Evaluating the Effects of the Jing Method on Temporomandibular Joint (TMJ) Pain in People aged 25 – 65 years of age.

Nicky Clarke

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

Total word count: 3940

"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".

Nicky Clarke: _____ Date:

ACKNOWLEDGEMENTS

I wish to thank

My participants, for placing their trust, and pain, in my hands. This study would not have been possible without them.

My teachers, the life changers, and magic makers, Rachel, Susan, and Meghan, for the sheer brilliance of their teaching, the meticulous attention to detail, and the meditations that held us so beautifully.

My fellow BTEC students, now friends for a lifetime, for their support and friendship over the past 2 years.

Val and Terry, for their kindness and generosity.

“Only from the heart can you touch the sky”

Rumi

ABSTRACT

Background

Temporomandibular Disorders are extremely common in adults ages between 20–40 years of age and are responsible for significant pain and disability. This painful condition tends to be more prevalent in females.

TMD may be classified as acute or chronic and symptoms include pain in and around the jaw, ear, or temple, clicking, popping, and grinding noises, headache around the temples, difficulty opening the mouth and jaw locking.

There are many studies on TMD but there appears still no clear definition, based on solid evidence, of which treatment modality is best recommended.

Method

Three female participants were recruited for the study, aged between 33 and 45 years of age. The Graded Chronic Pain Scale Revised questionnaire was issued weekly to each participant for weeks 1-6 with no intervention for participants to complete, providing the baseline level of pain within the group.

During weeks 7-12 the participants received a 55-minute hands-on advanced clinical massage

treatment of the Jing Method advanced clinical massage for the TMJ protocol. This included grounding, amma, myofascial release to the head, neck and shoulders, trigger point therapy to the head, neck and shoulders and external and intra-oral treatment to the masseter and temporalis muscles, stretching and treatment to acupressure points relating to the TMJ.

Between each treatment, participants were required to listen to a 1015guided meditation, emailed to them via the researcher.

Participants were required to complete the Graded Chronic Pain Scale Revised 6 days after each treatment and before the next treatment.

The Graded Chronic Pain Scale Revised was completed by each participant 7 days after the final treatment and again at week 16 to assess any longer-term effects of the treatment.

Results

This study provides quantifiable evidence that the Jing Method of HFMAST is an appropriate treatment option for TMD. The results saw the mean level of participants reported pain at week 12 had decreased by 59.9%. At week 16, reported pain levels had increased a little, but had not returned to levels reported at the start of the study.

TABLE OF CONTENTS

TABLES AND FIGURES

LITERATURE REVIEW

Temporomandibular Joint Disorder

Temporomandibular Disorders (TMD) are the second most common musculoskeletal disorders in adults and are responsible for significant pain and disability with approximately 33% of adults reporting at least one symptom of TMD dysfunction (Mnguni *et al.*, 2020). TMD is a major cause of non-dental pain, reported by between 40–75% of non-patient adult populations. Amongst the TMD's, the most common is myofascial pain (Sobral *et al.*, 2021).

The onset and persistence of pain in patients with TMD might be related to impaired central nervous system reception and processing of nociceptive stimuli as well as being linked to other conditions such as neck pain and headache. These connections are now widely accepted (La Touche *et al.*, 2020).

The most common cause of TMD, myofascial pain, can persist for years, even decades, without evidence of a progressive underlying pathology. This can be extremely debilitating. Sufferers describe the severity of the pain making it sometime impossible to eat or talk and to prevent

them from being about to work and go to social events. Being unable to laugh, talk and sing can cause feelings of great depression (Yost *et al.*, 2020)

Definitions

TMD is a condition affecting movement of the jaw. Symptoms of TMD include pain in and around the jaw, ear, or temple, clicking, popping, and grinding noises, headache around the temples, difficulty opening the mouth and jaw locking (National Health Service, 2023).

TMD may be classified as acute or chronic. Acute TMD is often attributable to an identifiable cause, such as prolonged dental treatment, and the symptoms are normally short-lived and self-limiting. In chronic TMD, the pain is of a longer duration, exceeding three months (Ghurye and McMillan, 2017).

Many TMDs are complex with a multifactorial aetiology. Interdisciplinary attention and intervention from a variety of professionals including clinicians in medicine, dentistry, and other health care fields is needed (Yost *et al.*, 2020).

Diagnosis

The classification system used for TMD is the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD). This system classifies TMD into 3 groups; joint and disc disorders, masticatory muscle disorders, and headache attributed to TMD (Mnguni *et al.*, 2020). The DC/TMD has been a work in progress since 2001, with many ideas being taken from the classification system for back pain used by National Institutes of Health Pain Consortium (Yost *et al.*, 2020) Overtime, the diagnosis of TMD has significantly improved with the DC/TMD being reliable and valid for most common diagnoses and a way to communicate efficiently in multidisciplinary settings (Kapos *et al.*, 2020).

