Evaluating the Jing Method™ of clinical massage on chronic leg pain in female recreational footballers

Rachel McKinlay

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

Rachel McKinlay _____

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Abstract

Chronic leg pain is common in female footballers and can impact a player's ability to play to their full potential, or even to participate at all. This study aimed to evaluate the effect the Jing Method™ of clinical massage had on chronic leg pain in female recreational footballers.

A within group design was used in which each participant acted as their own control. Participants were selected who had experienced leg pain for longer than 12 weeks and played football at least once a week. Participants completed a six-week control period, followed by a six-week intervention period. The intervention period combined hands-on clinical massage, self-care exercises and online group rehabilitation sessions. Participants completed the Exercise-Induced Leg Pain Questionnaire, British Version (EILP BR) weekly from weeks 1-12, with a follow up assessment at week 16, to evaluate functional changes over time.

Improvements were observed across all ten areas measured by the questionnaire. These findings suggest that a combined approach incorporating clinical massage, education and rehabilitation may be beneficial in supporting female football players with chronic leg pain. Further research with larger samples and measures taken over a longer period is recommended.

Literature Review

In both 2022 and 2025, the Lionesses lifted the European Championship trophy, two pivotal moments that transformed the visibility and popularity of women's football in the UK. Participation surged with the numbers of registered female teams more than doubling from 5,632 teams (2016-17) to 12,150 teams (2023-2024) (Samuels & Fagg, 2024). The success of the Lionesses not only captured the nation's attention, with record breaking audiences tuning in (Braidwood, 2025), but it has the potential to cement lasting change in participation, investment, and visibility in women's football for generations to come.

Table 1: Data on new women's and girls' teams registered 2021-2023

Season	Number of new women's and girls' teams registered	Source
2021 - 2022	1400	(Veevers, 2024)
2022 - 2023	1500	(Veevers, 2024)

Inevitably, the increase in participation means an increase in injuries. This literature review will be looking at conventional, preventative and alternative approaches to musculoskeletal injuries within the context of women's football. Firstly, it will examine the most common footballing injuries experienced by women.

Most common footballing injuries

There has been growing conversations around the specific challenges *female* football players face. It has been found that female footballers sustain predominantly joint or ligament injuries affecting the knee and ankle, whereas male footballers incur predominantly muscle related injuries to the thigh (Bennett et al., 2024; Larruskain et al., 2018; Mancino et al., 2024; Robles-Palazón et al., 2022).

Factors such as having greater joint and ligamentous laxity, hormonal fluctuations, football boots designed for the male foot, as well as reduced access to funding / structured training / quality pitches and technology have all been suggested as contributing factors to the higher rates of injuries in female football players (Bennett et al., 2024; Fox et al., 2020; Larruskain et al., 2018; Mancino et al., 2024; Raj et al., 2023; Renstrom et al., 2008). Knowing that female football players are more susceptible to ligament injuries, primarily anterior cruciate ligament (ACL) and ankle sprains (Bennett et al., 2024; Larruskain et al., 2018; Mancino et al., 2024), training and warm-up programmes should be designed to reflect this risk. This includes prioritising proprioceptive exercises which have been shown to reduce the rate of recurrent ankle sprains by improving joint control and stability (de Vasconcelos et al., 2018; Hupperets et al., 2009; Rivera et al., 2017). Understanding female specific footballing injuries is crucial, yet despite the rapid growth and visibility of women's football, research and investment remain disproportionately low (Okholm Kryger et al., 2023; Yiapanas, 2025). More high-quality research is needed not only to understand injury in female footballers but to examine how factors such as female specific training and warms ups, equipment design and technology, may influence injury prevention and recovery. Without this focus, the continued growth of women's

football at both elite and grassroots levels risks being undermined by avoidable injury and inadequate support.

Prevention – Warm up

A proper warm-up is amongst the most effective strategies for reducing the risk of injury (Bizzini & Dvorak, 2015). Evidence-based warm-up programmes have been shown to significantly enhance key attributes such as strength, agility, and proprioception, all of which play a critical role in reducing injury risk (Asgari et al., 2022; Kirkendall et al., 2010). When warm up programmes include multiple components, such as strength, plyometric, and balance exercises, they can reduce the incidence of injuries, including those to the hamstring, knee, ankle, and hip/groin, by as much as 27% (Crossley et al., 2020).

One of the most widely studied examples of this, is the FIFA 11+ Injury Prevention Programme (FIFA, 2026), a structured warm up programme combining stretching, running, balance, strength and plyometrics, designed to reduce the risk of injury. When properly implemented, the FIFA 11+ has been proven to reduce injuries by between 30-50% in both female and male players (Asgari et al., 2022; Bizzini & Dvorak, 2015; Kirkendall et al., 2010; Sople & Wilcox, 2024).

While the 11+ will not be implemented in this study, it serves as a clear example of how structured, evidence-based warmups can reduce injury. Its emphasis on education and player empowerment aligns closely with the ‘teach’ and ‘self-care’ elements of the Jing Method™. This is especially important for female recreational footballers who may not have access to experienced coaches as much as their male

counterparts. At grassroots levels, warm-ups can be limited and unstructured, lacking the components shown to be effective for injury prevention.

Conventional treatment for musculoskeletal injuries

For amateur footballers, their GP and the NHS website are often the first point of contact for acute soft tissue injuries. Conventional guidance has shifted from rest-heavy protocols like RICE and PRICE (see Table 2) towards more active recovery frameworks such as POLICE and PEACE & LOVE, which emphasise early activity, progressive loading, and patient education to support recovery and reduce the risk of reinjury (Dubois & Esculier, 2020). The NHS website, however, still advocates the outdated PRICE framework and offers little guidance on the importance of rehabilitation or strength-building, beyond the acute phase (NHS, 2024). For female footballers managing chronic leg pain, reliance on outdated PRICE advice, may potentially delay recovery and contribute to ongoing pain.

Table 2: Acronyms for acute strain and sprain management frameworks

Acronym	Meaning
RICE	Rest, Ice, Compression, Elevate
PRICE	Protect, Rest, Ice, Compression, Elevate
POLICE	Protection, Optimal Loading, Ice, Compression, Elevation
PEACE & LOVE	Protection, Elevate, Avoid Anti-inflammatories, Compression, Education Load, Optimism, Vascularisation, Exercise

Massage Therapy in Sport

Sports massage therapy is arguably one of the most common alternative approaches for acute injury within football, with most clubs employing sports massage therapists (Sriwongtong et al., 2020). While massage is widely used in sport, its long-term physiological effects, remain contested, potentially due to research being limited by small sample sizes, varied techniques, and lack of a standardised protocol. Several studies cast doubt on the extent to which massage can bring about measurable structural changes in muscles or tissues (Gasibat et al., 2024; Hemmings et al., 2000; Sriwongtong et al., 2020). However, when combined with stretching, massage *has* been proven to be effective in improving joint range of motion, balance and muscle pain (Sargyono et al., 2025; Yin et al., 2025), supporting its clinical value in injury recovery. Although it is worth noting that the Sargyono et al. (2025) study had a small sample size of just 14 participants, lacked a control group, and did not specify whether participants were male or female. Furthermore, the short intervention period (one week) and absence of long-term follow-up, restrict the strength of this study's conclusions.

Massage *has* been found to reduce pain perception and improve psychological recovery (Dakić et al., 2023; Sriwongtong et al., 2020), outcomes particularly relevant to footballers with chronic leg pain even if evidence for deep structural change is limited.

The Jing Method™

The Jing Method™ is an outcome-based approach that combines massage and soft tissue techniques within a biopsychosocial framework. Each treatment begins with a detailed consultation and orthopaedic assessment, enabling the therapist to identify not only physical but also psychological and social contributors to pain. This process establishes the therapeutic alliance, which alone has been shown to significantly influence clinical outcomes (Gillingham, 2017; Hall et al., 2010; Kinney et al., 2020; Pihlaja et al., 2018).

Building on this foundation, the method draws on a set of advanced techniques summarised by the acronym **HFMAST** (Heat, Fascia, Muscles, Acupressure, Stretching, Teaching), see Table 3. This adaptable framework allows treatment to be tailored to the individual, addressing both the mechanical aspects of musculoskeletal pain and the wider psychosocial factors that often sustain it. For female recreational footballers experiencing chronic leg pain, this integrated approach offers a way to manage not only the injury itself but also the psychological and social challenges of recovery and returning to play.

Table 3: Jing Method Clinical Massage Therapy HFMAST

Using Heat, Fascial work, Muscles, Acupressure, Stretching and Teaching to provide a multimodal approach to treatment (Fairweather & Mari, 2015).

