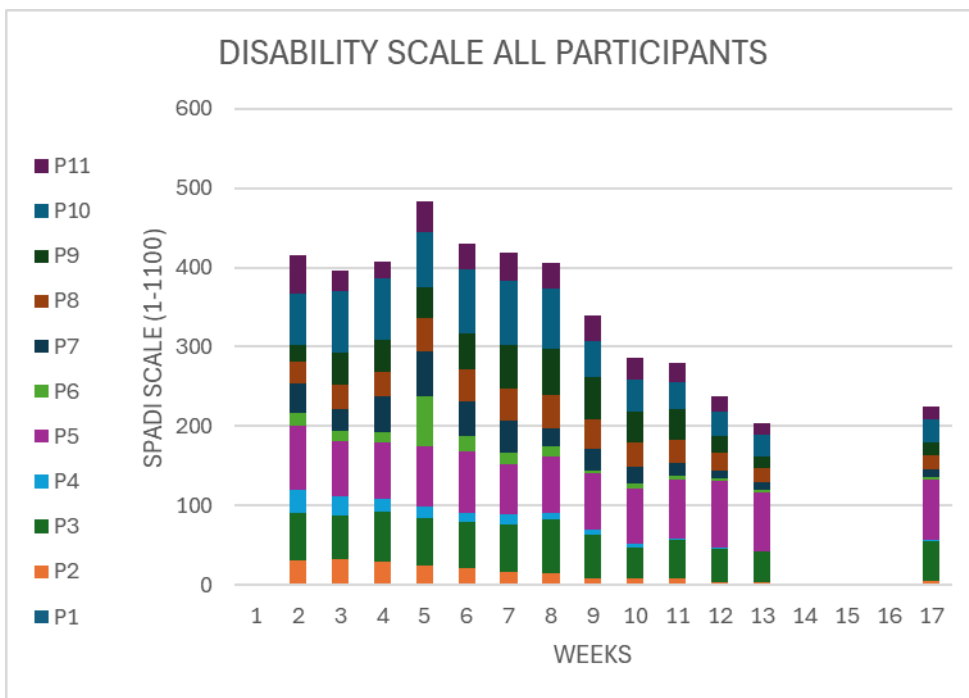


Fig 20: Disability Scale – All Participants

Appendix K3: Participants- combined results

Group A

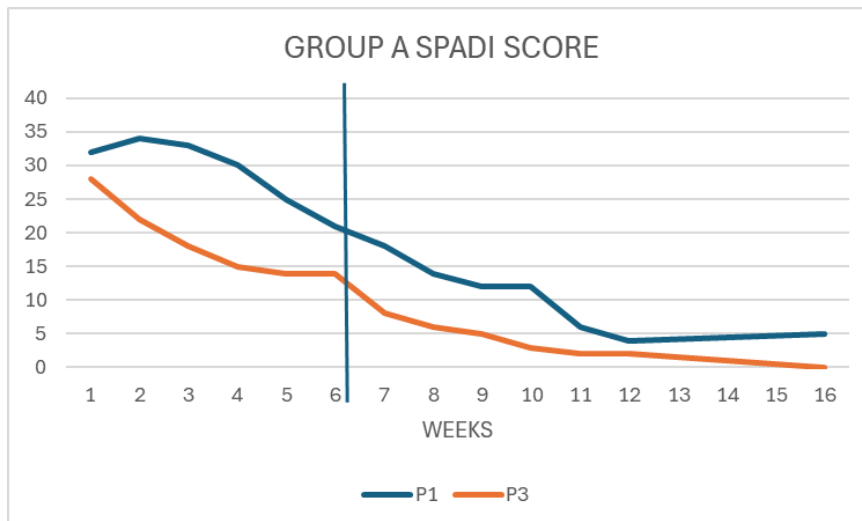


Fig 21: Group A. Two participants finished with a SPADI score under 5.

These two participants showed no improvement during the control period for pain at its worst, but they experienced a 91% reduction in pain and disability during the intervention period. Participant 3 sustained a minor injury in week 3 of the control phase. Group A's Self-Care adherence was high after week 1 of the intervention period, and participants exercised within the pacing parameters.