Prevalence

Information on population percentages who have TMD varies greatly, from 10%−15% of the adult population (Macrì *et al.*, 2022) to approximately 31% (Valesan *et al.*, 2021) and then up to 51% (Mnguni et al, 2020).

Mnguni et al. (2020) report the severity of TMD as increasing with age, occurring most between the ages of 20 and 50 years old, with most people being affected in their 40s. Other research from a similar period by Sobral et al. (2021) found TMD to be prevalent in people of all ages although, that said, in children its occurrence is low, and prevalence increases in adolescence and young adulthood.

A systemic review (SR) by Lai, Yap and Türp (2019) found that in all studies, TMD prevalence was higher among females. This was supported by Macri et al. (2022) which found the highest incidence of TMD was in women between 20 – 40 years of age, twice as high as in men.

There may be a link to depression. Those who have depressive symptoms complain more frequently of TMD pain (Alkhubaizi, Khalaf and Faridoun, 2022), although it is suggested in other research that it may in fact be the prolonged TMD symptoms which lead to depression and chronic pain-related disability (Ghurye and McMillan, 2017).

Myofascial Pain and TMD

Myofascial TMD affects 42% of patients with oro-facial pain, followed by 32.1% with disc displacement with reduction and 30% with arthralgia (Hernanz *et al.*, 2023).

Myofascial pain syndrome (MPS) is one of the most important chronic health problems also seen in clinical dental practice and it can be defined as a common pain disorder in which the

trigger point is described by Travell, cited in Finando and Finando, 2005, as “a hyper irritable locus within a taut band of skeletal muscle, located in the muscular tissue and/or it’s associated fascia”,

MPS can be acute or chronic. It can also be post-traumatic, lasting beyond the “normal” time of healing, usually over 3 or 6 months (Physiopedia, 2023).

Central Sensitisation and TMD

Several studies suggest that central sensitisation is a significant factor in TMD conditions. Central sensitisation is explained as a nervous system condition associated with the development and maintenance of chronic pain. When central sensitisation occurs, the nervous system goes through a process called *wind-up* and gets regulated in a persistent state of high reactivity (McAllister, 2022).

A SR to evaluate comorbid conditions making a link to central sensitisation as a factor in TMD finds more than 50% of TMD patients also report chronic back pain, myofascial syndrome, chronic stomach pain and fibromyalgia (Kleykamp *et al.*, 2022).

Similarly, an older study by Furquim, Flamengui and Conti (2015) found chronic muscle pain as being a pain condition like fibromyalgia, irritable bowel syndrome, interstitial cystitis, and chronic fatigue syndrome, with central sensitisation being the common link between these conditions, stating TMD symptoms should be understood as a complex response that may get worse or better depending upon the individual’s adaptation.

The Jing Method of Advanced Clinical Massage

Fairweather and Mari (2015) use the acronym HFMAST to describe their formula, the Jing Method, for the successful treatment of chronic pain. This acronym refers to heat, fascia, muscles, acupressure, stretching and teaching self-care. The Jing Method is a holistic approach based upon the biopsychosocial model of pain and modern neuroscience.

Jing treatment protocols exist for various conditions: including TMD, low back pain, neck and shoulder pain, etc, all of which utilise the HFMAST method. The Jing Method favours an approach of 6-treatments, delivered weekly, with some self-care often in the form of stretches or guided relaxation for the individual to carry out themselves in between each treatment, before moving on to a maintenance programme of approximately monthly sessions to keep the individual out of pain.

Research can be found supporting some of the HFMAST elements of the Jing Method as a useful approach for the treatment of TMD, however, the overall quality of evidence from this research can be seen as low or at best moderate due to small sample sizes and high heterogeneity. This is seen is Table 1.

Elements of the Jing Method of Advanced Clinical Massage and Current Research

Table 1 details information on some of the studies which have utilised elements of the Jing HFMAST Method to treat TMD.

Table 1 - Elements of the Jing HFMAST Method to treat TMD in research.

