

Evaluating the effects of the Jing method of clinical massage on non-specific neck pain in florists

Jonathan Caruana

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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".

Mr. Jonathan Caruana 31st March 2024

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ABBREVIATIONS AND MEANINGS

NSNP	Non-specific neck pain
NPDIQ	Neck pain disability index questionnaire
NSAIDs	non-steroidal anti-inflammatory drugs
PNF	Proprioceptive neuromuscular facilitation
HFMAST	Heat, Fascia, Muscle, Acupressure, Stretch, Teach
ROM	Range of motion

Abstract

This research aimed to assess the efficacy of the Jing method of clinical massage in alleviating non-specific neck pain (NSNP) among florists. Four florists experiencing NSNP were selected for participation. The study was conducted over a controlled 6-week period measuring pain using the Neck Pain Disability Index Questionnaire (NPDIQ), followed by a 6-week hands-on massage treatment using the Jing method of clinical massage. A final NPDIQ assessment was conducted at week 16 as a follow-up. Results indicated a notable reduction in self-perceived pain intensity throughout the intervention. The NPDIQ scores decreased from an average mean of 8.6 at baseline to 1.6 by week 12 and maintained at 3.3 by week 16. These findings suggest that the Jing method of clinical massage may offer an effective approach for treating NSNP in florists. Future studies should consider expanding the participant pool to enhance the generalisability of these results and further explore the potential impact of this pain-relieving intervention on wider populations.

1 Literature review

Worldwide, 30 to 50% of adults are estimated to be affected by neck pain every year, making it the 4th cause of global disability (University Hospitals Plymouth NHS Trust, 2023). However, not all neck pain is a musculoskeletal condition clearly caused by an underlying pathology, this is known as Non-Specific Neck Pain (NSNP). Research has shown that neck pain can radiate to nearby regions, with the upper limbs shown to often be affected, in some cases, this pain transference has been shown to cause disability (Ortego et al., 2022). A recent study found that a total of approximately 7.3 million workdays were lost in 2021/22 in the UK due to work-related musculoskeletal disorders (NHS employers, 2023). This is reflected by data revealing that the annual cost of work-related injury and ill-health, excluding cancer, in 2019/20 was £18.8 billion (HSE 2022). Concerningly, over the period of 2021-2022, 477,000 acute and chronic musculoskeletal disorders at work were reported with the coronavirus pandemic reported as a contributing factor of this figure (William Martin, n.d). A total of 175,000 British workers experienced upper limb disorders, according to HSE statistics 2021/22 (Stevens, 2023).

These reports demonstrate the significant costs of neck pain on both an individual and a population level. Conventional treatments for musculoskeletal conditions like NSNP often include interventions such as: painkillers, non-steroidal anti-inflammatory drugs (NSAIDs), physiotherapy, and exercise (University Hospitals Plymouth NHS Trust, 2023). However, these conventional treatments are proving to be limited in offering a sufficient solution. Moreover, there is growing evidence that traditional use of NSAIDs, which are available over the counter, may be linked to side-effects that perpetuate the experience of pain such as the development of chronic pain conditions (Parisien et al, 2022). Therefore, the purpose of this

study is to evaluate an alternative intervention, the Jing advanced clinical massage method, for the treatment of non-specific neck pain on florists.

1.1 Floristry

While the notion of a career as a florist may be romanticised by many, the practical realities of the profession are far from idyllic. Contrary to popular belief, the act of creating floral arrangements does not typically induce a meditative state of bliss, as such experiences are rare and elusive for most practitioners in the field (Cording Booth, 2022).

In reality, floristry is a physically demanding job where the days can be long with early starts and the hours sometimes can be unsociable (Christian, 2022). Working from heights and heavy lifting is part of the seasonal routine, and normally the environment is cold and with it comes a lot of cleaning (British Florist Association, n.d).

The researcher for this study worked as a florist for the 2-years that preceded this research, realising how physical floristry can be. In particular, the frequent reaching with the arms and the repetition of the same movements with the upper limbs, often hunching the back over a table for hours. Other colleagues and freelancing florists often complained about their achy neck and shoulders at work. This experience is supported by research, such as the study by Munala et al (2021) which found that the nature of labour-intensive work has a close relationship to the development of work-related musculoskeletal disorders. Similarly, a study on women suffering from neck pain working in horticulture found that position of the upper limb alongside stress was highlighted in the visual analogue scale (Czępińska et al, 2023).

1.2 Characteristics of non-specific neck pain (NSNP)

NSNP is a musculoskeletal condition that may affect the neck and the shoulder girdle (Bailey et al, 2020). There could be a restriction of movement in the area (Cerezo-Tellez et al, 2018). The pain may radiate down the arms, into the head and/or across the scapula. Particular movements, activities, and posture may aggravate the symptoms of NSNP (NICE, 2023).

1.3 Current treatments

Current literature on self-help interventions for neck pain most commonly includes the following: pain relief medication (such as paracetamol), exercise, rest, and adequate workplace ergonomics (Johnston, 2016; Dandale et al, 2023). If the symptoms do not improve after 6 to 8 weeks, physiotherapy is recommended for further help (Hull University Teaching Hospitals NHS Trust, 2019).

Research shows that one of the most common self-help interventions utilised for neck pain are different NSAIDs, which mostly are available over the counter in pill form or ointments (Institute for Quality and Efficiency in Health Care, 2022). Though these medications are evidenced to relieve pain in some individuals, NSAIDs are suspected to have a variety of side effects (Davis and Robson, 2016). Evidence suggests that analgesic medication that works to reduce inflammation may hinder the body's natural healing process, which in turn increases the chances of developing long-term chronic pain conditions (Parisien et al, 2022). A study in the UK, involving 500,000 participants, who took anti-inflammatory medications like ibuprofen, experienced long-term chronic pain for 2 to 10 years following the intervention (PA Media, 2022).

A randomised controlled trial, with 619 adults with subacute or persistent neck pain, compared the effectiveness of deep tissue massage, supervised exercise, combined therapy of both deep tissue massage with supervised exercise and lastly, advice (Skillgate et al., 2020). Skillgate et al (2020) found massage and combined therapy improved pain intensity more than advice to stay active, in the short-term.

Similarly, physiotherapy became more a hands-off approach that is managed by exercise therapy and advice (Geri et al, 2019). Touch could be a missing element in this case, as touch is known to induce analgesia (Geri et al, 2019; Mancini et al, 2014).

1.4. The Jing method

The Jing advanced clinical massage method was created by Rachael Fairweather and Meghan Mari (Fairweather and Mari, 2015). After many years working in the field of massage they created a multimodal approach where Eastern meets Western techniques (Fairweather and Mari; 2015:144-145). At the heart of this, the biopsychosocial model is a very important aspect of their approach (Fairweather and Mari; 2015: 34-36). The Jing method essentially is a ‘sandwich’ as the creators explain, where the techniques are intertwined in between the consultation, in the very beginning where the practitioner interacts and listens to the client, and at the end where learning and self-care are shared (Fairweather and Mari; 2015:3-6). After a detailed consultation, which might involve specialist orthopaedic testing and body reading, the treatment part of the session uses different techniques which can be remembered with the mnemonic HFMAST (Fairweather and Mari; 2015: 6)

H- the use of hot or cold

F- fascia- using direct and indirect approach

M- muscle detailed trigger point work

A-Acupressure points

S- static stretching, active isolation stretches, proprioceptive neuromuscular facilitation (pnf)

T- Teaching selfcare which may include rehab exercises, meditation, breathing and mindfulness, stretching, self massage, wellbeing diary

1.5. Effectiveness of the Jing method

Floristry is a manual skill and NSNP affects the neck and shoulder girdle (British Florist Association, n.d; Bailey et al, 2020). Several small-scale studies have used the Jing method for treating musculoskeletal pain effectively (Gipson, 2013; North, 2021). One study using the Jing method demonstrated improvement in wrist-pain in manual workers (Darlington, 2018). Similarly, another study investigating the Jing method used for musicians who suffered from performance musculoskeletal disorders found an improvement in their pain levels (Gipson, 2013). The Jing method was also proven to be effective in reducing NSNP (North, 2021) and non-specific shoulder pain (Watson- Bance, 2021) even when delivered as an online intervention.