Group B

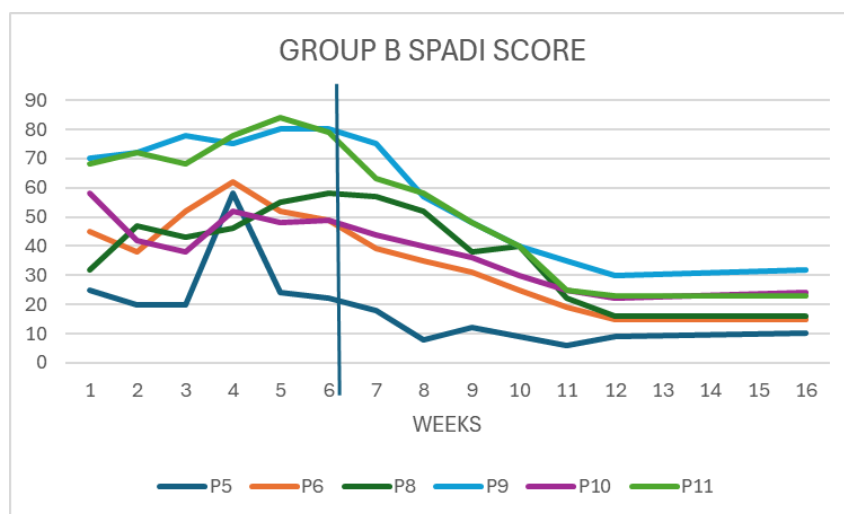


Fig 22: Group B. 6 participants.

These participants demonstrated an overall 68% improvement in the SPADI score; however, three participants sustained injuries during the control period, and one experienced an injury in week four of the intervention period. Group B's adherence to self-care was moderately consistent during the intervention phase, primarily functioning within the pacing parameters.

Group C

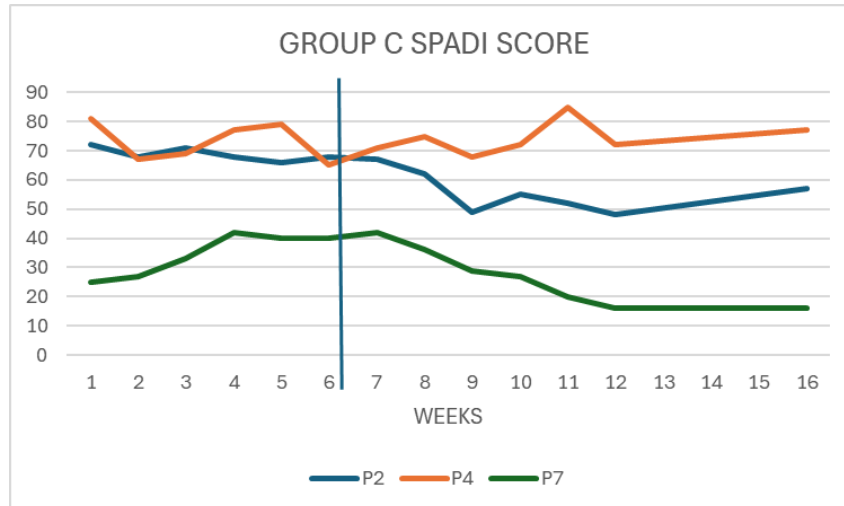


Fig 23: Group C. 3 participants.

All participants demonstrated significant improvements in range of motion (ROM) and body map pain patterns; however, SPADI results remained elevated. The group experienced notably high levels of pain due to exceptional circumstances, as reported in Appendix E. One participant achieved a 36% improvement, another had a 33% improvement, and a third participant showed an 11% improvement in symptoms, resulting in an overall 27% improvement for the group. Group C's adherence to self-care was inconsistent throughout the period, with frequent exceedances of the pacing parameters. This led to irritation, hindering pain and disability reduction, although it did foster new hobbies, exercise routines, and a renewed zest for life.