Study	**HFMAST Elements**	**References**

A 2015 survey concludes massage, trigger point therapy or muscle energy technique, the use of hot or cold and acupuncture at the site of trigger points as all being conservative treatments that should be considered as first choice therapies for TMD because of their low risk of side effects.	Heat Fascia Muscles Acupressure	(Wieckiewicz *et al.* 2015)
A study into relaxation of the temporal and masseter muscles using post-isometric relaxation and myofascial release methods in patients requiring prosthetic treatment due to TMD with a dominant muscular component found there was a significant decrease in the electrical activity of the examined muscles and a significant drop in the intensity of spontaneous pain in these patients. The study concluded that both therapeutic methods may be used as successful forms of adjunctive therapy in the prosthetic treatment of TMD.	Fascia Stretching	(Urbański, Trybulec and Pihut, 2021)
A study which proposes TMD and MPS as being regulated by psychosocial factors found craniosacral therapy a promising alternative treatment using gentle fascia palpation techniques to decrease arousal of the sympathetic nervous system, regulating body rhythms, and releasing fascial restrictions between the cranium and sacrum.	Fascia	(Golanska et al. 2021)

SR and meta-analysis (MA) of studies comparing the effectiveness of cervical massage therapy and cervico-craniomandibular manual therapy (MT) found each intervention to have had a positive outcome on pain in the masseter and temporalis. These muscles receive attention in the TMJ treatment protocol described in *Massage Fusion; The Jing Method for the Treatment of Chronic Pain,* Fairweather and Mari (2015).	Fascia Muscles	(La Touche *et al.*, 2020)
A 2015 survey concludes massage, trigger point therapy or muscle energy technique, the use of hot or cold and acupuncture at the site of trigger points as all being conservative treatments that should be considered as first choice therapies for TMD because of their low risk of side effects.		(Wieckiewicz *et al.*, 2015)
A SR into supported self-management (SSM), also termed as self-care, took place in 2022. This found evidence of SSM is limited with significant differences identified between the programmes. The SR concluded further research is needed to test the differing SSM programmes and to test these against no other intervention as in the studies reviewed SSM tended to be used as the control group and there was no study	Teaching self-care	(Palmer, Penlington and Durham, 2022)

identified in this SR which tested SSM against no treatment or a placebo.		

Central sensitization, BPS, depression, and the effectiveness of clinical massage on TMD

Research is already mentioned by Alkhubaizi et al (2022) and Ghurye and McMillan (2017) linking TMD symptoms and depression, and whether TMD symptoms cause depression or whether in fact it is the depression which causes TMD.

Depression is common among people with chronic pain. Once a person is depressed, depression can exacerbate chronic pain and similarly, depression lowers a person's ability to deal with chronic pain. People get stuck in the vicious cycle of perpetual wind up that is central sensitisation. Fairweather and Mari (2015) describe this process as being when the spinal cord and brain act like a faulty amplifier, turning up the volume of the pain. The individual is in real pain even though there is no injury or tissue damage.

Researchers agree that depression is likely to be the result of persistent stress and biological or genetic predisposition (McAllister, 2018), supporting George Engel's biopsychosocial (BPS) model of pain (Engel, 1977). This widely accepted model of pain management suggests there is a reciprocal nature in the relationship between biological, social, and psychological factors which would imply that clinical massage, especially when delivered within this BPS model which is key to the Jing Method, may have a positive impact upon TMD.

This Study

Google Scholar and Pubmed were used to source relevant literature for this study.

Whilst research can be found supporting elements of the Jing Method of Advanced Clinical Massage (see Table 1), there is a need for more and especially that of high quality, which evidences advanced clinical massage, or at least elements of it, as an effective treatment for TMD.

This study intends to test the hypothesis that a series of six clinical massage treatments using the Jing HFMAST Method of Advanced Clinical Massage as described by Fairweather and Mari (2015) can produce a quantifiable reduction in TMJ pain in people aged between 25–65. It builds on the work of Lindsay (2023) whose study 'Evaluating an Online Advanced Clinical Massage Treatment on Pain in Adults with Temporomandibular Joint Disorder' found that participants reported pain decreased by over 50%, providing evidence that this approach was an effective treatment option for TMD.

METHOD

Ethical approval was received for the following study from Jing Advanced Massage Training. The study is of within person design and was to provide hands on clinical massage treatments to men and women aged 25 – 65 years of age who have 3 or more of the criteria set out in Table 2.

Table 2 - Criteria for inclusion in the study. Participants had to meet 3 or more of the listed criteria.

Pain in the jaw or temple area that is always present.
Pain in the jaw or temple area that comes and goes.
Pain or stiffness in the jaw upon wakening.
Pain in the jaw or temple area affected by chewing hard or tough food.
Pain in the jaw or temple area affected by opening the mouth or moving the jaw forward or to the side.
Jaw habits such as holding teeth together, clenching or grinding.
Pain affected in the jaw or temple area by talking, kissing, or yawning.

A group of 3 participants were recruited via an existing client mailing list, promotion in a local dental practice, aesthetics beauty clinic offering Botox treatment for TMD, and social media. All the participants were female aged between 33 and 45. They each had 3 or more of the criteria detailed in Table 2.