1.6. Evidence of individual HFMAST techniques

Heat

Throughout history, civilisations have benefitted from the use of heat for its therapeutic benefits (Light, 1956). Even in modern times, we continue to use heat for soothing effects, from having hot baths to placing a hot water bottle on sore areas (Hogeback, 2016). Research by Nadler et al. (2002) found low-level heat therapy to be more effective than ibuprofen and acetaminophen for treating low back pain. Similarly, in another study, thermotherapy (heat therapy) was used alongside neck stabilisation exercises for chronic NSNP, this combination was found to be superior to stabilisation exercises alone (Shin et al., 2020).

Fascia

Myofascial release techniques are being applied in a variety of settings to treat pain and other complex pathologies (Barnes n.d). Various studies show the effectiveness of myofascial release in the treatment of chronic pain conditions, such as fibromyalgia (Overmann et al., 2023).

Trigger point therapy

Dr Janet Travell (cited in Finando and Finando, 2005) explains a trigger point as ‘a hyperirritable locus within a taut band of skeletal muscle, located in the muscular tissue or its associated fascia’. Trigger points may cause musculoskeletal pain, restrict movement, and sometimes may produce autonomic phenomena such as dizziness, nausea and secretion of sweat. Furthermore, the taut muscles have been shown to potentially cause nerve and blood vessel entrapment (Bron and Dommerholt, 2012; Fairweather and Mari; 2015: 121). A systematic review confirmed that myofascial trigger point therapy is effective in reducing pressure pain threshold (Fernandez de la Peñas et al., 2005). Furthermore, another study demonstrated that a home programme of ischemic pressure followed by sustained stretching was effective at treating trigger points (Hanten, 2000).

Acupressure

Kwon and Lee (2018) found that acupressure improved the symptoms of ‘*nakchim*’, which is a type of neck pain syndrome in East Asian traditional medicine. Multiple studies show that acupressure treatment helps to reduce lower back pain, chronic headaches, and other traumatic pain (Yip and Hing Min Tse, 2006; Chen and Wang, 2013).

Stretching

Proprioceptive neuromuscular facilitation (PNF) was found to reduce neck pain and increase the range of motion in patients with chronic neck pain (Ashfaq et al, 2022; Song et al, 2021). PNF is one of the key methods of stretching advocated in the Jing method (Fairweather and Mari, 2015: 167).

Teaching Self-care

There is evidence that teaching self-management decreases chronic pain and improves the quality of life of a person (Mann et al, 2013).

1.7. The Biopsychosocial model

The Biopsychosocial model was presented in 1977 as a response to the limitations of the biomedical model (Engel, 1977). The biomedical model has a more dominant anatomical and pathological source when looking at pain or ailments. This could be useful when the cause is acute. On the contrary, the biopsychosocial model acknowledges biological as well psychological and social factors as the cause of illness or pain (Smart, 2023).

1.8. Therapeutic alliance

Various studies suggest that in any therapy, therapeutic alliance is a key component to a successful outcome. When there is a sense of collaboration between the therapist and the patient it promotes a better recovery (Ferreira et al., 2013; Skillgate et al., 2020).

Collaboration goes hand-in-hand with the '*locus of control*', a concept which was introduced by the psychologist Julian Rotter (Fairweather and Mari; 2015:178-180). This concept can be divided into two criteria: the people who believe that they can control events in their life, and

the people who believe that they are at the mercy of chance and external forces (Smith, 2021). This concept would suggest that by massage therapists and clients collaborating in the treatment process, the patient will be empowered as they are part of the process (Fairweather n.d.).

2 Method

Five florists were recruited to study the effects of the Jing method of advanced clinical massage on NSNP in florists. One participant withdrew from the study. The final number of participants was four florists, aged between 28 and 40 years old. An ethics form was submitted and the study was approved by Jing advanced massage training.

Recruitment of the participants was by word of mouth. A meeting was arranged with a luxury florist studio and employees were asked if they were interested in taking part in the study. The participants were not offered incentives for their participation.

In person, one-to-one consultations and an orthopaedic assessment of the cervical spine and the scapula thoracic joint was used to measure pain and range of motion. This was done to confirm the participants suitability before the study was conducted. Informed consent was ensured by explaining the details of the study to the participants before the start of the treatment plan, at this time participants were also offered the opportunity to ask any questions before providing consent to take part. Confidentiality during the study was assured and any data will be destroyed after the study.

The NPDIQ was used as an instrument to measure the pain for a 6-week controlled period. This was followed up with another 6-week period of hands-on massage treatment using the Jing

method of clinical massage HFMAST. The final step was a follow-up NPDIQ assessment on week 16.

2.1. Inclusion and exclusion criteria

Inclusion criteria

All participants were required to be over 18 years of age, be employed working as a florist, and to have been experiencing NSNP for more than 3 months. Furthermore, the participants were required specifically to be experiencing pain in one or more of the following areas: the cervical area (back, front or side), pain radiating between the shoulder blades (interscapular pain) or the front or lateral side of the shoulder when working. Lastly, participants were required to be comfortable with receiving massage around the pectoral area.

Exclusion criteria

The following criteria were not accepted for this research study: pregnancy, currently undergoing cancer treatment, recent operation, whiplash, an acute injury, a specific diagnosis of a pre-existing neck or shoulder pathology, fused cervical vertebrae and/or arthritis in the cervical spine.

2.2. Measurements and Intervention

In weeks 1-6, the participants were required to complete the NPDIQ once per week as part of the control period. In the following six weeks, weeks 7-12 of the study, participants received hands-on treatments. The hands-on treatments were performed onsite at the participant's workplace, the floristry studio in London. Permission was received by the studio owner before the start of the study. Each hands-on treatment session lasted 50 minutes, following a short, verbal consultation, to assess the client before treatment.

The techniques used were: Heat – through a heating pad on the massage couch; Client prone and start with Grounding; Amma fusion; Fascial techniques of skin rolling shoulders and neck, torquing of the upper trapezius and posterior neck nuchal ligament area; Direct myofascial release techniques on erector spinae, broad effleurage work on the back neck and shoulders; Trigger point work in prone to suboccipital, upper traps, levator scapula, rhomboids and serratus anterior; Supine: Torquing of pectoralis major, soft tissue release of pectorals, trigger point work to scalenes and pectoralis minor; Stretching upper traps, PNF scalenes, positional release to posterior neck; and finally, Acupressure points K1, GV21.

After each treatment participants were given a 5-minute aftercare self-care routine, which they were encouraged to do daily, they were reminded to this every week after their treatment session. The aftercare comprised of scalenes myofascial stretch, platysma stretch and belly breathing. Detailed instructions and images are available in Appendix C.

The participants were required to complete the NPDIQ 7 days after the hands-on treatment for weeks 7 to 12 and before any subsequent appointments. After the final hands-on treatment, the cervical and scapula thoracic joints were re-tested to see if there was an improvement compared to the results gathered before the intervention. Finally, on Week 16, 4 weeks after the final hands-on intervention was completed, participants were required to complete a follow-up NPDIQ.

3. Results

The neck pain disability index questionnaire is designed to show how neck pain affects the ability to manage daily activities (Gerrish chiropractic center, n.d). The data from week 1 to 6

relating to the average mean was organised into an Excel spreadsheet, the data was then transferred onto a graph for analysis. Week 1 to 6 was the controlled period and week 7 to 12 was the intervention period, where the participants received hands-on treatments once a week. Using the NPDIQ the pain was measured from 0 to 5 with 0 reflecting 'no pain' and 5 reflecting 'worst pain' in response to each question. As a total score, the questionnaire is measured from 0 to 50, with 0 referring to 'no pain' and 50 to 'worst pain'. At the start of this research project, the participants had a consultation and range of motion subjective assessment of the cervical spine and the scapula thoracic joint as one of the tools to see if they were suitable for the study, these measurements also provided a baseline for comparison after the intervention was completed. In week 12 the participants subjective assessment showed an improvement in range of motion and pain which was self-measured from a scale of 1 to 10. The NPDIQ showed an 81% decrease as an overall result from week 1 to week 12.