Appendix K4: Overall % Reduction SPADI Score

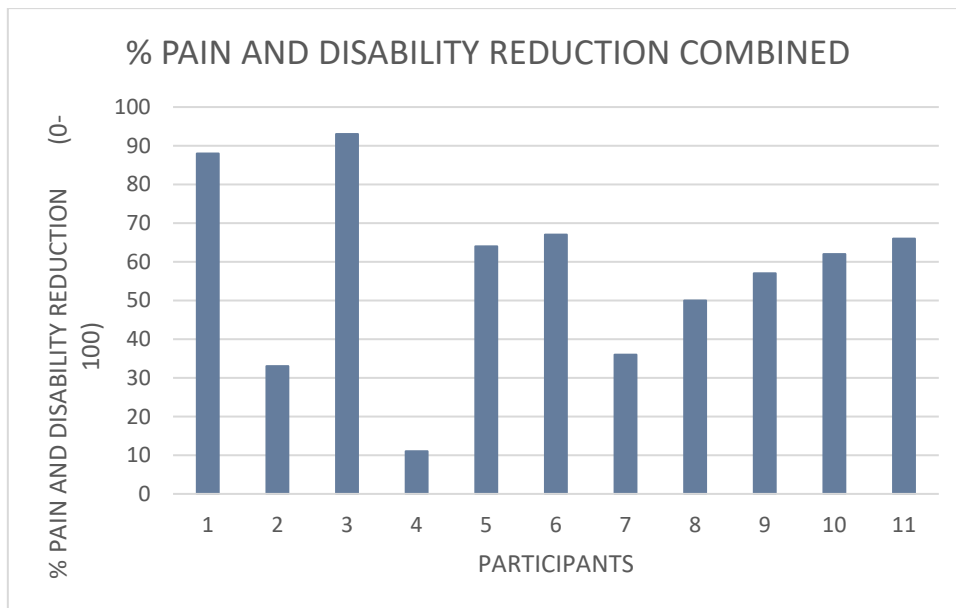


Fig 24: Total SPADI score reduction during the *intervention* period for each participant.

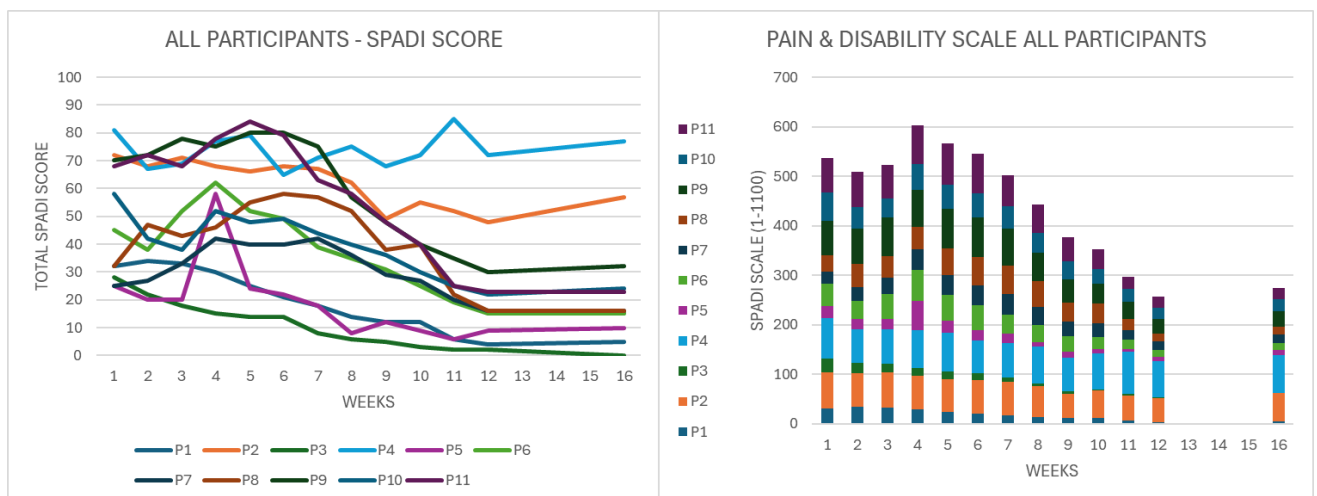
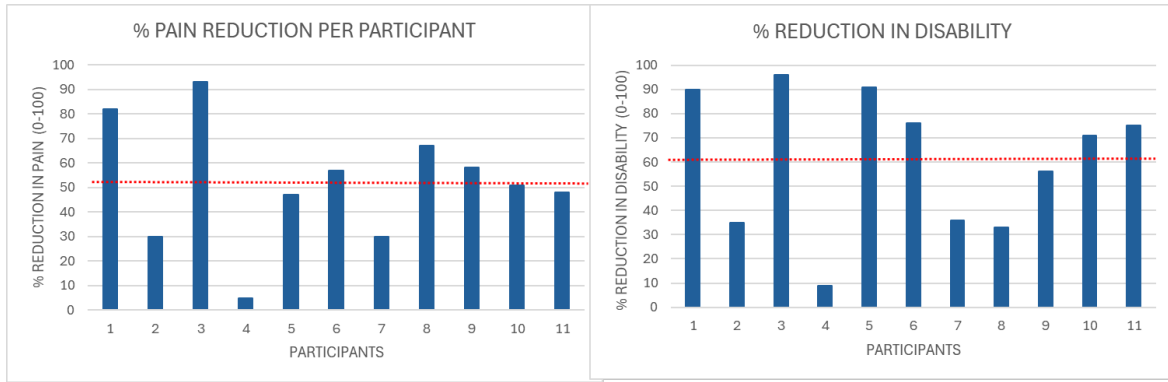


Fig 25: Weekly average SPADI score and the cumulative weekly average score.