Anyone who was pregnant, had dental work or surgery within the past 12 weeks, was already receiving any form of treatment for their TMJ pain, or had had any dental work or surgery planned to take place during the study was excluded from the study. This unfortunately did mean that a couple of people who had enquired initially were not able to take part.

Online consultations were held with each participant, where the study was outlined, and they could ask any questions before consenting to the study.

The Graded Chronic Pain Scale Revised questionnaire was issued weekly via Google Forms to each participant for weeks 1-6 with no intervention for participants to complete. These results were to provide the baseline level of pain within the group.

During weeks 7-12 the participants received a 55-minute hands-on advanced clinical massage treatment, which was the Jing Method of advanced clinical massage for the TMJ protocol. This included grounding, amma, myofascial release to the head, neck and shoulders, trigger point therapy to the head, neck and shoulders and external and intra-oral treatment to the masseter and temporalis muscles, stretching and treatment to acupressure points relating to the TMJ.

Between each treatment, participants were required to listen to a 10–15-minute guided meditation once a week. The meditation included breathing exercises, body scans and the practice of paying attention to the sensation of opposites in the body. The recording was emailed to them each week by the researcher.

Participants were required to complete the GCPS Revised 6 days after each treatment and before the next treatment. A reminder email was sent to each participant.

The GCPS Revised was completed by each participant 7 days after the final treatment and again at week 16 to assess any longer-term effects of the treatment.

RESULTS

Data was collected and analysed over a 12-week period, with a follow up at week 16, from 3 females ages between 33 and 45 years old. Weeks 1–6, shown in blue, were the control period, and intervention took place between weeks 7–12, shown in orange.

Shown in this section is data from the first 3 questions of the GCPS. These questions relate specifically to the participants' pain levels and are the results most relevant to this study. Data from the remaining questions of the GCPS can be found in Appendix 2 of this paper.

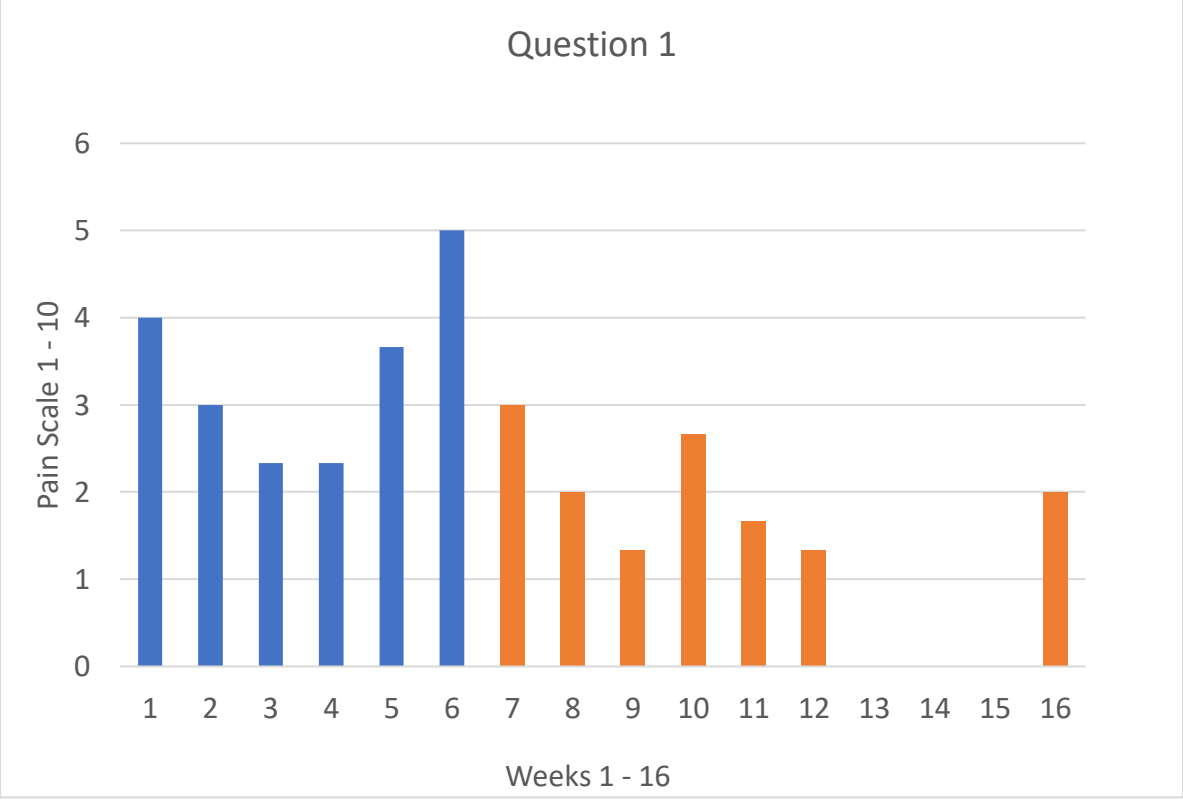


Figure 1 Results from Question 1

How would you rate your pain on a scale of 0–10 at this present time?