Approach	Effects	Reference
H Hot and Cold	Positive effects of heat: 1. Psychological effects (feel relaxed, nourished). 2. Decreased muscle tightness and trigger point activity. 3. Increased circulation brings fresh blood and nutrients to the area, helping tissue and injury repair. 4. Increased pliability of fascia. 5. Decrease perception of pain.	1. (Parot-Monpetit et al., 2015) 2. (Yin et al., 2025) 3. (Nadler et al., 2004) 4. (Hammer, 2014) 5. (French et al., 2006b, 2006a)
F Fascial Techniques	Adhesions can form between fascial layers which can lead to pain. Working to 'release' the fascia, can help reduce pain.	(Ajimsha, 2011; Ajimsha et al., 2014)
M Muscles Treat all the muscles around the joint with Trigger Point Therapy	Relieve pain by applying pressure to trigger points (hyper irritable spots) in the muscle.	(Finando & Finando, 2005; Simons DG, Travell JG, 1999)
A Acupressure Points	Acupressure points can be used to help reduce pain.	(Chen et al., 2021; Ogul & Yildiz, 2023)
S Stretching	1. Helps improve flexibility. 2. Regular stretching can help improve sporting performance. 3. Stretching can help musculoskeletal pain. 4. Stretching can help you feel good.	1. (Anjum et al., 2023; Cai et al., 2023) 2. (Shrier, 2004) 3. (Posadzki et al., 2011; Yildirim & Gultekin, 2022) 4. (Montero-Marín et al., 2013; Sudo & Ando, 2020)
T Teaching self-care strategies to your client	Empowering your client to believe they have control over their pain. Self-care strategies and education can help foster this.	(Sengul et al., 2010; Sidiq et al., 2024)

In summary, the literature highlights several gaps in the way in which musculoskeletal and chronic leg pain are managed for female recreational football players. Progressive rehabilitation frameworks, like PEACE & LOVE, remain poorly disseminated outside of clinical and academic circles, leaving many players to rely on outdated, rest heavy advice.

Similarly, structured warm up programmes like the 11+ have been proven to reduce injuries, but uptake at grassroots level remains low. There is also a growing argument, that female football players could benefit from adaptions from these programmes, targeting the injuries to which they are most susceptible. These gaps reflect broader issues of accessibility, awareness and investment in the women's game. This reinforces a wider pattern across the literature, where much of the existing research is male-focused.

This literature review points to a pressing need for approaches that are both evidence-informed, accessible and tailored to female recreational footballers. The Jing Method™, with its outcome-based, biopsychosocial framework and adaptable toolkit (HFMAST), offers a potential model to bridge this gap. By combining education, soft tissue therapy and self-care strategies, it has the capacity to address not only the physical symptoms of chronic leg pain but also the psychological and social factors in recovery. Existing research on the Jing Method™ has demonstrated positive outcomes in managing various sport related musculoskeletal injuries, including shoulder pain in tennis players, ankle instability in footballers, post-ACL repair in snowboarders and shoulder injuries in individuals engaged in CrossFit (Harwood, 2018; Le Messurier, 2024; Loveday, 2018; O'Connell, 2024). However,

there is limited evidence on the effectiveness of the Jing Method™ for chronic leg pain in female recreational football players, this project directly addresses this gap by evaluating its potential as a holistic approach for this under-researched population.

Method

Ethical approval for this study was granted by the Jing Institute of Massage and Complementary Medicine, in 2025 (Appendix 1). The aim was to evaluate the effectiveness of the Jing Method™ of clinical massage on chronic leg pain in female recreational footballers.

Six female participants, aged 20 – 70, were recruited via local women's football groups, social media (Facebook, Instagram), and word of mouth. All participants played football at least once per week and reported chronic leg pain persisting for more than 12 weeks, aggravated during sport. At the initial consultation, a full medical history was taken, and participants agreed not to commence any new therapies during the study.

All participants provided informed consent prior to taking part in the study. Participants were given an information sheet outlining the study's purpose, procedures, and potential risks and benefits, and were assured of their right to withdraw at any time without consequence. Signed consent forms were obtained, an unsigned example is provided in Appendix 6.

Table 4: Location of injury for the participants

	Ankle Pain	Knee Pain	Hamstring Pain	Gastrocnemius Pain
P1	*			
P2	*			
P3	*			
P4		*		
P5				*
P6			*	

This was a within-group design in which each participant acted as their own control. This approach was appropriate given the small sample size.

Participants completed the EILP-BR questionnaire (Nauck et al., 2015) throughout the study. During the control phase (weeks 1- 6), participants completed the EILP-BR weekly. During the intervention phase (weeks 7–12), participants received treatment and rehabilitation and completed the EILP-BR six days after each treatment and returned it within 24 hours, before their next session. A final follow-up questionnaire was completed at week 16.

The intervention combined clinical massage, self-care and rehabilitation exercises:

- Weeks 7, 9 and 11: Clinical massage incorporating techniques from the Jing Method™ Leg, Knee, and Foot Protocol (Appendix 3), alongside prescribed self-care (Appendix 5).
- Weeks 8, 10, 12: Online group rehabilitation sessions (Appendix 4) alongside prescribed self-care (Appendix 5).

Massage treatments followed the Jing Method™ HFMAST approach:

- H – Heat: Application of heat using hot stones
- F – Fascial techniques such as cross hand stretch and skin rolling to ease the fascia
- M – Muscles: Using massage and trigger point therapy to treat muscles in the leg
- A – Acupressure Points: Applying gentle pressure to specific acupressure points to support pain reduction.
- S – Stretching: A range of passive, Active Isolated Stretches (AIS) and Proprioceptive Neuromuscular Facilitation (PNF) stretching techniques were used
- T – Teaching self-care exercises to perform in between sessions

Following each hands-on session, participants were provided with a YouTube link to a five-minute self-care video demonstrating four prescribed exercises, which participants were asked to perform every other day. These exercises were updated at week 9 and 11. The study design emphasised active patient participation through hands-on therapy, structured rehabilitation, and at-home exercises.

Results

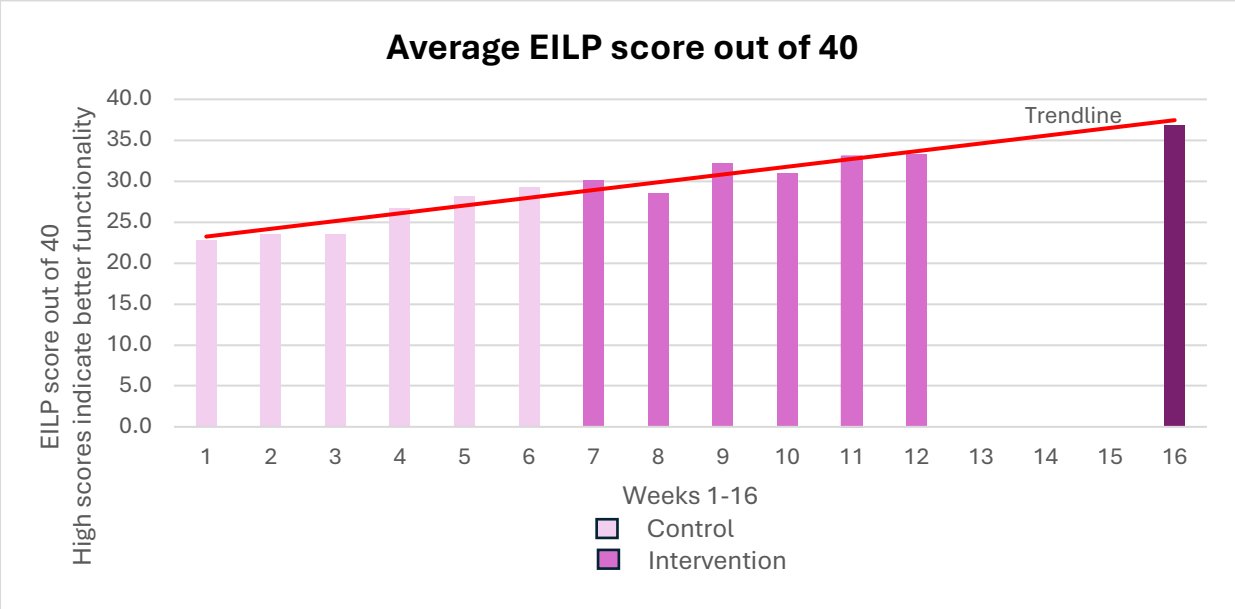

Figure 1: Weekly Mean Scores for all 10 EILP-BR Questions out of 40.