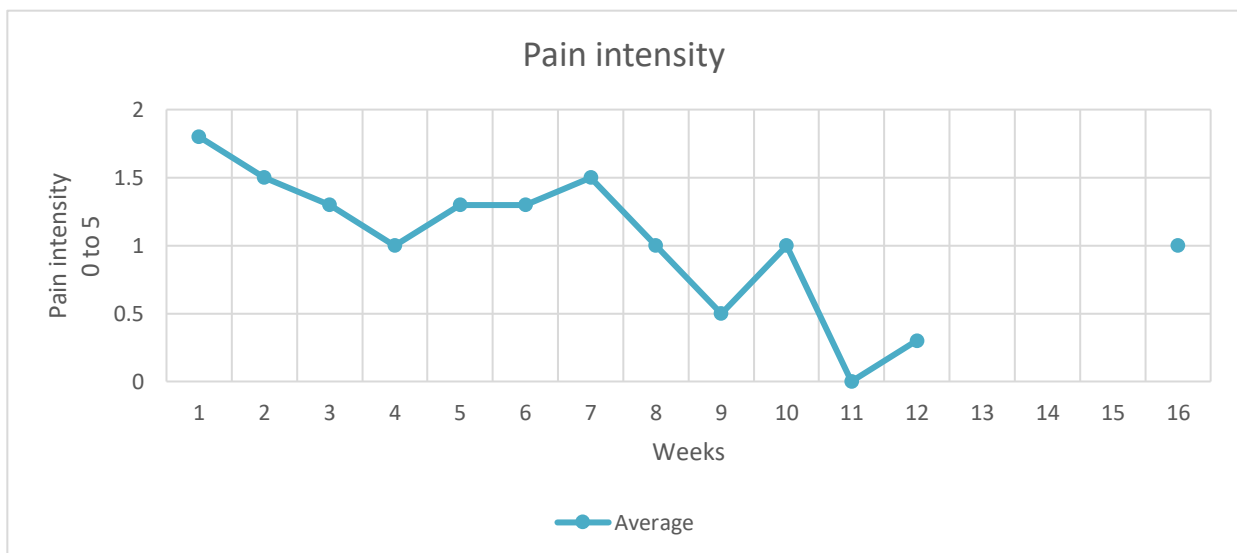


Fig.1 Pain intensity at week 1 started with a mean average of 1.8 and descended to 0.3 in week 12. Week 16 ascended to 1.

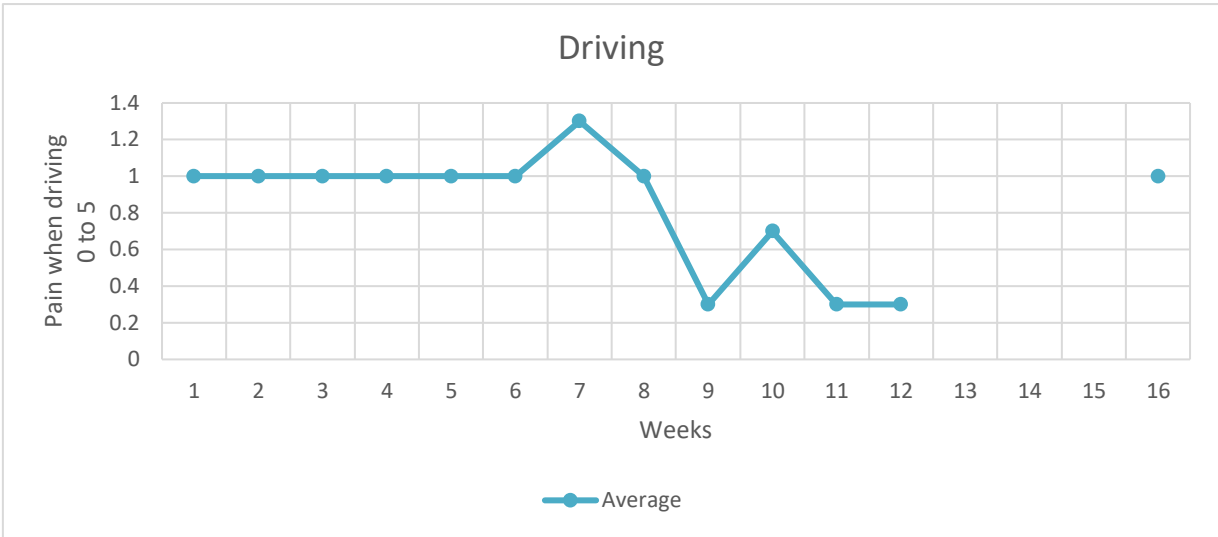


Fig.2 Pain when driving started with a mean average of 1 which increased to 1.3 in week 7 and dropped down to 0.3 in week 12. Week 16 ascended to 1.

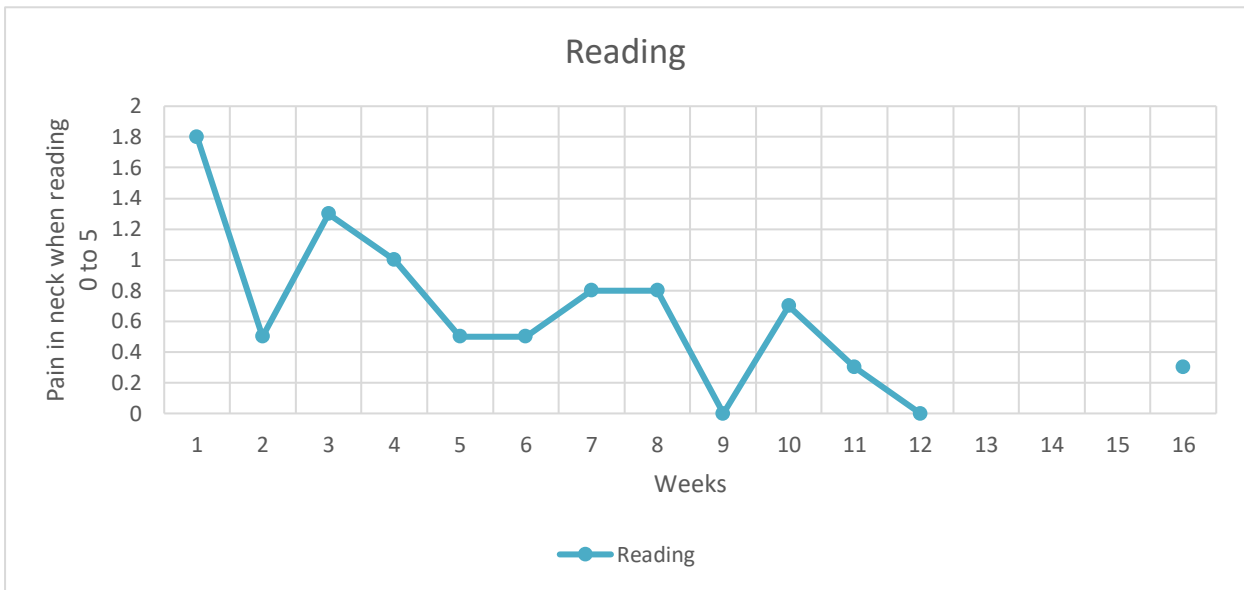


Fig. 3 Neck pain during reading started with a mean average of 1.8 in week 1 and dropped down to 0 in week 12. Week 16 increased to 0.3.