Figure 1 shows data from question 1 of the GCPS, the mean scores out of 10, based on a 0–10 pain scale of the participants pain at the time of reporting. It shows participants' pain levels have reduced from 3 out of 10 to 1.3 out of 10, a percentage decrease of 56%, over the course of intervention period and have increased to 2 out of 10 week 16.

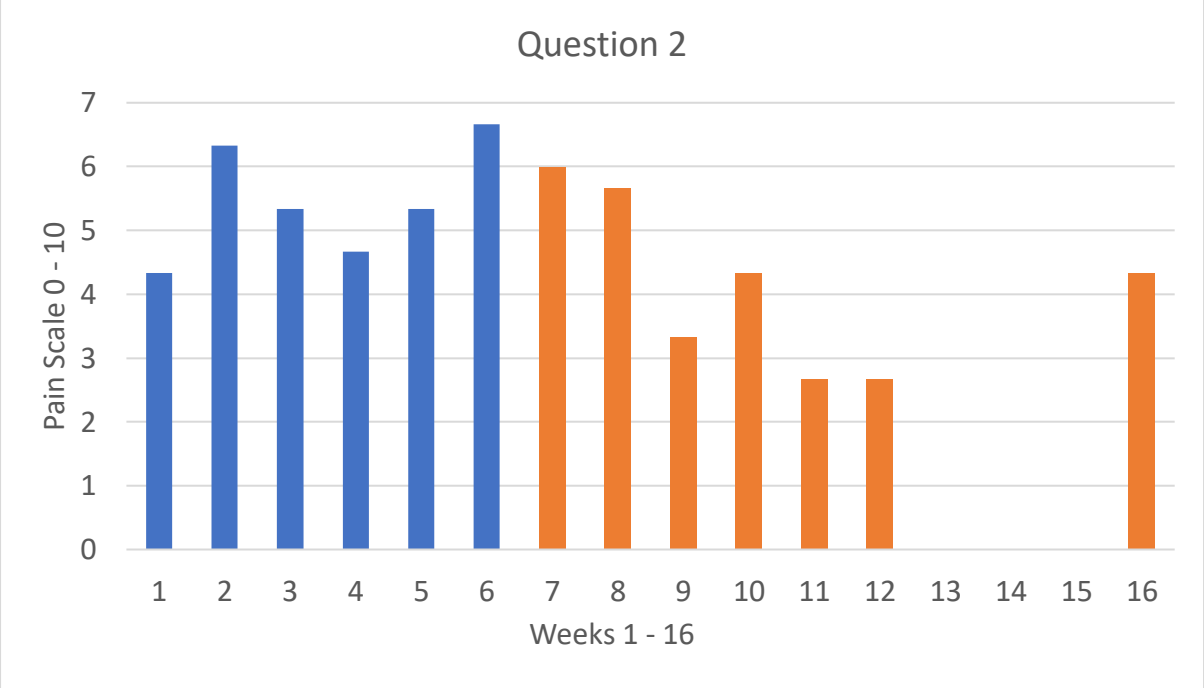


Figure 2 Results from Question 2

In the past 7 days, how intense was your worse pain rated on a 0 -10 scale?

Figure 2 shows data from question 2 of the GCPS, the mean scores out of 10, based on a 0 – 10 scale, of the participants pain levels at their worst over the last 7 days. It shows participants'

pain levels have reduced from 6 out of 10 to 2.7, a percentage decrease of 55%, over the course of the intervention period and have increased to 4.3 out of 10 at week 16.