High scores indicate better functionality

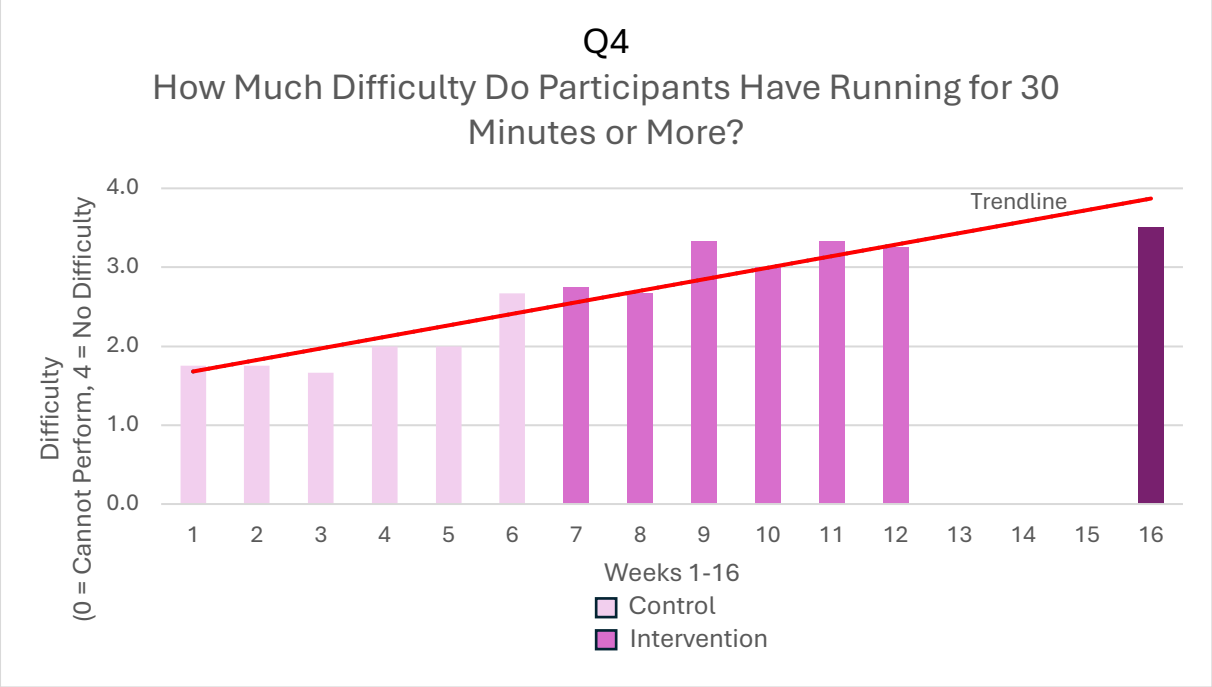

Figure 2: Weekly Mean Score For Difficulty Reported When Running for 30 Minutes or More

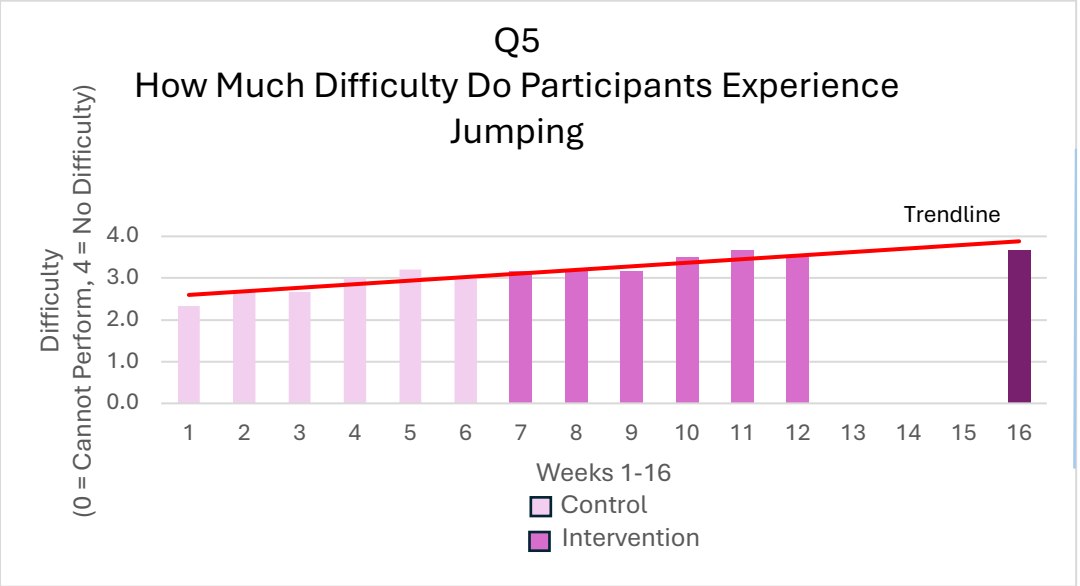

Figure 3: Weekly Mean Score For Difficulty Reported When Jumping (Q5, EILP-BR)