Appendix K5: Self-Care adherence and Improved Well-being

PARTICIPANT	1	2	3	4	5	6	7	8	9	10	11
TIMES / WK	3	3	3	3	3	3	1-3	3	2-3	2-3	1-3
WEEKS COMPLETED	4	5	6	6	6	6	6	6	6	6	6
WITHIN PACING PARAMETERS	YES	NO	NO	NO	YES	YES	YES	YES	YES	YES	NO
INJURY SUSTAINED	X	X	X	YES							
STARTED A NEW SPORT	X	X	X	YES							
IMPROVED WELL-BEING	YES, BUT CONCERNED ABOUT NEW HEALTH ISSUE	SOME STILL REPORTING HIGH PAIN LEVELS	YES	YES, BUT UNDERLYING HEALTH ISSUES	YES	YES	YES	YES	YES	YES	YES
IMPROVED SLEEP	√	√	√	√	√	√	√	√	√	√	√
REQUEST TO CONTINUE Tx	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Table 15: Adherence to self-care, mindfulness, and rehab exercises was associated with improved feelings of well-being; however, no correlation was found between adherence and outcomes. The Pain Pattern body maps and ROM scores reflected and surpassed the overall quantitative results (see Appendix E), providing a more accurate representation of the findings.



Average pain reduction 52%

Average disability reduction 61%

Fig 26 Participants' results: reduction in pain and restricted movement or disability. The red dotted line shows the group average result.

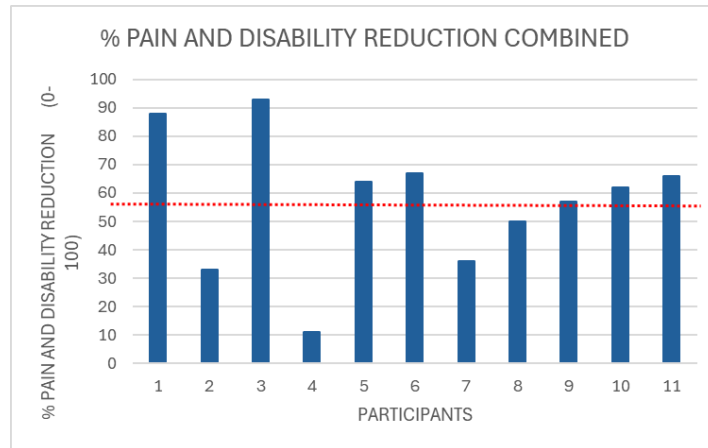


Fig 27: Average combined pain and disability reduction 57%

Appendix K6: Signs and Symptoms Self-Reported

SIGNS & SYMPTOMS	SELF REPORTED COMMENTS	
	PRIOR TO INTERVENTION	AFTER 6 WKS INTERVENTION
Gnawing, deep, constant, stabbing or intermittent pain	Constant and troublesome, when using the muscle, exhausting	11 out of 11 participants reported pain as: Gone or almost gone
Low mood, depression	Large proportion of time, frequently, all the time	Much improved, had forgotten about it, feel empowered 11/11 improved, more positive mood
Anxiety, stress	All the time, stress levels high, feel very stressed	Feel more in control of life, feel more relaxed. 11/11 reduced stress levels
Poor or broken levels of sleep	Wake in pain, pain wakes me constantly, sleep constantly broken, lucky if I get 1-2 hours, wake up exhausted	Sleep much better, sleep right through the night, I wake up free of pain, wake up refreshed. 11/11 reported better sleep
Restricted range of movement (ROM),	Pain stops me styling hair, lying down, prevents me reaching for shelf, pain when driving, cannot turn neck, cannot put hands behind back, cannot put on trousers or socks, cannot turn over in bed, have to support arm into waist constantly, afraid of someone jolting me, have to sit straight or pain instant	Almost gone, still there but less of a problem, gone except when overdoing things, lots better, really pleased. Even able to sit on sofa comfortably at last 11/11 improved or almost resolved ROM
Restricted ability to work	Driving and standing uncomfortable, cannot work on computer for long, pain when sitting relaxing, dare not risk being knocked	Able to drive, gone back to work, taking regular healthy breaks from work positions constantly, feels good to be back 11/11 confident to work
Withdrawal from social activities	Awkward feeling tired and in pain all the time, friends stopped asking me out, avoided recent trips with friends, feel depressed that I am not joining in with school activities for the children	Met up with several friends and family I haven't seen for ages, enjoyed a bingo night, went back to yoga, took dog out with family, arranged to help at next school Mums catering for school disco 11/11 taking part in social activities
Cessation of sports and hobbies	Stopped playing tennis, stopped pilates, don't go camping, stopped kayaking	Started walking Started yoga Started golf lessons Gone with friends on kayaking trip although not ready to risk joining in the rowing for a bit longer! 11/11 partaking, started or restarted sports and hobbies