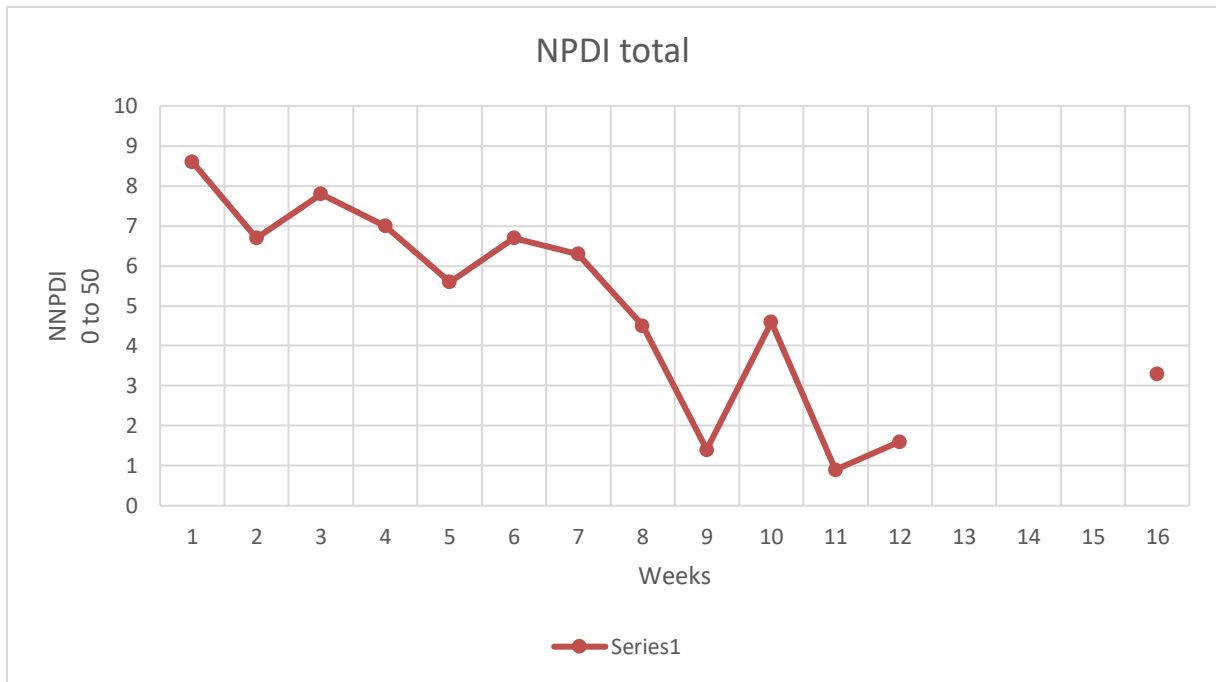


Fig.4 Week 1 started with a mean average of 8.6 followed by a decrease of 5.6 in week 5, which then increased to 6.7 in week 6. In the intervention period, week 7 started with a mean average of 6.3 which dropped significantly on week 9 to 1.4. Week 10 there was an increase to 4.6 but then again it dropped significantly to 0.9 in week 11 and 1.6 on week 12. Four weeks after the mean average was 3.5.

4. Discussion

This study found evidence that suggests that the Jing advanced clinical massage method may improve NSNP in florists. This supports previous research which used the Jing clinical massage online, finding reductions in NSNP (North, 2021) and non-specific shoulder pain (Watson-Bance, 2021). During the consultations, participants shared that they felt their symptoms were negatively influenced by working for long hours and repetitive movements. This anecdotal evidence is supported by research which shows how the intensity of the laborious work and positioning of the limbs during work can be a cause of the increase in pain (Munala et al, 2021; Czepińska et al, 2023).

Using a heating pad for the whole of the treatment may have provided health benefits. A previous Jing advanced clinical massage study researched the efficacy of adding heat in comparison to therapeutic massage on its own for the reduction of neck pain. The participants that had heat had a greater reduction in pain than the group who didn't (Fuller, 2015). Similarly, when palpating the tissues during skin rolling the researcher observed a high level of trigger point activity predominantly on the upper trapezius area. This supports the theory that trigger points may cause musculoskeletal pain and restrict movement (Fairweather and Mari; 2015:121). Stretching was applied to treated trigger points; sustained stretching after ischemic pressure is found to be effective at treating trigger points (Hanten, 2000).

Interestingly, the overall NPDIQ results show a descending trajectory, apart from in week 10, see fig.4, where the data shows an increase from 1.4 in week 9 to 4.6 in week 10. When talking to participants during the verbal consultations before treatment, they mentioned how the workload increased during the previous week. This is even more visible on the pain intensity chart in Fig1. with an increase of 0.5. Stress has been evidenced to be a contributing factor in

upper extremity pain (Bonger et al, 2002; Czepińska et al, 2023), therefore, the anomaly in the trajectory of the pain may be a response to the increase in stress experienced during that time frame.

In addition to the pain intensity, driving and reading were the most common activities where neck pain was present (see Fig 3.). Neck pain during reading started with a mean average of 1.8 in week 1 and dropped down to 0 in week 12. Week 16 increased to 0.3. Pain when driving started with a mean average of 1 which increased to 1.3 in week 7 and dropped down to 0.3 in week 12. What this may suggest is that the common factor of these two activities, hunching of the spine, may be responsible for this pain response. The hunching position is also repeated during work as a florist. A hypothesis that the researcher thought is that the participants' neck pain may be heightened with this position known as upper cross syndrome.

Upper cross syndrome is a postural disorder which may create a muscular imbalance. The upper trapezius, levator scapula and pectoralis major become overactive and the mid/ low trapezius and serratus anterior lengthened and weakened. This causes all muscles to not work efficiently (Mahmood et al, 2021; Mujawar and Sagar, 2019). The study didn't include any strengthening as an aftercare. Potentially strengthening the under-active muscles alongside stretching and breathing could provide a more effective intervention to manage the symptoms of NSNP.

4.1. Week 16

Four weeks after the intervention the participants filled the NPDIQ. Fig 4. shows an increase average of 1.7 from week 12. However, this was still a notable drop of 62% from week 1.

Similar studies have shown how deep tissue massage and supervised exercises improve pain intensity in NSNP patients but only in the short-term (Skillgate et al., 2020).

4.2. Limitations

The findings from this study may be limited in their application to other populations as there were only four participants, consequently, the data cannot be extrapolated to reflect the diversity of larger populations. Therefore, future research could investigate the effects of this intervention on a larger group of participants to test the validity of the results.

Originally the study had 5 participants but 1 declined due to not being available for the intervention phase. On week 9 a participant had to leave the study due to a family commitment.

The NPDIQ was very easy to use for the participants. ROM improved when doing a subjective assessment at the end of the study. However, the use of a goniometer may have given a more precise result and could be used in future studies.

Finally, although each time participants were seen for treatment, they were asked if they were doing the self-care aftercare exercises, this wasn't measured. The self-care adherence could have been measured to have more quantitative results to analyse.

4.3. Recommendations for future studies

For future studies, it is recommended to increase the number of participants. Increasing the population studied may provide further evidence and insight into the effectiveness of the Jing advanced clinical massage for pain management in florists who suffer from NSNP. The NPDIQ could be used as part of the inclusion and exclusion criteria. ROM of the neck could be measured either using a goniometer or taking pictures of the before and after to be more precise. Furthermore, self-care adherence could be measured to produce quantitative results allowing an analysis of the links between intervention and the condition improvements. Strengthening the inhibited areas that develop because of the repetitive hunching position could be beneficial to be added to the aftercare regime alongside the stretches and breathing to test whether this may provide further pain-relief.

Finally, research in this area could progress further with funding. A collaboration with the British Florist Association, for example, may open another door to take this research further, with the potential to provide insight for florists as to how they can work more safely.

Conclusion

The aim of this research was to evaluate the effects of the Jing method of clinical massage on NSNP in florists. The design of the method consisted of a 6-week controlled period and a 6-week intervention period. Four weeks later participants completed another NPDIQ. The Jing method of clinical massage was shown to be a valuable multimodal approach in the treatment of NSNP in florists and that the effects were sustained after 4 weeks post treatment.

This study identified evidence to support existing research to show that NSNP can happen due to the conditions of labour as well as stress. Furthermore, the Jing method of clinical massage

has been evidenced to provide pain relief for NSNP in florists, suggesting that it may be a useful intervention to treat neck pain alongside, or even, in replacement for, the most common current interventions such as NSAIDs. It has been suggested that further studies with more participants may help to better understand the treatment of NSNP in florists and wider populations.

References

Adams, R., White, B. and Beckett, C. (2010). The effects of massage therapy on pain management in the acute care setting. *International Journal of Therapeutic Massage and Bodywork: Research, Education, and Practice*, 3(1). <https://doi.org/10.3822/ijtmb.v3i1.54>.

Ashfaq, M., Naveed Babur, M., Hussain Malick, W., Arif Hussain, M. and Awan, W.A. (2022). ‘Comparative effectiveness of proprioceptive neuromuscular facilitation and passive vertebral mobilization for neck disability in patients with mechanical neck pain: A randomized controlled trial’, *Journal of bodywork and movement therapies*, Vol. 31, pp. 16-21. <https://doi.org/10.1016/j.jbmt.2022.02.009>.

Bailey, E., Heneghan, N. R., Cassidy, N. J., Falla, D., & Rushton, A. B. (2020). Clinical effectiveness of manipulation and mobilisation interventions for the treatment of non-specific neck pain: protocol for a systematic review and meta-analysis. *BMJ open*, 10(10), e037783. <https://doi.org/10.1136/bmjopen-2020-037783>.