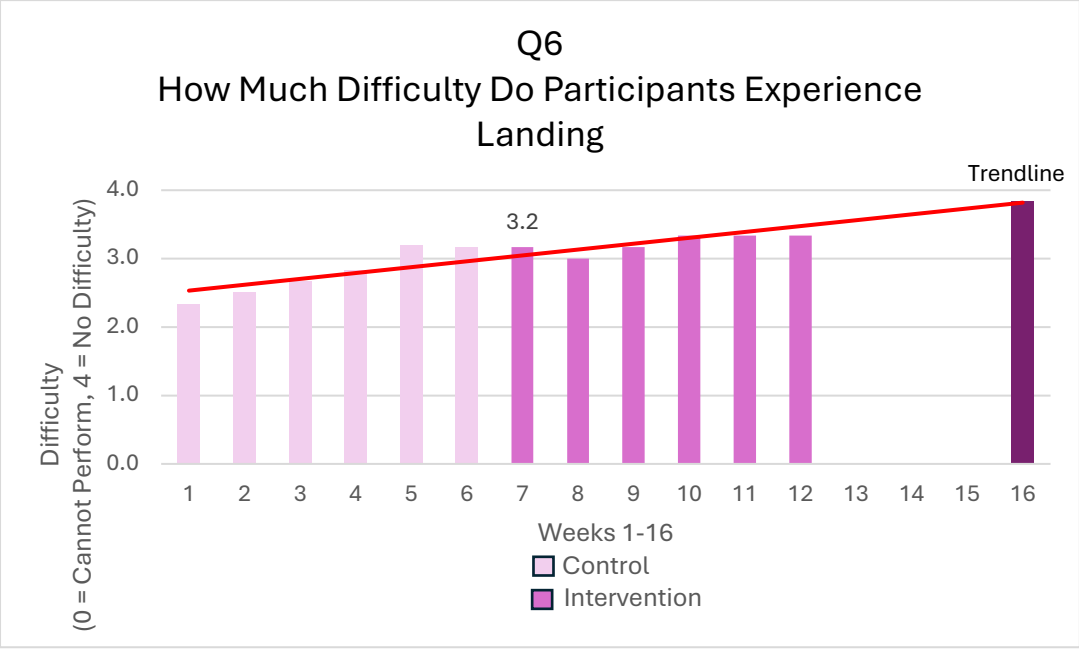

Figure 4: Weekly Mean Score For Difficulty Reported Landing

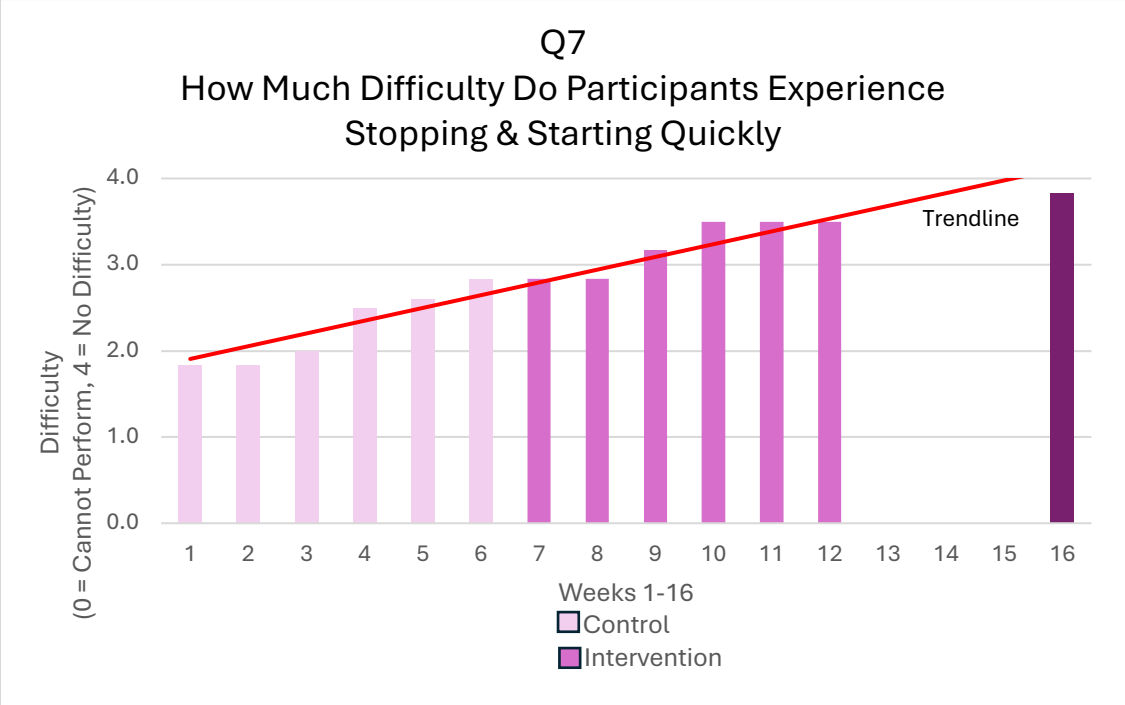

Figure 5: Weekly Mean Score For Difficulty Reported Stopping & Starting Quickly

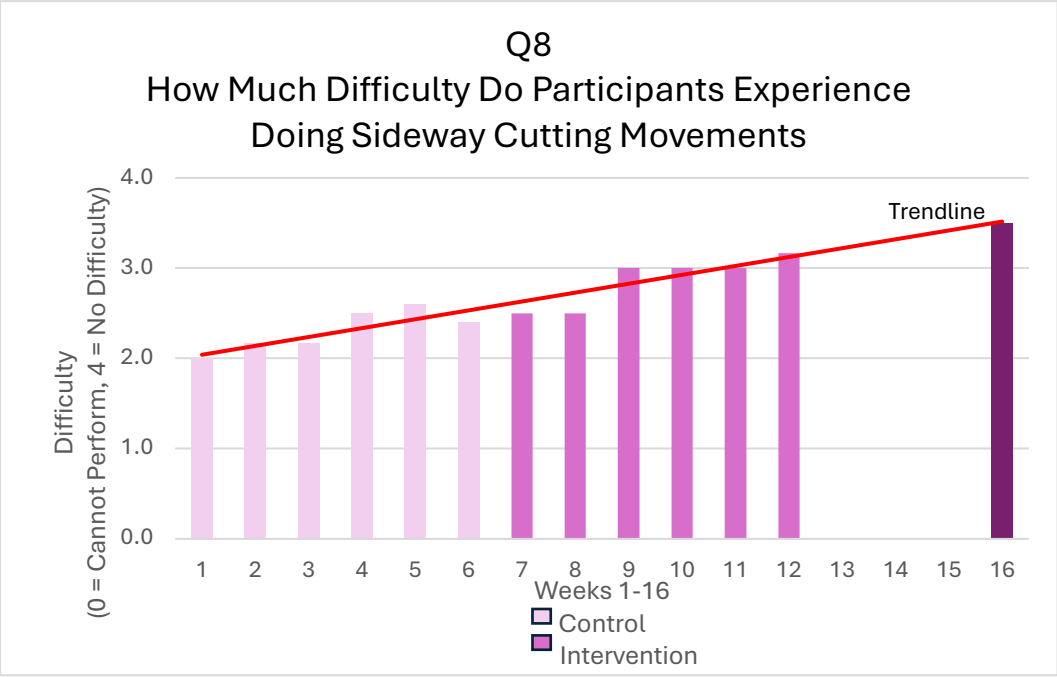

Figure 6: Weekly Mean Score For Difficulty Reported Doing Sideway Cutting Movements

Across all six participants, the overall mean score (calculated from the ten questions from the EILP-BR questionnaire) improved from 22.8 on week 1, to 36.8 by week 16, a 14-point increase, indicating improved functional movements and reduced discomfort amongst participants. The most pronounced improvements were observed in stop-start movements, followed by running after 30 minutes, and then jumping and sideway cutting tasks.

Discussion

This study suggests some modest benefits can be achieved in reducing chronic leg pain in recreational female footballers using the Jing Method™. The combined use of clinical massage, self-care and leg rehabilitation exercises, enhanced the players' football-specific endurance and enabled longer participation in training and / or matches. Improvements in agility related movements and running endurance, align with previous research suggesting that multimodal interventions, combining massage and rehabilitation can enhance performance in sports (Sargyono et al., 2025; Yin et al., 2025).

Interestingly, improvements were evident from week 2 of the control phase across 9 out of 10 questions. These gains continued throughout the intervention period (weeks 7-12) and were maintained up to week 16. Notably, the control period ran from w/c 21 July 2025 until w/c 25 August 2025, over the summer recess, during this time many of the participants experienced a reduction in training and matches, which may help explain the improvements observed from week 2 onwards. In addition, it is possible that the early establishment of the therapeutic alliance, which has been shown to significantly influence clinical outcomes across musculoskeletal and rehabilitation settings (Gillingham, 2017; Hall et al., 2010; Kinney et al., 2020; Pihlaja et al., 2018) was having an effect. In this sense, while hands-on treatment began at week 7, meaningful therapeutic engagement, and therefore "treatment" in a broader sense, commenced from week 1, this helps to further contextualise the early improvements observed within this cohort.

These findings support the existing body of literature on the Jing Method™, which has demonstrated positive outcomes in managing a range of musculoskeletal pain across different sports (Donate, 2023; Harwood, 2018; Le Messurier, 2024; Loveday, 2018; O'Connell, 2024). This study extends that evidence by suggesting that the Jing Method™, may also benefit female football players experiencing chronic leg pain, an area previously unexplored.

Secondary Findings

The following observations, while not central to the study's primary outcomes, are noteworthy and align with the broader patterns reported in the literature review. Although not part of the formal questionnaire, five participants of the six reported that their teams did not conduct adequate warm-ups before training, reinforcing the evidence that structured warm-ups, like the 11+, are critical in reducing injury rates (Asgari et al., 2022; Bizzini & Dvorak, 2015; Kirkendall et al., 2010; Sople & Wilcox, 2024).

The pattern of injuries amongst the participants supports the existing research that shows female footballers are more likely to sustain ligamentous injuries, especially to the knee and ankle, compared to men (Bennett et al., 2024; Larruskain et al., 2018; Mancino et al., 2024; Robles-Palazón et al., 2022). In this study, four of the six were ligamentous injuries and of those four, all were ankle or knee injuries, reflecting those trends. In response to this injury profile and as highlighted from common injuries among female footballers (Bennett et al., 2024; Larruskain et al., 2018; Mancino et al., 2024; Robles-Palazón et al., 2022), the study design incorporated, proprioceptive exercises in both the online sessions and the self-care exercises.

Proprioceptive training has been shown to play a significant role in reducing injury rates, particularly in cases of recurrent ankle sprain (de Vasconcelos et al., 2018; Hupperets et al., 2009; Rivera et al., 2017). Several participants reported continuing their self-care exercises beyond week 13 of their own volition, suggesting good adherence and perceived benefit. Given that structured warm-ups and ongoing rehabilitation are not usually implemented in many grassroots football settings, this self-directed rehab and proprioceptive work may also have provided a practical means of maintaining strength between sessions.

Limitations

There were several limitations to this study that should be considered when interpreting the results and deciding how future studies could learn from this work. This was a small-scale study with six participants which limits the validity of the findings. There was considerable variation in participant characteristics, including age, fitness and level of football participation. Some participants were training and playing up to three times a week, whilst others trained once weekly, which may have influenced outcomes.

The inclusion criteria were intentionally broad to attract participants, focusing on chronic leg pain rather than a specific injury type. As a result, the nature and location of injuries varied between participants, introducing additional variability. This variability influenced the design of the hands-on treatment, self-care strategies, and online rehab programme, with the aim of ensuring that each participant's affected area was addressed over the course of the six-week intervention.

Had the participants presented with the same injury (for example, an ankle sprain), the exercise selection and overall protocol could arguably have been more targeted and specific. However, the Jing Method™ advocates treating not only the affected joint but also the joints above and below, an approach that was adhered to throughout the intervention. One advantage of including a broader range of injuries was that the focus shifted from injury-specific rehabilitation, such as ankle sprain management, to a wider remit of developing overall leg strength.

This broader approach also shaped the educational component of the programme. Rather than focusing solely on a specific set of exercises, participants were educated on the importance of developing whole-leg strength and resilience, including proprioception training and appropriate warm-up and cool-down strategies. This is particularly relevant given the injury patterns observed in female footballers, who are at greater risk of ligament injuries (Bennett et al., 2024; Larruskain et al., 2018; Mancino et al., 2024).

It is acknowledged, however, that the broad inclusion criteria may have influenced the level of specificity possible within the study. Consequently, the hands-on treatment and prescribed self-care may have varied in relevance across participants from week to week. Future studies may benefit from narrower inclusion criteria to allow for a more injury-specific intervention, while still adhering to the holistic principles of the Jing Method™.

A further learning point for future studies would be to schedule the final session as a hands-on treatment session. In the present study, the final session was delivered

online, which limited the opportunity to reassess participant injuries following the intervention period.

The questionnaire had limited biopsychosocial scope and did not include a validated pain scale, focusing primarily on physical performance outcomes. While these measures were relevant to functional change, the absence of pain assessment restricted the ability to fully evaluate participants subjective symptom perceptions. Including questions around pain intensity, confidence, fear of reinjury or motivation, might have offered a more holistic understanding of the participants experience through a biopsychosocial lens.

Although some measurable data was collected (running after 10, 15 and 30 minutes), most of the questions relied on self-reporting. Participants recall bias and subjective interpretation could have impacted data accuracy. In addition, participants trained on different days and at different times, resulting in inconsistencies between the timing of training sessions / matches and questionnaire completion. For example, one participant could have completed the questionnaire a day after a training session, and another could have completed it 6 days after training, this could influence how they perceived and reported their symptoms.

This study captured short term changes in symptoms and function, however the intervention period was relatively brief. A key benefit of future research would be to extend the study over a whole football season in order to collect more longitudinal data. This would allow injury rates to be captured over time and to explore whether regular adherence to strength and proprioceptive training between football sessions

is associated with a reduction in injury occurrence or recurrence. This approach could be achieved through collaborations with local football teams / clubs, facilitating longer term engagement and more consistent data collection.

Conclusion

This small-scale study aimed to explore the effects of a Jing Method™ informed intervention on chronic leg pain in female recreational footballers. These findings suggest that modest improvements in football specific function can be achieved by combining clinical massage, self-care, rehabilitation and education.

This study extends the existing evidence base for the Jing Method™ by applying it to female recreational footballers experiencing chronic leg pain, a population that has been relatively underrepresented in the literature. The broader educational focus, emphasising general leg strength, proprioception and the importance of proper warm up and cool down strategies, aligns closely with the realities of grassroots football and is particularly relevant given the higher incidence of ankle and knee ligament injuries in female players.