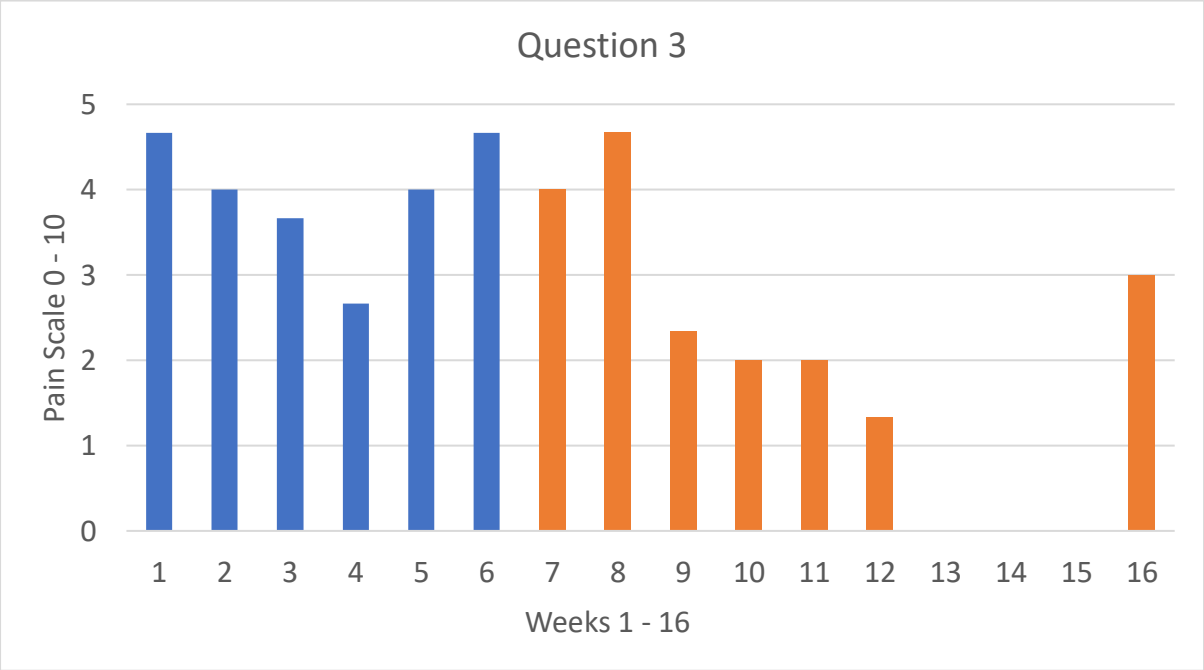


Figure 3 Results from Question 3

In the past 7 days on average, how intense was your pain rated on a 0 -10 scale?

Figure 3 shows data from question 3 of the GCPS, the mean scores out of 10, based on a 0 – 10 scale, of the intensity of the participants pain levels over the last 7 days. It shows participants' pain levels have reduced from 4 out of 10 to 1.3 out of 10, a percentage decrease of 67.5%, over the course of the intervention period and have increased to 3 out of 10 at week 16.

DISCUSSION

The aim of this study was to evaluate the effects of the Jing Method on TMJ pain in people aged 25 – 65 years of age and to test the hypothesis that the Jing HFMAST Method, when delivered as 6 treatments over consecutive weeks, would make a positive impact upon pain associated with TMD. The results seen here are encouraging as they show a significant overall decrease of 59.9% in pain, thus evidencing the Jing Method as being an appropriate treatment for TMD.

In addition to the positive results observed at week 12, results at week 16, when the follow up GCPS Revised was completed by participants, show that the treatment 'held' somewhat, with the scores dipping down again but remaining below the pain scores at the start of the study and at the start of the intervention period. This data suggests that if the participants had continued with monthly maintenance treatments and self-care, as recommended by Fairweather and Mari (2015) as being necessary for the ongoing management of chronic pain, they may have seen more improvement in their symptoms and a greater reduction in pain.

Scores dipped a little in the control period and increased at week 6. This may be because of the participants having a sense of hope at the outset of the study and a more intense focus upon their pain at week 6, the time at which the intervention phase was about to start.

Links to other research

For each participant, factors became evident to the researcher at the point of consultation and when disclosed by the participants over the duration of the study, which support George Engel's (1977) BPS model of pain. With reference to this model, Miles (2020) describes disease and health as the product of physiological, biological, and social factors as opposed to the biomedical model, in which disease is viewed in terms of deviation from normal biological

functioning. For the participants of this study, factors the researcher identified which linked to the BPS model were childhood trauma, caring responsibilities of a parent, and chronic fatigue. As discussed below, the link between these factors and TMD has been identified by other studies.

Interestingly, Vuong et al. (2019) link chronic fatigue and TMD describing both conditions as being poorly understood. They suggest autonomic dysfunction may play a role in the presentation of both conditions and explain some of the apparent comorbidity between them. Kleykamp et al. (2022) also find the presence of comorbid health conditions contributes to the multidimensionality of TMDs and increased the overall burden of pain associated with this group of conditions. Similarly, Noteboom et al. (2021) found that for individuals with a history of childhood trauma, there may also be an increased risk of developing digestive, musculoskeletal, respiratory disorders and migraine. It should be noted however, that childhood trauma can encompass a broad range of events and the trauma experienced by the participant in this study was not one of physical or sexual abuse.

This study follows on from the work of Lindsay (2023) who successfully incorporated the Jing Method treatment protocol of HFMAST for TMD into an online format following the Covid pandemic. Results from her study found that the mean level of participants reported pain decreased by over 50%, meaning that, at face value, the results from this current study are slightly better, however, Lindsay had more participants which would have had an impact upon the mean data.