Table 16: Reported comments before and after intervention

Appendix K7: Range of Movement (ROM) and Special Orthopaedic tests

ROM & SPECIAL TESTS	PAIN AND RESTRICTIONS PRIOR TO INTERVENTION	PAIN AND RESTRICTIONS AFTER 6 WKS INTERVENTION
CERVICAL SPINE LAT FLEXION	PAIN 0-4 RESTR 0-70	P 0 RESTR 0-20
CS ROTATION	PAIN 0-1 RETR 0-50	PAIN 0
GLENOHUMERAL JT FLEXION	PAIN 0-3 RESTR 0-45 DEG	PAIN 0 REST 0-45DEG
GH JT EXTENSION	PAIN 0-2 RESTR NO MOVEMENT -	PAIN 0-1 REST 0-45 DEG
GH ABDUCT	P 0-3 RESTR 0-70	P 0 RESTR
GH ADDUCT	P 0-1	P 0
GH EXT/LAT ROT	P 0-2 RESTR 0-90	P 0
GH INT/MED ROT	P 0-5 RET 0-90	P 0
GH H ABD	P 0-2	P 0
GH H ADD	P 0-3	P 0-1
SCAPULOTHORACIC JT DEPR	P 0-2 RESTR -30	P 0
ST ELEVATION	P 0-3	P 0-1
ST JT ABD/PROTRACT	P 0-3 RESTR -10	P 0
ST ADDUCT/RETRACT	P 0-1 REST 0-20	P 0 REST 0-5 (FEELS 'TIGHT' END OF RANGE)
EMPTY CAN	+	-
NEERS	+	-
SPEEDS	+	-
CROSSOVER	+	-
SCRATCH	REACH DOWN 0 TO T5	0 TO T3

	REACH UP 0 TO T12	0 – T10
LIFT OFF	0-1 INCH	2-6INCH
CENTRAL SENSITISATION		
FEAR AVOIDANCE/	4 OUT OF 11 PATIENTS	0/11
GUARDING	2 OUT OF 11	0/11
HYPERSENSITIVITY /	7/11 PATIENTS	1/11
HYPERALGESIA /	7/11	1/11
ALLODYNIA	1/11	0/11

Table 17: ROM and Special Test Combined Results

Appendix L1

Volunteer Inclusion / Exclusion questions

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21	V22	V23	V24	V25
DO YOU SUFFER WITH SHOULDER PAIN AROUND THE UPPER BACK AND / OR SHOULDER AREA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HAVE YOU GOT PAIN FOR OVER 30 MINS / DAY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HAVE YOU HAD THE PAIN FOR MORE THAN 3 MONTHS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DO YOU HAVE PAIN THAT AFFECTS ARM MOVEMENT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DO YOU HAVE PAIN OR PINS AND NEEDLES RADIATING DOWN THE ARMS	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DOES PAIN RESTRICT YOUR UPPER BODY MOVEMENT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PAIN THAT INTERFERES OR PREVENTS WITH DAILY ACTIVITIES AT HOME	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PAIN THAT INTERFERES WITH OR PREVENTS DAILY ACTIVITIES AT WORK	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
PAIN WHICH INTERFERES WITH OR PREVENTS SLEEP	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CAN YOU COMMIT TO THE 16 WEEK STUDY, INCLUDING TRAVELLING TO MY STUDIO FOR 6 WEEKLY MASSAGE SESSIONS	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HAVE YOU BEEN ON ANY REGULAR MEDICATION FOR 6 WEEKS BEFORE THE START OF THE STUDY	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CAN YOU AVOID CHANGING EXISTING OR STARTING NEW TREATMENTS FOR THE DURATION OF THE STUDY	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y
HAVE YOU HAD ANY RECENT SURGERY IN THE AREA (LAST 12 MONTHS)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	Y
ARE YOU PREGNANT	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
ARE YOU UNDERGOING ANY MANUAL THERAPY FOR THE CONDITION	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	Y
ARE YOU OVER 18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table 18: Inclusion questions