These findings should be viewed in light of the limitations of the study, including small sample size, short intervention and follow up period and broad inclusion criteria. Future research would benefit from, longer study duration, narrower inclusion criteria, larger sample sizes and the inclusion of pain and psychosocial outcome measures. Extending interventions across a whole football season, potentially collaborating with local football clubs, may further support understanding of both symptom management and injury prevention in this population.

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Appendices

Appendix 1 Ethical approval

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

Jing BTEC Research Ethics Form

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

Section 1: to be completed by student

Student's name:	Rachel Mckinlay
Student number:	RG08746
BTEC Year-group:	2024-26
Date of application:	28.03.2025
Student e-mail address:	R_mckinlay@hotmail.co.uk
Title of research project:	Evaluating the Jing Method™ of clinical massage on chronic leg pain in female recreational footballers

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? *Exercise induced leg pain questionnaire*	**X**	
If yes, please specify the name of the validated questionnaire you are using and attach a copy here. *Exercise induced leg pain questionnaire*		

Section 3: Research premises

Where is your research being undertaken? My clinic: Restore Aromatherapy 111 Magdalen Road SW18 3NW Online rehab sessions, participants will be in their own environment.	
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?

- Use local neighbourhood, Facebook groups, Next-door, Existing football WhatsApp groups
- Reaching out to local football coaches
- Posters at cafes / pubs
- Promote on my website, through existing clients, etc

Section 5 Outline your project procedure

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

This study aims to investigate the effect of the Jing Method™ of clinical massage on chronic leg pain in female recreational footballers.

Participants will be recruited for this within group study design using:

- Use local neighbourhood, Facebook groups, Next-door, Existing football WhatsApp groups
- Posters at local café, pubs, churches, community centres
- Promote on my website, through existing clients, etc

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

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

- During this time participants will complete the Exercise induced leg pain questionnaire once a Week but there will be no intervention.
- Participants will also be asked how many times per Week they were able to train or play in games.

Weeks 7-12 will be the intervention period.

Weeks 7, 9 and 11 will include a clinical massage (details below)
Weeks 8, 10 and 12 will consist of a group online rehab session (details below)

Weeks 7, 9 and 11 in the intervention period.

- Week 7: This session will be 80 minutes — including 25 minutes for consultation, 45 minutes of hands-on treatment, and 10 minutes for self-care demonstration and homework review.
- Weeks 9 & 11: These will be 60-minute sessions, with 45 minutes of hands-on treatment and 15 minutes for welcome check-in, self-care demonstration and homework review.
- The hands on session will follow the Jing leg, knee and foot protocol (see Massage Fusion, pp. 317 - 344).
- Each Week it will follow the HFMAST approach and include Amma, hot stones, indirect and direct myofascial release, effleurage, trigger point work, acupressure, stretching and teaching. Details on each Weekly treatment will be added as an appendix.
- There will be some background music played throughout the treatment.
- After hands on each session, the participants will be given a link to a 5-minute self-care video, uploaded to YouTube.
- The self-care will include stretches, proprioceptive drills and strength building movements
- This self-care will be performed three times per Week. I will check self care compliance at the hands on sessions.
- Details of each Weekly treatment plus self-care routine will be added as an appendix to the study.
- Six days after treatment the EILP-BR -BR questionnaire will be sent to participants to complete and return prior to their next treatment or within 24 hours.
- At the same time, participants will be asked to inform the researcher how many times they performed the self-care that Week and how many times per Week they were able to train or play in games.

Weeks 8, 10 and 12 in the intervention period.

- During these Weeks, participants will join a 40 minute online group session which will include leg, knee and foot stretches, mobilisations and strengthening exercises
- After each online session, the participants will be given a 5-minute self-care video to follow. This self-care will be performed three times per Week.
- The online sessions will include: a warm up, targeted stretches (Hamstrings, Calves, Quadriceps, IT Band), strengthening exercises, proprioception and a warm down.
- Details of each online rehabilitation treatment plus self-care routine will be added as an appendix to the study.
- Six days after online session the EILP-BR BR questionnaire will be sent to participants to complete and return prior to their next treatment or within 24 hours
- Participants will also inform the researcher how many times they performed the self-care each Week and how many times per Week they were able to train or play in games

At Week 16, a follow up of the EILP-BR BR questionnaire will be sent to participants to assess if there were any longer term changes as a result of the intervention period.

Participants will have a chance to ask any questions before consenting to the study.

Section 6: Describe what your participants need to do

Participants are required to initially attend an online meeting to:

- Check they meet the inclusion criteria
- Have the study explained to them, have any questions answered so they can give consent to take part in the study
- Collect information required for the consultation process.
- Participants are required to inform the researcher of any manual therapy, medication or any other relevant treatment, they are receiving for their chronic leg pain throughout the duration of the study.
- Weeks 1-6, Participants are required to fill in EILP-BR BR questionnaire once a Week for 6 Weeks with no intervention. They will also inform the researcher how many times they trained or played in matches each Week.
- Weeks 7, 9 and 11 participants will receive a standardised Jing clinical massage treatment.
- Week 7: This session will be 80 minutes — including 25 minutes for consultation, 45 minutes of hands-on treatment, and 10 minutes for self-care demonstration and homework review.
- Weeks 9 & 11: These will be 60-minute sessions, with 45 minutes of hands-on treatment and 15 minutes for welcome check-in, self-care demonstration and homework review.
- Weeks 8,10 and 12 participants will join a 40 minute online group rehab session
- The clinical hands on treatment will include Amma, hot stones, the Jing leg, knee and foot protocol (the techniques used will be listed in my appendix)
- The online rehab session will include mobilisations, range of motion, stretching, strengthening, and proprioception techniques.
- A new 5-minute video demonstrating the Self-Care Routine will be uploaded to YouTube every two Weeks, following the in-person treatment sessions. The link will be shared via email, and the routine should be followed three times per Week until the next update.
- A new Self Care Routine will be introduced at Week 9 and Week 11.
- Six days after each treatment, participant is required to fill in the ELIP BR questionnaire and return it to the researcher prior to the next treatment.
- The participant will inform the researcher how many times they performed the self-care routine.

Section 7: Respecting confidentiality and ethical issues for participants

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

- Data held will be in accordance with the General Data Protection Regulation (GDPR)
- Information on initial signup form informing participants that their information will not be available to third parties.
- Assurance that details will not be seen by anyone else.
- Their names will be replaced by numbers so they will be anonymous.
- For any online group sessions participants can change their name so real identity is not revealed.
- Participants in online sessions will agree not to record any of the research project so as to protect the identities of all the participants.
- There is minimal risk of injury but possibly there might be some localized bruising, especially if participant presses too hard during self-care or transient muscle aches that can occur after a massage. This will be explained to participants before consenting to the study
- This study will be evaluating chronic leg pain in female recreational football players. Should the researcher be concerned about a participant, resources will be available of local specialist help where participants can be signposted to.
- Selection criteria will be fair and non-discriminatory, ensuring that footballers from diverse backgrounds have equal opportunity to participate.
- Consideration should be given to whether participants can fully engage in three online rehab (e.g., access to technology, time constraints).
- Qualified therapist

Section 8: Inclusion and exclusion criteria

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

- Female recreational football players over the age of 18 years old, able to commit to the 16-Week study and travel to my home clinic in Earlsfield for the 3-Weeks of hands-on treatment and able to commit to the 3 online Rehab sessions.
- Experiencing chronic leg pain (longer than 3 months) aggravated when playing sport.
- Regular medication: any regular medication needs to have been taken for over 12 Weeks to ensure stabilisation.
- Any on-going medical issues/medication may affect suitability for the study and will need to be discussed.
- If participants start a new medication, therapy, or develop a medical condition during the study, inform the researcher in case it impacts the study.

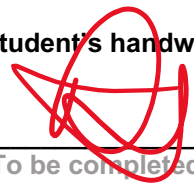
The study will exclude:

- Recent leg pain (less than 3 months)
- Any participants who are pregnant

Section 9: Student declaration:

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

Student's handwritten signature:



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

Print Name: **Rachel Mckinlay** **Date:** **28.3.2025**

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

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

Studies should not involve participants under 18 without express permission from your supervisor.

Studies carried out in schools require the permission of the head-teacher, and of any responsible adults as per the head teachers' recommendation. Minors aged over 14 years should also sign an individual consent form themselves. If you are planning to carry out a project whereby you will be in contact with minors, you must establish from the head-teacher or other responsible adult whether the work proposed will require you to have the relevant DBS disclosure. Please seek advice from your Local Authority.

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

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

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

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

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

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

Signature: .....Susan Harrison..... date: ....12/5/25.....

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

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

Appendix 2 EILP-BR questionnaire

Exercise -Induced Leg Pain Questionnaire – British Version (EILP-BR -BR)

Dear patient, please answer the questions below with one answer (by making an X) that most closely describes your condition within the past Week. If you have bilateral symptoms, please answer for the worse side. If the described activity is limited by something other than your leg pain, mark not applicable (NA)

How much difficulty do you experience with the following activities due to pain in your legs caused by exercise?