Whilst the numbers are still small, the combined data from this study and that of Lindsay is beginning to provide some solid evidence that the Jing Method is an effective treatment option for TMD and associated symptoms such as bruxism.

Few other studies exist specifically about the Jing Method and its effectiveness upon TMD with the work of Schaay (2023) being one exception. Schaay's study was a mix of online and hands-on treatment which saw good results in terms of a decrease in pain density and a reduction in painful areas. The DC/TMD was the instrument used by Schaay to measure results, this is a standardised tool used by professionals trained in its application, meaning it's not possible to draw a direct comparison to this current study, the GCPS was not used. Linday's study used the GCPS, so a better comparison can be made.

There are also other studies into the treatment of TMD, however, which make clear parallels with the Jing Method of HFMAST, particularly the work of Wieckiewicz et al. (2015) who identify massage trigger point therapy, acupuncture at the site of trigger points, and the use of hot and cold as being effective, non-invasive, and safe conservative methods for the treatment of TMD.

Despite with reference to the various studies having been carried out on TMD in recent years, Al-Moraissi et al. (2021) find there is still no clear definition, based on solid evidence, of which treatment modality is best for the management of this painful condition. In contrast, this current study supports the work of Fisch et al. (2021) who, amongst others including Wieckiewicz et al. (2015) and Yap et al. (2023), who find non-invasive, conservative treatment such as physical therapy, acupuncture, massage, and patient self-management to achieve good outcomes albeit in the short term.

Excitingly, this study also supports findings of Yao et al. (2023) published recently in the British Medical Journal which identifies therapist assisted jaw-mobilisation, cognitive behavioural therapy with relaxation therapy, and manual trigger point therapy as being the three most effective interventions out of eight trialled for the treatment of TMD. These interventions clearly link to the massage and self-care elements of the Jing Method of HFMAST and will

hopefully help to demonstrate how a conservative approach to TMD can have a positive benefit, reducing the need to expensive dental work or pharmacological interventions.

Recruitment

This study was advertised to all genders but only females signed up. Whilst this appears to support the findings of Lai, Yap and Türp (2019), who found TMD to be more prevalent in females, the evidence presented here should be seen as weak due to there being such a small number of participants having taken part in this study. It should also be considered as a possibility that the methods the researcher used to recruit participants may have inadvertently targeted a more female audience.

Similarly, this study supports the work of Macri et al. (2022) and Mnguni et al. (2020) in terms of the age ranges of participants, with those recruited being between 33 and 35 years of age, although again, this evidence must also be considered weak for the same reason of low participant numbers.

Interestingly, especially for a study with such a small number of participants, there was some diversity, in terms of ethnicity and socioeconomic status.

Recruitment for the study was harder than the researcher expected. It is possible that the time of year had an influence with the study beginning right at the end of the school summer holidays. This may have meant that the people to whom the researcher reached out to had different priorities at that time.

Participants were required to pay, albeit at a reduced rate, for their treatments as opposed to being offered free treatment during the study. It was evident that this deterred some potential

participants from taking part as several people withdrew their interest citing the requirement to pay for treatment as being an issue for them.

Unfortunately, another participant withdrew as they felt it would not be possible for them, despite, extra support being offered by the researcher, for them to complete the weekly questionnaire due to them having a brain injury and struggling with short term memory.

Limitations of this study

The low number of participants should be considered the main criticism of this research. The study was limited at the outset by being self-funded by the researcher, meaning it was not ever going to be possible to have the number of participants some larger-scale studies with external funding sources achieve.

Recommendations

The results from this study are extremely positive and will hopefully encourage further research which evaluates the effectiveness of the Jing Method as a treatment option for TMD. Should others be inspired by this study, and the work of fellow Jing students Lindsay and Schaay before it, then it is recommended similar methods are used, delivering interventions online, hands-on, or a blend of both, and for the same instrument as in this study and Lindsay's, the GCPS Revised, to be used for consistency.

It would also be interesting to see future research explore further into the links between TMD and other chronic pain conditions such as fibromyalgia, chronic fatigue syndrome and myofascial pain syndrome for which central sensitisation is a key factor. As it does seem, based on some of the studies mentioned, that there is a link, and sometimes comorbidity, of

these conditions for which it is generally accepted that treatments which favour the BPS model of pain are the best approach. A stronger, more defined link between TMD and these conditions could see clearer evidence for the BPS model becoming a preferred treatment option for TMD too. This could be empowering for the individuals who have found a medical approach to make little or no difference to their pain.

CONCLUSION

The aim of this study was to evaluate the effects of the Jing Method on TMJ pain in people aged 25 – 65 years of age and to test the hypothesis that the Jing HFMAST Method, when delivered as 6 treatments over consecutive weeks, would make a positive impact upon pain associated with TMD.