Barnes, J.F. (n.d). *Myofascial release: The “missing link” in your treatment*, [Online], Available: <https://myofascialrelease.com/downloads/articles/MFR-MissingLink.pdf> [accessed 10 December 2023].

Barnes, J. F. (1996). Myofascial release for craniomandibular pain and dysfunction. *International Journal of Orofacial Myology*, 22(1), pp. 20-22. DOI: 10.52010/ijom.1996.22.1.3.

Bongers, P.M., Kremer, A.M. and, Laak, J. (2002). Are psychosocial factors, risk factors for symptoms and signs of the shoulder, elbow, or hand/wrist?: A review of the epidemiological literature. *American journal of industrial medicine*, 41(5), pp. 315-342. doi: 10.1002/ajim.10050. PMID: 12071487.

British Florist Association. (n.d). *Floristry as a career*. [online] British Florist Association. Available at: <https://britishfloristassociation.org/careers-education/is-floristry-for-me/>[accessed 10 August 2023].

Bron, C., & Dommerholt, J. D. (2012). Etiology of myofascial trigger points. *Current pain and headache reports*, 16(5), pp. 439–444. <https://doi.org/10.1007/s11916-012-0289-4>.

Castro-Sánchez, A.M., Matarán-Peñarrocha, G.A., Granero-Molina, J., Aguilera-Manrique, G., Quesada-Rubio, J.M., Moreno-Lorenzo, C. (2010). Benefits of Massage-Myofascial Release Therapy on Pain, Anxiety, Quality of Sleep, Depression, and Quality of Life in Patients with Fibromyalgia. *Evidence based complimentary and alternative medicine*, Volume 2011. doi.org/10.1155/2011/561753.

Cerezo-Téllez, E., Torres-Lacomba, M., and Mayoral-del-Moral, O. (2018). Health related quality of life improvement in chronic non-specific neck pain: secondary analysis from a single blinded, randomized clinical trial. *Health Qual Life Outcomes* 16, 207, <https://doi.org/10.1186/s12955-018-1032-6>.

Chen, Y.W. and Wang, H.H. (2014). 'The Effectiveness of Acupressure on Relieving Pain: A Systematic Review'. *Pain management nursing*, vol. 15, no.2, pp. 539-550, <https://doi.org/10.1016/j.pmn.2012.12.005>.

Christian, E. (2022). *How to become a florist*, [online], Available at: <https://restless.co.uk/career-advice/career-change-advice/how-to-become-a-florist/#:~:text=Being%20a%20Florist%20can%20mean,they%20want%20the%20flowers%20for> [accessed 10 January 2024].

Cording Booth, E. (2022). *The inside track on what it's really like to be a florist*, [online], Available at: <https://www.houseandgarden.co.uk/article/how-to-become-a-florist> [accessed 10 August 2023].

Czępińska, A., Zawadka, M., Wójcik-Zaluska, A., Rzeszak- Siwiec, A., and Gawda, P. (2023). Association between pain intensity, neck disability index, and working conditions among women employed in horticulture. *Annals of agriculture and Environmental Medicine*, 30 (3), pp.531-535. <https://doi.org/10.26444/aaem/162028>.

Dandale, C., Telang, P. A. and Kasatwar, P. (2023). The Effectiveness of Ergonomic Training and Therapeutic Exercise in Chronic Neck Pain in Accountants in the Healthcare System: A Review. *Cureus*, 15(3): e35762. doi:10.7759/cureus.35762.

Darlington, A. (2018). Effects of neck and shoulder massage on male manual labour workers suffering with wrist pain. Dissertation, Jing Institute of Massage and Complementary Medicine: Brighton.

Davis, A. and Robson, J. (2016). The dangers of NSAIDs: look both ways.

British Journal of General Practice, 66 (645): pp. 172-173. DOI:

<https://doi.org/10.3399/bjgp16X684433>.

Engel, G.L. (1977). The Need for a New Medical Model: A Challenge for Biomedicine.

Science, vol. 196, no.4286, pp. 129-136, DOI:[10.1126/science.847460](https://doi.org/10.1126/science.847460).

Fairweather, R. (n.d). *Improve your results for clients with persistent pain:*

Top tips for effective client self care, [online], Available

at: <https://www.jingmassage.com/wp-content/uploads/2016/02/jing.pdf> [accessed 10 December 2023].

Fairweather, R. and Mari, M.S. (2015). *Massage fusion : the Jing method for the treatment of chronic pain*. 1st ed. Edinburgh: Handspring Publishing.

Fernández de las Peñas, C., Sohrbeck Campo, M., Fernández Carnero, J. and Miangolarra

Page, J.C. (2005). ‘Manual therapies in myofascial trigger point treatment: a systematic review’, *Journal of body work and movement therapies*, vol 9, (1), pp. 27-34,

<https://doi.org/10.1016/j.jbmt.2003.11.001>.

Finando, D. and Finando, S. (2005). *Trigger point therapy for myofascial pain: The practice of informed touch*. Rochester, Vermont: Healing Arts Press.

Ferreira, P.H., Ferreira, M.L., Maher, C.G., Refshauge, K.M., Latimer, J. and Adams, R.D. (2013). The Therapeutic Alliance Between Clinicians and Patients Predicts Outcome in Chronic Low Back Pain. *Physical Therapy*, [online] 93(4), pp.470–478.
doi:<https://doi.org/10.2522/ptj.20120137>.

Frazier, L.D. (2020). The past, present, and future of the biopsychosocial model: A review of The Biopsychosocial Model of Health and Disease: New philosophical and scientific developments by Derek Bolton and Grant Gillett. *New Ideas in Psychology*,
<https://doi.org/10.1016/j.newideapsych.2019.100755>.

Fullen, B.M., Wittink, H., De Groef, A., Hoegh, M., McVeigh, J.G., Martin, M. and Smart, K. (2023). Musculoskeletal Pain: Current and Future Directions of Physical Therapy Practice. *Archives of Rehabilitation Research and Clinical Translation*,
<https://doi.org/10.1016/j.arrct.2023.100258>.

Fuller, J. (2015). Effectiveness of thermotherapy when combined with therapeutic massage in the treatment of neck pain in office workers. Dissertation, Jing Institute of Massage and Complementary Medicine: Brighton.

Geri, T., Viceconti, A., Minacci, M., Testa, M. and Rossetini, G. (2019). Manual therapy: Exploiting the role of human touch. *Musculoskeletal science and practice*, Vol. 44, <https://doi.org/10.1016/j.msksp.2019.07.008>.

Gerrish chiropractic center. (n.d). *Neck pain disability index questionnaire*, [online], Available at: <https://gerrishchiro.com/wp-content/uploads/2018/04/Neck-Pain-Disability-Questionnaire.pdf>, [accessed 10 July 2023].

Gipson, S. (2013). Performance related musculoskeletal disorders in orchestral musicians. Dissertation, Jing Institute of Massage and Complementary Medicine: Brighton.

Hanten, W., Olson, S.L., Butts, N.L. and Nowicki, A.L. (2000). ‘Effectiveness of a Home Program of Ischemic Pressure Followed by Sustained Stretch for Treatment of Myofascial Trigger Points’, *Physical Therapy*, Vol 80, no.10, pp. 997–1003, <https://doi.org/10.1093/ptj/80.10.997>.

Hogeback, J. (2016). Why Does Heat Relax Your Muscles?. *Encyclopedia Britannica*, [online], Available at: <https://www.britannica.com/story/why-does-heat-relax-your-muscles> [accessed 15 December 2023].

HSE. (2022). *Health and safety at work: Summary statistics 2022*, [online], Available at: <https://www.hse.gov.uk/statistics/overall/hssh2122.pdf> [accessed 11 August 2023].

Hull University teaching hospitals NHS Trust. (2019) *Neck pain*, [online], Available at: <https://www.hey.nhs.uk/patient-leaflet/soft-tissue-injury-neck-pain/> [accessed 10 August 2023].