	No difficult	Slight Difficulty	Moderate Difficulty	Extreme Difficulty	Unable to Perform	NA
When beginning to run						
Running after about 10 minutes						
Running after about 15 minutes						
Running after 30 minutes or longer						
Jumping						
Landing						
Starting and stopping quickly						
Sideward cutting movements						
Low impact activities						
Ability to participate in your desired sport as long as you like						

Participant Name:

Week number:

Appendix 3 Jing Leg, Knee, and Foot Protocol

WEEK 1

PRONE – 22 mins total (11 per leg)

1. Still grounding work
2. AMMA glutes → feet
3. Hot Stones (glutes → hamstrings → lower leg
4. Passive quad stretch
5. Myofascial release hamstrings
6. Broad work hamstrings
7. Soft tissue release hamstrings
8. Release proximal hamstring
9. Strip hamstrings
10. Strip hamstrings & ITB
11. Attachments at fibula & tibia
12. Popliteus → belly of popliteus
13. Plantaris
14. Forearm to gastrocnemius
15. STR intrinsic muscles of foot
16. Forearm to plantar surface of foot
17. Grounding still

SIDELYING – 8 mins total (4 per leg)

1. Palm compression TFL
2. Listening elbow to TFL
3. Forearm down IT band & vastus lateralis

SUPINE – 13 mins total (6.5 per leg)

1. Mobilise hip joint

2. Broad work quads
3. Strip quads
4. Cross-fibre friction to patella
5. Slide patella medially & laterally
6. Knee hold
7. Passive gastrocnemius stretch
8. Acupressure point above medial malleolus
9. Mobilise foot
10. Flex & extend toes
11. Acupressure sole of foot
12. Fascial leg pull
13. Grounding still

STRETCHES – 7 mins total

- Passive quad stretch
- AIS straight leg hamstring stretch
- Passive gastrocnemius stretch

SELF-CARE

1. Double leg bridge – 3 sets of 10 reps

2. Banded eversion / inversion – 3 sets of 10 reps each

3. Single-leg balance (eyes open → eyes closed) – 1 min each leg

4. Ankle A–Z – seated or standing, draw the alphabet with your foot once each side

WEEK 3: Focus on Ankle, Gastrocnemius, Foot

PRONE – 22 mins total (11 per leg)

Warm-up (7 mins of this section)

1. Still grounding work (~1 min)
2. AMMA glutes → feet (~2 mins)
3. Hot Stones (~2 mins)
4. Myofascial release hamstrings & gastrocnemius (~2 mins)

Main Work (proximal → distal) 7 mins per leg

5. Broad work hamstrings
6. Soft tissue release hamstrings
7. Forearm to gastrocnemius
8. Strip gastrocnemius (Week 3 focus)
9. Windscreen gastrocnemius (Week 3 focus)
10. Muscle strip soleus (Week 3 focus)
11. Achilles tendon direct work (Week 3 focus)
12. STR Achilles tendon & gastrocnemius (Week 3 focus)
13. STR intrinsic muscles of foot
14. Forearm to plantar surface of foot
15. Ankle decompression (Week 3 focus)
16. Grounding still

SIDELYING – 8 mins total (4 mins per leg)

Warm-up already completed prone

1. Fist to peroneals (Week 3 focus)
2. Strip tibialis anterior (Week 3 focus)
3. Work grooves x 2 (Week 3 focus)
4. AIS sidelying quad & psoas stretch

SUPINE – 14 mins total (7 mins per leg)

1. Mobilise hip joint
2. Facial release of flexor retinaculum (ask client to flex foot) (Week 3 focus)
3. Strip dorsal surface of foot (Week 3 focus)

4. STR dorsal surface of foot (Week 3 focus)
5. Passive tib ant stretch (foot off table)
6. Acupressure point above medial malleolus
7. Mobilise foot
8. AIS gastrocnemius stretch (hand under heel)
9. Flex & extend toes
10. Acupressure sole of foot
11. Fascial leg pull
12. Grounding still

STRETCHES – 7 mins total

- Passive tib ant stretch
- AIS gastrocnemius stretch
- AIS sidelying quad stretch

SELF-CARE

1. Split Squats - 3 sets of 10 reps
2. Heel lowering off a step- 3 sets of 10 reps
3. Wall Squat Heel Raises - 3 sets of 10 reps
4. Balance Clock Exercise: Stand on one leg and tap your hand toward each “hour” on an imaginary clock

WEEK 6: Mixed Focus + Adductors

PRONE – 22 mins total (11 per leg)

Warm-up (7 mins)

1. Still grounding work (~1 min)
2. AMMA glutes → feet (~2 mins)
3. Hot Stones (~2 mins)
4. Myofascial release hamstrings & gastrocnemius (~2 mins)
5. Passive quad stretch

Main Work (15 mins, 7.5 mins per leg)

5. Broad work hamstrings
6. Soft tissue release hamstrings
7. Release proximal hamstring
8. Strip hamstrings
9. Strip hamstrings & ITB
10. Attachments fibula/tibia
11. Popliteus & belly
12. Plantaris
13. Forearm to gastrocnemius
14. Strip gastrocnemius
15. STR Achilles tendon & gastrocnemius
16. STR intrinsic muscles of foot
17. Forearm to plantar surface of foot
18. Ankle decompression
19. Grounding still

SIDELYING – 8 mins total (4 per leg)

Warm-up already completed prone

1. Palm compression TFL
2. Listening elbow TFL
3. Forearm down IT band & vastus lateralis
4. Butterfly Press with heel of hand
5. Soft fist to adductors (bottom leg straight)

6. Strip adductors proximal → distal

SUPINE – 13 mins total (6.5 per leg)

2. Mobilise hip joint
3. Broad work quads
4. Strip quads
5. Direct pressure rectus femoris attachment
6. Compression adductor attachment
7. AIS short adductor stretch (face feet, anchor other hand)
8. Acupressure above medial malleolus
9. Knuckles up Tib Ant, other hand P/F foot
10. Mobilise foot
11. Flexor retinaculum
12. Flex & extend toes
13. Acupressure sole of foot
14. PNF straight leg hamstring stretch (on table)
15. Fascial leg pull
16. Grounding still

SELF-CARE

1. Standard squats - 3 sets of 10 reps
2. One leg balance “runner” - 3 sets of 10 reps (Stand on one leg and mimic a running motion with the opposite leg, keeping your balance throughout each repetition)
3. Single leg calf drop (off a step) – 3 sets of 10 reps
4. Resisted ankle eversion and inversion – 3 sets of 10 reps on each leg

Appendix 4 Group online rehab session

Rehab Online Session 1

- Welcome everyone and thank you for joining.
- *"I'll be **recording** the session, so you can go back to it if you want to repeat it or missed anything."*
- Quick reminder: work at your own pace, listen to your body, and adapt if anything feels uncomfortable. Rest when you need to,
- Today's session will cover: warm-up → strength → proprioception → warm down.

Session 1 (40 mins)

Warm-Up (10 mins)

- Marching on the spot – 1 min *(hips, calves, coordination)*
- Bum kicks – 1 min *(hamstrings)*
- High knees – 1 min *(hip flexors, quads, calves)*
- Open the gate – 1 min *(hip mobility, glutes)*
- Close the gate – 1 min *(hip mobility, adductors)*
- Kick the door down – 1 min right, 1 min left *(hip flexors, hamstrings)*
- Hamstring walking stretch – heel on floor, toe up to ceiling, leg out straight,
- Diagonal straight leg
- Carioca – coordination, proprioceptive feedback
- Ankle mobilisation A–Z – 30s right, 30s left *(ankle stabilisers)*

Strength (20 mins)

1. **Glute Bridge Raises** – 40s work, 20s rest × 3 rounds
2. **Squats** – 40s work, 20s rest × 3 rounds
3. **Forward Squats** – 40s right leg forward, 20s rest → 40s left leg forward, 20s rest

4. **Backward Squats** 40s right leg forward, 20s rest (repeat twice)
5. **Side-lying hip abduction 40 secs on, 20 secs rest – each leg repeat x 2**
6. **Plank** – 40 secs on, 20 secs rest - **building core strength.**
7. **Lateral lunges** 40 secs on, 20 secs rest

Proprioception (10 mins)

- Balance on 1 leg, catch ball: 40s right, 20s rest → 40s left, 20s rest
- Clock face touches: 1 min right, 30s rest → 1 min left

Warm Down (5 Mins)

- Standing Quad Stretch – hold 20–30s each side
- Seated Hamstring Stretch – 20–30s each side
- Standing Calf Stretch (against wall or step) – 20–30s each side
- Groin / Adductor Stretch (side lunge) – 20–30s each side
- Seated spinal twist
- Piriformis stretch
- Child's Pose or Cat–Cow (spinal release) – 30–45s

Goodbye / Closing

- **Thank everyone for joining and completing First rehab session**
- **Encourage them to keep going during the Week if they want to repeat some exercises.**

Session 2 (40 mins)

Warm-Up (10 mins)

- Marching on the spot – 1 min *(hips, calves, coordination)*
- Bum kicks – 1 min *(hamstrings)*
- High knees – 1 min *(hip flexors, quads, calves)*
- Open the gate – 1 min *(hip mobility, glutes)*
- Close the gate – 1 min *(hip mobility, adductors)*
- Kick the door down – 1 min right, 1 min left *(hip flexors, hamstrings)*
- Hamstring walking stretch – heel on floor, toe up to ceiling, leg out straight,
- Carioca – coordination, proprioceptive feedback
- Ankle mobilisation A–Z – 30s right, 30s left *(ankle stabilisers)*

Strength (20 mins)

1. **Groiners** – 40s work, 20s rest × 2 rounds
2. **Clams with band** – 40s right, 20s rest → 40s left, 20s rest (repeat twice)
3. **Forward lunges** – 40s right leg forward, 20s rest → 40s left leg forward, 20s rest (repeat twice)
4. **Resisted ankle eversion and inversion (plantarflexion)** – 40s right, 20s rest → 40s left, 20s rest (repeat twice) (4 mins total)
5. **Seated 1-leg extensions** – 40s right, 20s rest → 40s left, 20s rest (repeat twice)

Strengthens quads and especially the VMO.”

Proprioception (10 mins)

- Hop Scotch – 40s, 20s rest × 3 rounds
- Balance on 1 leg, catch ball – 40s right, 20s rest → 40s left, 20s rest
- Clock face touches – 1 min right, 30s rest → 1 min left

Warm Down (5 Mins)

- **Quad Stretch**
- **Seated Hamstring stretch**
- **Groin standing side lunge**
- **Hips (90 degree seated)**

Session 3 (40 mins)

Warm-Up (10 mins)

- Marching on the spot – 1 min
- Bum kicks – 1 min
- High knees – 1 min
- Open the gate – 1 min
- Close the gate – 1 min
- Leg swings forward/back – 1 min right, 1 min left
- Leg swings side/side – 1 min right, 1 min left
- Standing on 1 leg, small swings – 30s each side
- Ankle mobilisation A–Z – 30s each ankle

Strength (20 mins)

1. **Glute Bridge Raises (single-leg)** – 40s right, 20s rest → 40s left, 20s rest (repeat × 3 rounds)
2. **Walking lunges** – 40s work, 20s rest × 3 rounds
3. **Sideways lunge** – 40s right, 20s rest → 40s left, 20s rest (repeat twice)
4. **Clams with band** – 40s right, 20s rest → 40s left, 20s rest (repeat twice)
5. **VMO Twister leg raise** – 40s right, 20s rest → 40s left, 20s rest (repeat twice)
6. **Single-leg calf raises** – 40s right, 20s rest → 40s left, 20s rest (repeat twice)
7. **Plank**

Proprioception (10 mins)

- Clock face touches – 1 min right, 30s rest → 1 min left (repeat once)
- Balance on one leg – arms crossed over to shoulders , try a few mini squats, knee tracking over foot, not leaning back . Up to 10 x
- Bird Dog

Warm Down (5 Mins)

- Standing Quad Stretch – hold 20–30s each side
- Seated Hamstring Stretch – 20–30s each side
- Standing Calf Stretch (against wall or step) – 20–30s each side
- Groin / Adductor Stretch (side lunge) – 20–30s each side
- Seated spinal twist
- Piriformis stretch
- Child’s Pose or Cat–Cow (spinal release) – 30–45s

Appendix 5 Self Care Exercises

Week 1 -2:

SELF-CARE

1. Double leg (toe-elevated) bridge – 3 sets of 10 reps
2. Banded eversion / inversion – 3 sets of 10 reps each
3. Single-leg balance (eyes open → eyes closed) – 1 min each leg
4. Ankle A–Z – seated or standing, draw the alphabet with your foot once each side

Week 3-4:

1. Split Squats - 3 sets of 10 reps
2. Heel lowering off a step- 3 sets of 10 reps
3. Wall Squat Heel Raises - 3 sets of 10 reps
4. Balance Clock Exercise: Stand on one leg and tap your hand toward each “hour” on an imaginary clock

Week 5-6

1. Standard squats - 3 sets of 10 reps
2. One leg balance “runner” - 3 sets of 10 reps (Stand on one leg and mimic a running motion with the opposite leg, keeping your balance throughout each repetition)
3. Single leg calf drop (off a step) – 3 sets of 10 reps
4. Resisted ankle eversion and inversion – 3 sets of 10 reps on each leg

Appendix 6 Consent Form

PARTICIPANT CONSENT FORM

Title of study: Evaluating the Jing method of clinical massage on chronic leg pain in female recreational footballers

Name of student: Rachel Mckinlay

	Yes	**No**
I have read the information letter about this study		
I have had an opportunity to ask questions and discuss this study		
I have received satisfactory answers to all my questions		
I have received sufficient information about this study		
I understand that I am / the participant is free to withdraw from this study: • At any time (until such date as this will no longer be possible, which is once all anonymised data has been merged) • Without giving a reason for withdrawing • That I am free to refuse to answer any question without saying why • That the services I am receiving will not be affected whether I participate or not.		
I understand that my research data may be used for a further project in anonymous form, but I am able to opt out of this if I so wish, by ticking 'No' here.		
I understand that online sessions may not be recorded by participants		
I understand that online sessions may be recorded by the host only if a participant is unable to attend, and that the recording will be made available solely to that participant for catch-up purposes.		
I understand the online sessions might involve other participants and I will respect the confidentiality of the group and not share information with others		
I agree to take part in this study		
Signature (participant) **Date:**		
Name: (BLOCK LETTERS)		
Rachel Mckinlay **Tel no: 0788 947 465** **Email:** Restorearomatherapy@gmail.com		

Appendix 7 Participant EILP-BR Scores Per Week

Table 5: Research Study - Participant EILP-BR Scores Per Week.

High scores indicate better functionality

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 16
P1	24.0	24.0	22.0	22.0	27.0	24.0	30.0	25.0	33.0	35.0	35.0	31.0	36.0
P2	15.0	14.0	15.0	23.0	21.0	26.0	22.0	25.0	28.0	34.0	29.0	30.0	37.0
P3	26.0	26.0	19.0	21.0	25.0	26.0	26.0	27.0	27.0	27.0	29.0	29.0	34.0
P4	12.0	14.0	15.0	21.0	20.0	22.0	24.0	21.0	28.0	19.0	23.0	29.0	33.0
P5	32.0	35.0	36.0	37.0	37.0	37.0	38.0	38.0	39.0	39.0	39.0	39.0	39.0
P6	23.0	23.0	23.0	23.0	19.0	15.0	30.0	17.0	22.0	21.0	28.0	32.0	35.0
Average	22.8	23.5	23.5	26.7	28.2	29.3	30.2	28.5	32.2	31.0	33.0	33.3	36.8

Appendix 8 Weekly Mean Score Question 1 EILP-BR

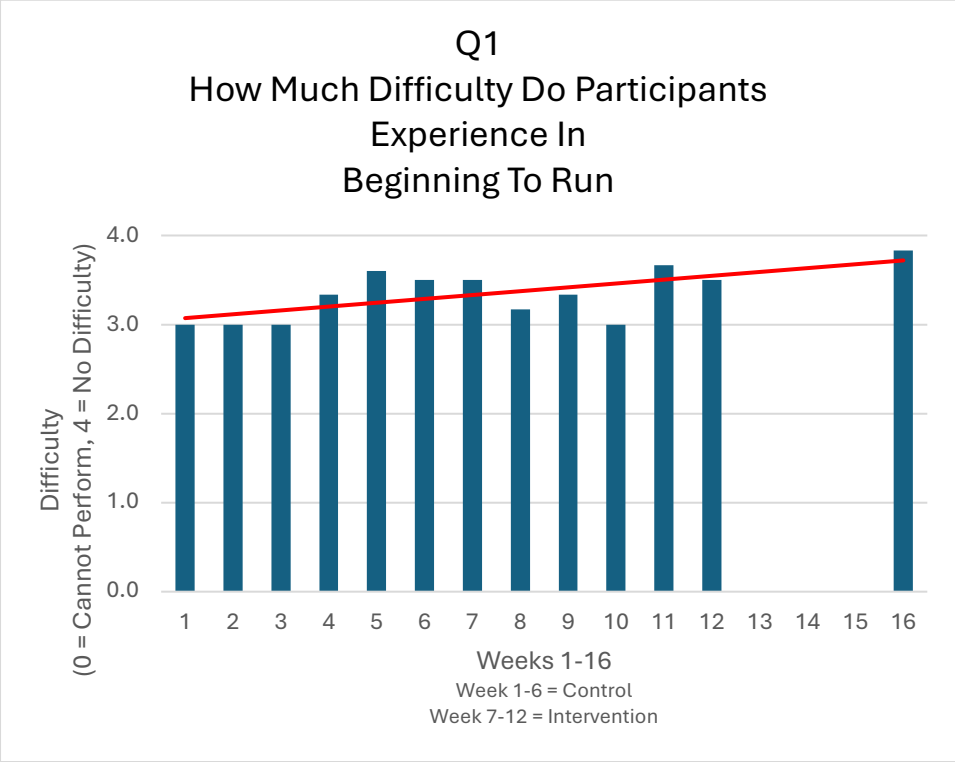


Figure 7: Weekly Mean Score For Difficulty Reported When beginning to run (Q1, EILP-BR)