Institute for Quality and Efficiency in Health Care (2022). What can you do about non-specific neck pain? [online] National Library of medicine. Available at:

[https://www.ncbi.nlm.nih.gov/books/NBK338118/#:~:text=Different%20kinds%20of%20medication%20can,also%20use%20acetaminophen%20\(paracetamol\)](https://www.ncbi.nlm.nih.gov/books/NBK338118/#:~:text=Different%20kinds%20of%20medication%20can,also%20use%20acetaminophen%20(paracetamol)) [Accessed 17 August 2023].

Johnston, V. (2016). Consequences and management of neck pain by female office workers: results of a survey and clinical assessment. *Archives of Physiotherapy*, 6 (8), <https://doi.org/10.1186/s40945-016-0023-3>.

Kwon, C.Y. and Lee, B. (2018). 'Clinical effects of acupuncture on neck pain syndrome (nakchim): a systematic review'. *Integrative medicine research*, Vol. 7, no.3, pp. 219-230, <https://doi.org/10.1016/j.imr.2018.01.002>.

Light, S. (1956). An outline of the history of therapeutic heat. *American Journal of Physical Medicine*, Vol. 35, no.4, pp. 237-264, https://journals.lww.com/ajpmr/Citation/1956/08000/AN_OUTLINE_OF_THE_HISTORY_OF_THERAPEUTIC_HEAT_.7.aspx.

Mancini, F., Nash, T., Iannetti, G.D. and Haggard, P. (2014). Pain relief by touch: A quantitative approach. *Pain*, Vol. 155, no.3, pp. 635-642, <https://doi.org/10.1016/j.pain.2013.12.024>.

Mahmood, T., Afzal, W., Ahmad, U., Arif, M.A. and Ahmad, A. (2021). Comparative effectiveness of routine physical therapy with and without instrument assisted soft tissue mobilization in patients with neck pain due to upper crossed syndrome. *Journal of the Pakistan medical association*, 71 (10), <https://doi.org/10.47391/JPMA.03-415>.

Mann, E.G., Le Fort, S., and Van Den Kerkhof, E.G. (2013). Self management interventions for chronic pain. *Pain management*, vol.3, no.3. <https://doi.org/10.2217/pmt.13>.

Mezjane, L. (2017). Comparison of the clinical massage and hot stone massage in people with chronic non-specific neck pain. Dissertation, Jing Institute of Massage and Complementary Medicine: Brighton.

Munala, J.M., Olivier, B., Karuguti, W.M., and Karanja SM. (2021). Prevalence of musculoskeletal disorders amongst flower farm workers in Kenya. *South African journal of physiotherapy*, Vol. 77(1), doi: [10.4102/sajp.v77i1.1515](https://doi.org/10.4102/sajp.v77i1.1515).

Mujawar, J.C and Sagar, J.H. (2019). Prevalence of Upper Cross Syndrome in Laundry Workers. *Indian journal of occupational and environmental Medicine*, Vol.23, no.1, pp. 54-56. doi: 10.4103/ijoem.IJOEM_169_18. PMID: 31040591; PMCID: PMC6477943.

Nadler, S.F., Steiner, D.J., Erasala, G.N., Hengehold, D.A., Hinkle, R.T., Beth Goodale, M., Abeln, S.B. and Weingand, K.W. (2002). Continuous Low-Level Heat Wrap Therapy Provides More Efficacy Than Ibuprofen and Acetaminophen for Acute Low Back Pain. *Spine*, 27(10), pp.1012–1017. doi:<https://doi.org/10.1097/00007632-200205150-00003>.

NHS Employers. (2023). *Musculoskeletal health in the workplace.*, [online], Available at: <https://www.nhsemployers.org/publications/musculoskeletal-health-workplace>, [accessed 20th December 2023].

NICE. (2023). *What are the signs and symptoms of non-specific neck pain?*, [online], Available at: <https://cks.nice.org.uk/topics/neck-pain-non-specific/diagnosis/signs-symptoms/>, [accessed 10th August 2023].

North, G. (2021). *Can the Jing Method Abstract 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*. Dissertation, Jing Institute of Massage and Complementary Medicine: Brighton.

Ortego, G., Lluch, E., Herrero, P., Boudreau, S.A., and Doménech-García, V. (2022). Profiling and Association over Time between Disability and Pain Features in Patients with Chronic Nonspecific Neck Pain: A Longitudinal Study. *Journal of Clinical Medicine*, Vol. 11, no.5, <https://doi.org/10.3390/jcm11051346>.

Overmann, L., Schleip, R., Anheyer, R., and Michalak, J. (2023). Effectiveness of Myofascial Release for Adults with Chronic Neck Pain: A Meta-Analysis. *Physiotherapy*. <https://doi.org/10.1016/j.physio.2023.12.002>.

PA Media (2022). Short-term use of ibuprofen may increase chance of chronic pain, study suggests. [online] The Guardian. Available at: <https://www.theguardian.com/society/2022/may/11/short-term-use-of-ibuprofen-may-increase-chance-of-chronic-pain-study-suggests#:~:text=Using%20drugs%20like%20ibuprofen%20and,reconsider%20how%20pain%20is%20treated>. [Accessed 15 Aug. 2023].

Parisien, M., Lima, L.V., Dagostino, C., El-Hachem, N., Drury, G.L., Grant, A.V., Huising, J., Verma, V., Meloto, C.B., Silva, J.R., Dutra, G.G.S., Markova, T., Dang, H., Tessier, P.A., Slade, G.D., Nackley, A.G., Ghasemlou, N., Mogil, J.S., Allegri, M. and Diatchenko, L. (2022). Acute inflammatory response via neutrophil activation protects against the development of chronic pain. *Science Translational Medicine*, 14(644).
doi:<https://doi.org/10.1126/scitranslmed.abj9954>.

Shin, H.J., Kim, S.H., Hahm, S.C., Cho, H.Y. (2020). Thermotherapy Plus Neck Stabilization Exercise for Chronic Nonspecific Neck Pain in Elderly: A Single-Blinded Randomized Controlled Trial. *International Journal of Environmental Research and Public Health*, 17(15):5572. <https://doi.org/10.3390/ijerph17155572>.

Skillgate, E., Pico-Espinosa, O.J., Côte, P., Jensen, I., Viklund, P., Bottai, M. and Holm, L.W. (2020). Effectiveness of deep tissue massage therapy, and supervised strengthening and stretching exercises for subacute or persistent disabling neck pain. The Stockholm Neck (STONE) randomized controlled trial. *Musculoskeletal science and practice*, vol 45.
<https://doi.org/10.1016/j.msksp.2019.102070>.

Smart, K.M., (2023). The biopsychosocial model of pain in physiotherapy: past, present and future. *Physical Therapy Reviews*. <https://doi.org/10.1080/10833196.2023.2177792>.

Smith, K. (2021). What is Locus of control. *Open Learn*. [online]. Available at:
<https://www.open.edu/openlearn/health-sports-psychology/psychology/what-locus-control>
[accessed 14 February 2024].

Song, M.-J., Kang, T.-W. and Kim, B.-R. (2021) “The Effect of Lower Trapezius Strengthening Exercise Using PNF on Pain, Range of Motion, and Disability in Patients with Chronic Neck Pain,” *PNF and Movement*, 19(1), pp. 137–146. doi: 10.21598/JKPNFA.2021.19.1.137.

Stevens, M., (2023). How to prevent work related upper limb disorders, [online], Available at: <https://praxis42.com/resources/health-and-safety/how-to-prevent-work-related-upper-limb-disorders/>, [Accessed 20th December 2023]

University Hospitals Plymouth NHS Trust. (2023). *Neck pain*, [online], Available at: <https://www.plymouthhospitals.nhs.uk/neck-pain/> [accessed 10 August 2023].

Vernon, H. (2008). The Neck Disability Index: State-of-the-Art, 1991-2008. *Journal of Manipulative and Physiological Therapeutics*. 31 (7),pp. 491-502.
<https://doi.org/10.1016/j.jmpt.2008.08.006>.

Wade, DT., Halligan PW. (2017). ‘The biopsychosocial model of illness: a model whose time has come’, *Clinical Rehabilitation*, vol. 31 (8) doi:10.1177/0269215517709890

Watson-Bance, A. (2021). A comparison of treating clients online with nonspecific shoulder pain using the Jing method of advanced clinical massage. Dissertation, Jing Institute of Massage and Complementary Medicine: Brighton.

William Martin. (n.d). Health and safety at work: Summary statistics for Great Britain 2022, [online], Available at: <https://wmcompliance.co.uk/health-and-safety-at-work-summary-statistics-for-great-britain-2022/>, [accessed 25 September 2023].

Yip, Y. and Hing Ming Tse, S. (2006). ‘An experimental study on the effectiveness of acupressure with aromatic lavender essential oil for sub-acute, non-specific neck pain in Hong Kong’, *Complimentary therapies in clinical practice*, vol. 12, no.1, pp. 18-26, <https://doi.org/10.1016/j.ctcp.2005.09.005>

Appendix A

NECK PAIN DISABILITY INDEX QUESTIONNAIRE

PLEASE READ: This questionnaire is designed to enable us to understand how much your neck pain has affected your ability to manage your everyday activities. Please answer each section by circling the **ONE CHOICE** that most applies to you. We realize that you may feel that more than one statement may relate to you, but **PLEASE JUST CIRCLE THE ONE CHOICE WHICH MOSTLY DESCRIBES YOUR PROBLEM RIGHT NOW.**

<p><i>SECTION 1- Pain Intensity</i></p> <p>A I have no pain at the moment. B The pain is very mild at the moment. C The pain is moderate at the moment. D The pain is fairly severe at the moment. E The pain is very severe at the moment. F The pain is the worst imaginable at the moment.</p>	<p><i>SECTION 6- Concentration</i></p> <p>A I can concentrate fully when I want to with no difficulty. B I can concentrate fully when I want to with slight difficulty. C I have a fair degree of difficulty in concentrating when I want to. D I have a lot of difficulty in concentrating when I want to. E I have a great deal of difficulty in concentrating when I want to. F I cannot concentrate at all.</p>
<p><i>SECTION 2- Personal Care (Washing, Dressing, etc.)</i></p> <p>A I can look after myself without causing extra pain. B I can look after myself normally, but it causes extra pain. C It is painful to look after myself and I am slow and careful. D I need some help, but manage most of my personal care. E I need help every day in most aspects of self care. F I do not get dressed, I wash with difficulty and stay in bed.</p>	<p><i>SECTION 7- Work</i></p> <p>A I can do as much work as I want to. B I can only do my usual work, but no more. C I can do most of my usual work, but no more. D I cannot do my usual work at all. E I can hardly do any work at all. F I cannot do any work at all.</p>
<p><i>SECTION 3- Lifting</i></p> <p>A I can lift heavy weights without extra pain. B I can lift heavy weights, but it gives me extra pain. C Pain prevents me from lifting heavy weights off the floor, but I can manage if they are conveniently positioned, for example, on a table. D Pain prevents me from lifting heavy weights, but I can manage light to medium weights if they are conveniently positioned. E I can lift very light weights. F I can not lift or carry anything at all.</p>	<p><i>SECTION 8- Driving</i></p> <p>A I can drive my car without any neck pain. B I can drive my car as long as I want with slight pain in my neck. C I can drive my car as long as I want with moderate pain in my neck. D I cannot drive my car as long as I want because of moderate pain in my neck. E I can hardly drive at all because of severe pain in my neck. F I cannot drive my car at all.</p>
<p><i>SECTION 4- Reading</i></p> <p>A I can read as much as I want to with no pain in my neck. B I can read as much as I want to with slight pain in my neck. C I can read as much as I want to with moderate pain in my neck. D I cannot read as much as I want because of moderate pain in my neck. E I cannot read as much as I want because of severe pain in my neck. F I cannot read at all.</p>	<p><i>SECTION 9- Sleeping</i></p> <p>A I have no trouble sleeping. B My sleep is slightly disturbed (less than 1 hour sleepless). C My sleep is mildly disturbed (1-2 hours sleepless). D My sleep is moderately disturbed (2-3 hours sleepless). E My sleep is greatly disturbed (3-5 hours sleepless). F My sleep is completely disturbed (5-7 hours).</p>
<p><i>SECTION 5- Headaches</i></p> <p>A I have no headaches at all. B I have slight headaches which come infrequently. C I have moderate headaches which come infrequently. D I have moderate headaches which come frequently. E I have severe headaches which come frequently. F I have headaches almost all the time.</p>	<p><i>SECTION 10- Recreation</i></p> <p>A I am able to engage in all of my recreational activities with no neck pain at all. B I am able to engage in all of my recreational activities with some pain in my neck. C I am able to engage in most, but not all of my recreational activities because of pain in my neck. D I am able to engage in a few of my recreational activities because of pain in my neck. E I can hardly do any recreational activities because of pain in my neck. F I cannot do any recreational activities at all.</p>

COMMENTS: _____

PATIENT NAME: _____ DATE: _____ SCORE: _____

Appendix B



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

Jing BTEC Research Ethics Form

**BTEC Level 6 – Professional diploma in advanced
clinical sports massage**

Section 1: to be completed by student

Student's name:	Jonathan Caruana
BTEC Year-group:	2022-2024
Date of application:	12 th May 2023
Student email address:	
Title of research project:	Evaluating the effects of the Jing method of clinical massage on non-specific neck pain in florists.

Section 2:

Does your project involve any primary research using human subjects?

Please delete as appropriate.

	YES	NO
Does your project involve any primary research using human subjects?	X	
If yes, does it involve children under 16?		X
If yes, does it involve children under 18?		X
Other vulnerable populations (i.e. mental illness, aged subjects)?		X
Does your project involve NHS patients, NHS staff or Local Authority Service Providers?		X
<i>If yes, you must obtain 'external ethics approval' for your proposal before the form can be signed-off by 'Jing' and before you can start your fieldwork.</i>		

Are you planning to use deception?		X
Are you collecting sensitive personal data such as sexuality, mental health data, etc?		X
Does your project make use of a validated questionnaire?	Neck Pain Disability Index Questionnaire (NPDIQ)	
Does your project make use of a new/adapted questionnaire or semi-structured interview checklist?		X

Section 3:

Where is your research being undertaken?		
5 Havelock terrace Unit 4G London SW84AS		
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.	YES	NO

Section 4:

How will you recruit subjects for this research study?
Word of mouth inside the flower studio unit and possibly through social media.

Section 5:

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

- All data held in accordance with the General data protection regulation (GDPR).
- All participants information will not be shares to third parties.
- The initial consultation documents will be stored in a password protected folder in the researcher's personal electronic device.
- Each participant will be assigned a number so that they will be anonymous.

Section 6:

Outline your project procedure

- Recruit participants to study the effects of the Jing method of advanced clinical massage on non-specific neck pain in florists.
- One-to-one consultations in person to confirm suitability to the study. The study can then be fully explained and participants have the chance to answer any questions before providing consent to take part. An orthopaedic assessment of the cervical spine and the scapula thoracic joint will be used to measure pain.
- Weeks 1-6, Send NPDIQ questionnaire to participants to complete over a six week period before the treatment part of the study. There will be no intervention and this will form the control period for the study.
- The following six weeks, weeks 7-12: participants will receive individual hands-on treatments. Each session will last 45 minutes.
- Hands on treatment: **prone**: grounding – bringing the awareness to the

breath, indirect MFR on shoulders, skin rolling and torquing of the posterior neck muscles and upper trapezius. Broad work on the back, neck and shoulders. Trigger point work on upper trapezius, levator scapula, rhomboids, sub occipitals. **Side-** shoulder mobilisation, working the medial border of the scapula, direct fascial work on the side of the thorax. **Supine-** mfr torquing pecs. Trigger points pec minor and scalenes. Pnf scalenes, Positional release technique posterior neck. Grounding

- Each participants will be given a simple 5 minute self-care routine to do at least twice a week.
- A reminder will be sent seven days after each hands-on treatment the participants are required to complete and return the **NPDIQ** questionnaire before the next session. The final questionnaire will be returned on day 7 post treatment in Week 12.
- After the last hands on treatment there will be another retesting of the cervical and scapula thoracic joint to see if there was an improvement.
- On Week 16 which is 4 weeks after the intervention participants are required to complete a final **NPDIQ** questionnaire.

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

E.g. will they be interviewed? Where, for how long? Will they complete a Questionnaire? Will they receive a treatment intervention? Will they be involved in a group discussion?