Appendix 9 Weekly Mean Score Question 2 EILP-BR

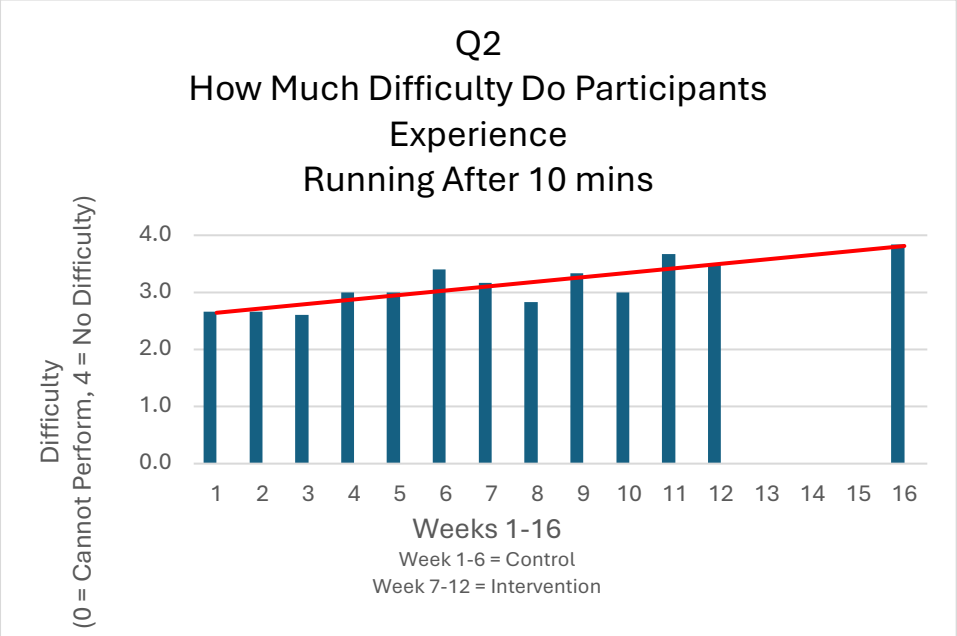


Figure 8: Weekly Mean Score For Difficulty Reported After Running for 10 mins (Q2, EILP-BR)

Appendix 10 Weekly Mean Score Question 3 EILP-BR

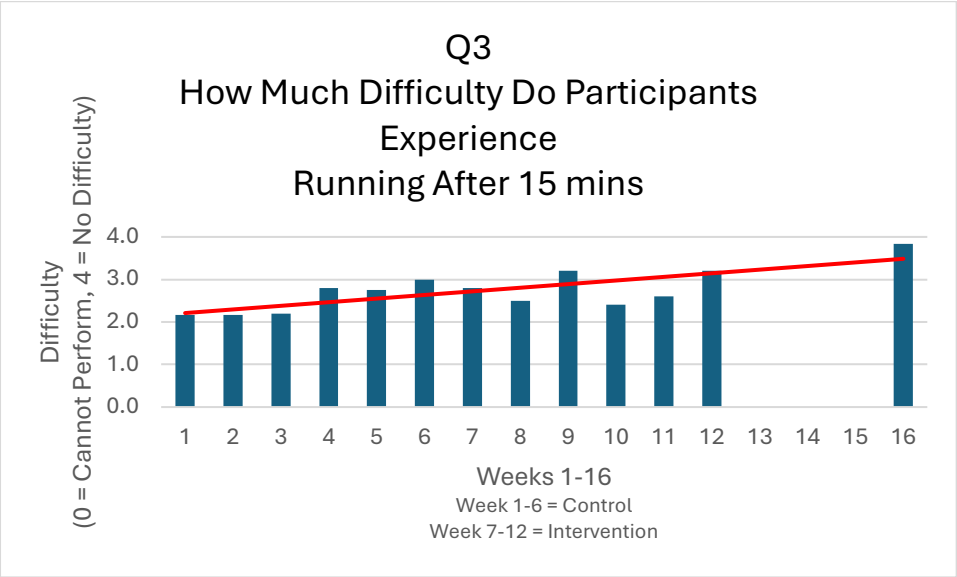


Figure 9: Weekly Mean Score For Difficulty Reported After Running for 15 mins (Q3, EILP-BR)

Appendix 11 Weekly Mean Score Question 9 EILP-BR

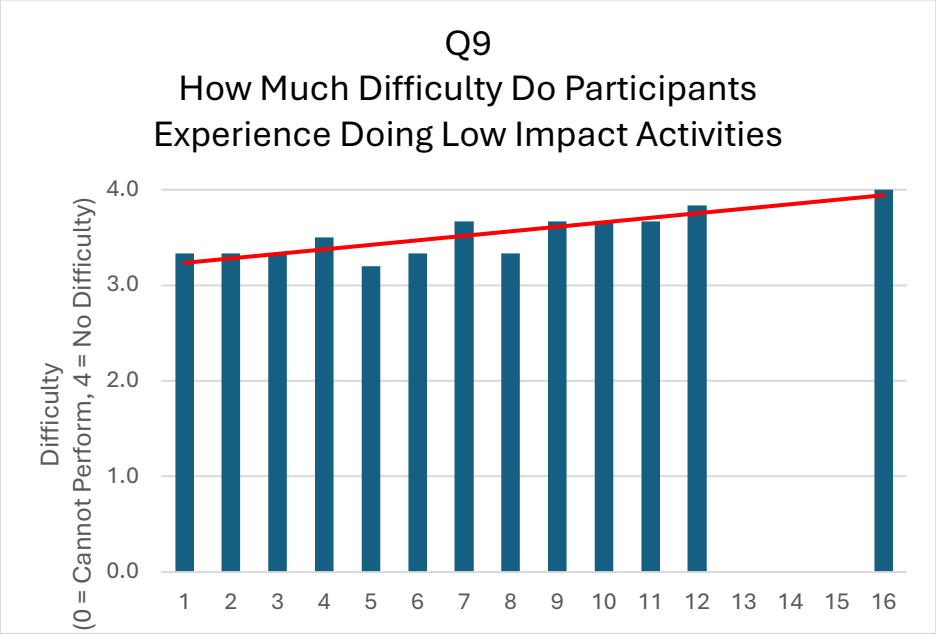


Figure 10: Weekly Mean Score For Difficulty Reported Doing Low Impact Activities (Q9, EILP-BR)

Appendix 12 Weekly Mean Score Question 10 EILP-BR

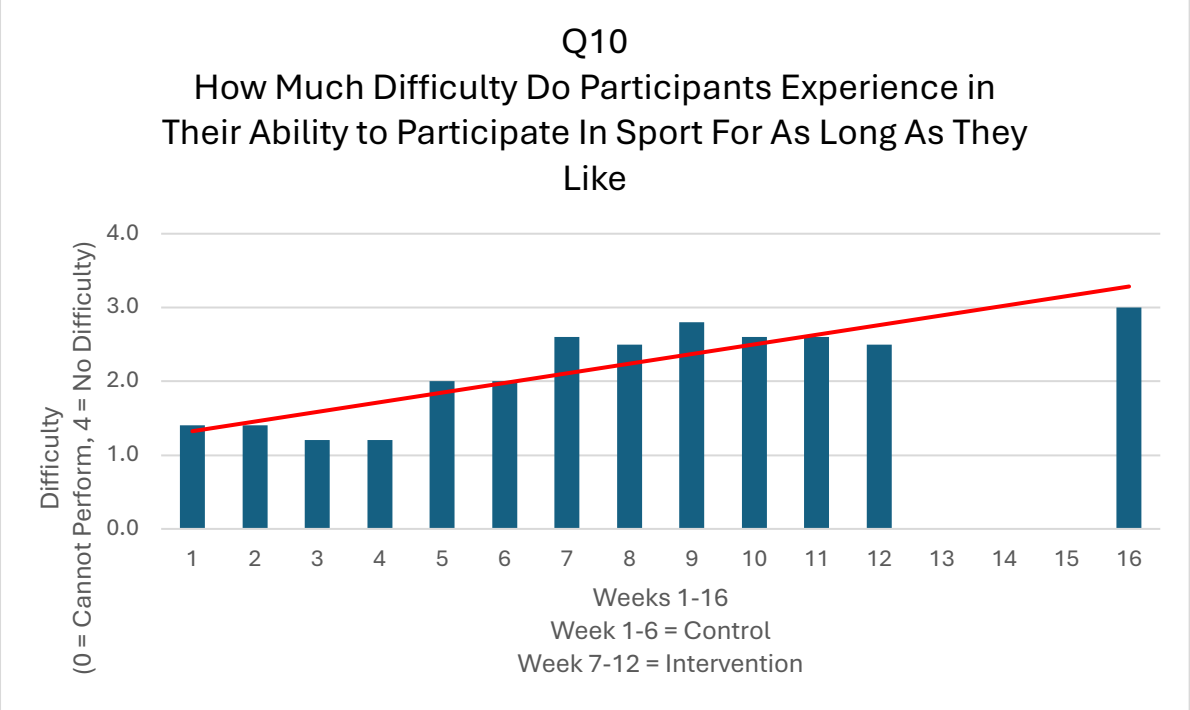


Figure 11: Weekly Mean Score For Difficulty Reported in Their Ability to Participate in sport For As Long As They Like (Q10, EILP-BR)