- Participants will have a one-to-one consultation to discuss the study and their suitability to take part. This will also allow participants to ask any questions before consenting to take part. Basic contact information, health history, current medication, lifestyle and questions related to their pain in the neck and shoulder area will be obtained
- An orthopaedic assessment of the cervical spine and the scapula thoracic joint will be used to measure pain.
- Participants must inform the researcher of any medication, treatments, or other therapies they are receiving for their condition.
- For weeks 1-6, Participants are required to fill-in the NPDIQ questionnaire which will be sent via Google forms once a week for six weeks. without any intervention to assess their pain levels during normal activities to form a baseline of their pain.
- The following **6** weeks, weeks 7-12, the participants will receive a 45 minute hands-on Jing advanced clinical massage. After the last hands on treatment there will be another retesting of the cervical and scapula thoracic joint to see if there is any change.
- During this period participants are asked not to have any additional interventions out of their normal routine.

- Seven days after each treatment participants are required to fill the **NPDIQ** questionnaire via Google forms. This needs to be filled and returned prior to the next treatment.
- Participants will be given a simple 5 minute self-care routine to do at least twice a week
- On Week 16 which is 4 weeks after the intervention participants are required to complete a final **NPDIQ** questionnaire.

Section 7:

What sort of materials or stimuli will your participants be exposed to?		
	YES	NO
Questionnaires	X	
Pictures (will you take a photo of participants)		X
Sounds	X	
Words	X	
Other	Hands on Jing advanced clinical massage	

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

- For 'Other' please elaborate:
- Hands on Jing advanced clinical massage

Section 8:

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

Adults 18 years of age and over that have been experiencing non-specific neck pain that also might radiate a dull ache in between the shoulder blades (interscapular pain) or the front/ side of the shoulder when working.

To be included in the study participants are required to be comfortable to receive massage around the pectoral area.

You need to be a florist.

Exclusion criteria see above comments

Pregnancy

Currently having cancer treatment

Recent operation

Whiplash

An acute injury

Have a specific diagnosis of a pre-existing neck or shoulder pathology

Fused cervical vertebrae

Arthritis in the cervical spine

Section 9:

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

N/A

Section 10:

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

- I am a qualified therapist.
- The participants will always be asked if the pressure applied is within their threshold and not producing any pain. They will be encouraged to speak up when anything is uncomfortable during treatment.
- The participant may leave the study at any point with no further explanation.
- The practitioner will always take into consideration the emotional wellbeing of the participants and will always guide them to other help if needed.

Section 11

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

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

- All data held in accordance with the General data protection regulation (GDPR).
- All participants information will not be shares to third parties.
- The initial consultation documents will be stored in a password protected folder in the researcher personal electronic device.
- Each participant will be assigned a number so that they will be anonymous.

Section 12

Does any of the following apply to your research study?	YES	NO
It requires participants to give information of a personal nature	X	

It involves minors or other vulnerable individuals;		X
It involves paying participants or an alternative incentive to participate		X
It could put you or someone else at risk of injury.		X

Section 13:

I understand that I can only start my project, once this ethical application has been approved. This applies to ALL projects, whether using human participants or not.	YES X	NO
--	----------	----

Student's handwritten signature:

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

Print Name:Jonathan Caruana

Date: 12/06/2023

IMPORTANT

Consent

Informed consent must be obtained for **all** participants before they take part in your project. The Consent Form (example below) should clearly state the parameters and content of the research. It should explain what is expected of the participants and what they will be doing. It should draw specific attention to any elements that could conceivably cause subsequent objections, and the measures you are taking to ensure the confidentiality of their data. It should also state that the participants are free to withdraw from the study at any time. Studies carried out in schools require the permission of the head-teacher, and of any responsible adults as per the head teachers' recommendation. Minors aged over 14 years should also sign an individual consent form themselves. If you are planning to carry out a project whereby you will be in contact with minors, you must establish from the head-teacher or other responsible adult whether the work proposed will require you to have the relevant DBS disclosure. Please seek advice from your Local Authority.

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



PROJECT TITLE: Evaluating the effects of the Jing method of clinical massage on non-specific neck pain in florists

STUDENT NAME: Jonathan Caruana

STUDY LOCATION:

5 Havelock terrace
Unit 4G
London
SW84AS

Tel:

email:

INFORMATION FOR PARTICIPANTS

Important

Please be advised that you can withdraw your participation from this study at any time. There is no need to submit a reason and there will be no consequences to you as a result of withdrawing. However, it is important that you are available for the hands-on days of the study during weeks 7-12.

What will be expected of you, the participant?

Weeks 1-6, Participants are required to complete the questionnaires that are sent via Google forms for the initial 6 weeks which is the control phase of the study.

Weeks 7-12, Participants must be available to attend for hands on part of the study. Seven days after each treatment the questionnaire needs to be filled prior to the next hands-on session. After week 12, the questionnaire will be sent to you for completion by return seven days later.

Four weeks after the hands on intervention (week 16) participants are required to fill the final questionnaires.

Participants are asked not to have any additional interventions out of their normal routine during the study.

What does the initial consultation and research study involve?

- Participants will have a one-to-one consultation to discuss basic contact information, health history, current medication, lifestyle and questions related to their pain in the neck and shoulder area.
- An orthopaedic assessment of the cervical spine and the scapula thoracic joint will be used to measure pain.
- No data will be shared. Participants will be given a number that will be used in the documentation of the study.
- Participants must inform the researcher of any medication, treatments,

- or other therapies they are receiving for their condition.
- The research study is looking at the effects of the Jing method of clinical massage on non-specific neck pain in florists.
 - The study comprises 6 weeks **NPDIQ** questionnaires in the beginning. These instruments will measure pain and quality of activities of each individual before the following 6 weeks which will be a hands on intervention.
 - The hands on intervention is a 45 minute Jing advanced clinical massage.
 - Each participant will be given a 5-minute self-care routine to do at least twice a week.

 - 7 days after treatment the questionnaire need to be filled prior the next hands-on session.
 - 4 weeks after the hands on intervention participants are required to fill the final questionnaires.

Are there any risks involved?

I am a qualified massage therapist with 6 years of experience. I will do my best to take care of you during the sessions. If at any time participants feel uncomfortable with anything during the process let me know and I will try to help. Anyone can leave the study with no explanation.

What are the potential benefits to you; the participants?

As a participant you will receive 6 sessions of advanced clinical massage. The questionnaires will give you time to reflect about your area of pain and potentially may help you control the symptoms.

How the results of the study will be used

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

Confidentiality

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

What to do now you have decided to participate

If you would like to participate, please return a completed consent form to **Jonathan Caruana**

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

Thank You.



PARTICIPANT CONSENT FORM

Title of study: Evaluating the effects of the Jing method of clinical massage on non-specific neck pain in florists

Name of student: Jonathan Caruana

<ul style="list-style-type: none"> • I have read the information sheet about this study • I have had an opportunity to ask questions and discuss this study • I have received satisfactory answers to all my questions • I have received sufficient information about this study • I understand that I am / the participant is free to withdraw from this study: • At any time (until such date as this will no longer be possible, which I have been told) • Without giving a reason for withdrawing • That I am free to refuse to answer any question without saying why • 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 here. • I agree to take part in this study 	
Signed (participant)	Date
Name in block letters	
Signed (parent / guardian / other) (if under 18)	Date
Name in block letters:	
BTEC students contact details (including telephone number and e-mail address):	
Jonathan Caruana	
Tel:	
email:	

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

EITHER:

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

Signature: **date:**

OR:

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

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

Signature:  **date:** ...12/7/23.....

If a second opinion was sought from a research ethics expert, the advisor should also sign this form below:

Advisor's name (please print):

Advisor's signature: **date:**

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



Platysma stretch



MFR scalenes stretch



Belly breathing

Appendix D- Hands on protocol

Heat – through a heating pad on the massage couch; Client prone and start with Grounding; Amma fusion; Fascial techniques of skin rolling shoulders and neck, torquing of the upper trapezius and posterior neck nuchal ligament area; Direct myofascial release techniques on erector spine, broad effleurage work on the back neck and shoulders; Trigger point work in prone to suboccipital, upper traps, levator scapula, rhomboids and serratus anterior; Supine: Torquing of pectoralis major, soft tissue release of pectorals, trigger point work to scalenes and pectoralis minor; Stretching upper traps, PNF scalenes, positional release to posterior neck; and finally, Acupressure points K1, GV21.