The results from this study are extremely positive, showing a significant overall decrease of 59.9% in pain, thus providing quantitative evidence that the Jing Method of HFMAST is a safe, effective, and non-invasive treatment option for TMD. This study has also shown that as well as the participants overall pain levels having decreased considerably, the results 'held' to some extent 4 weeks post final treatment.

This study adds to the increasing body of research, including two other studies by Jing students, that non-invasive, conservative treatments are the most appropriate and effective treatment for this painful and debilitating condition. This study should be seen as very positive indeed for sufferers of TMD and may hopefully be encouraging for others wishing to undertake future research into the effectiveness of Jing Method of HFMAST as a treatment option for TMD.

REFERENCES

Alkhubaizi, Q., Khalaf, M. E., & Faridoun, A. (2022). Prevalence of Temporomandibular Disorder-Related Pain among Adults Seeking Dental Care: A Cross-Sectional Study. *International journal of dentistry*, *2022*, 3186069. https://doi.org/10.1155/2022/3186069

Al-Moraissi, E.A., Conti, P.C.R., Alyahya, A., Alkebsi, K., Christidis, N. The hierarchy of different treatments for myogenous temporomandibular disorders: a systematic review and network meta-analysis of randomized clinical trials. *Oral Maxillofac Surg* **26**, 519–533 (2022). https://doi.org/10.1007/s10006-021-01009-y

Asquini, G., Pitance, L., Michelotti, A., & Falla, D. (2022). Effectiveness of manual therapy applied to craniomandibular structures in temporomandibular disorders: A systematic review. *Journal of oral rehabilitation*, *49*(4), 442–455. https://doi.org/10.1111/joor.13299

Biopsychosocial model of pain https://www.painscale.com/article/biopsychosocial-model-of-pain. (Accessed 28th March 2024).

Fairweather, R. and Mari, M. (2015) *Massage Fusion, The Jing Method for the Treatment of Chronic Pain*. Handspring, City Publishers.

Finando, D. and Finando, S. (2005) *Trigger point therapy for myofascial pain: The Practice of Informed Touch*. Healing Arts Press.

Fisch, G., Finke, A., Ragonese, J., Duglas, L., Wrzosek, M. Outcomes of physical therapy in patients with temporomandibular disorder: a retrospective review. *British Journal of Oral & Maxillofacial Surgery*, 59(2), pp. 145–150. https://doi.org/10.1016/j.bjoms.2020.08.068.

Furquim, B.D., Flamengui, L.M.S.P. and Conti, P.C.R. (2015). TMD and chronic pain: A current view. *Dental Press Journal of Orthodontics*, 20(1), pp. 127–133. https://doi.org/10.1590/2176-9451.20.1.127-133.sar.

Ghurye, S. and McMillan, R. (2017); Orofacial pain – an update on diagnosis and management. *British Dental Journal*, 223(9), pp. 639–647. https://doi.org/10.1038/sj.bdj.2017.879.

Golanska, P. Saczuk, K., Domarecka. M, Kuć, J., Lukomska-Szymanska M. (2021) Temporomandibular Myofascial Pain Syndrome -Aetiology and Biopsychosocial Modulation. A Narrative Review. *International Journal of Environmental Research and Public Health*, 18(15), p. 7807. https://doi.org/10.3390/ijerph18157807.

Serrano-Hernanz G., Angulo-Carrere T., Ardizone-García I., Svensson P., Álvarez-Méndez AM. Pressure release technique versus placebo applied to cervical and masticatory muscles in patients with chronic painful myofascial temporomandibular disorder: A randomised clinical trial. *Journal of Oral Rehabilitation*. 2023; 50: 782-791. doi:10.1111/joor.13490.

Institute for Chronic Pain | Ideas that are Changing Pain (Accessed 30 March 2024). https://instituteforchronicpain.org/.

Kapos, F.P., Exposto, F.G., Oyarzo, J.F., Durham, J. (2020) Temporomandibular disorders: a review of current concepts in aetiology, diagnosis, and management. *Oral Surgery*, 13(4), pp. 321–334. https://doi.org/10.1111/ors.12473.

Kleykamp, B.A., Ferguson, M.C., McNicol, E., Turk, D.C., Dworkin, R.H. 2022) The prevalence of comorbid chronic pain conditions among patients with temporomandibular disorders. *Journal of the American Dental Association*, 153(3), pp. 241-250.e10. https://doi.org/10.1016/j.adaj.2021.08.008.

La Touche, R., Martínez García, S., Serrano García, B., Proy Acosta, A., Juárez, D. A., *Fernandez* Pérez, J.J., Angulo-Díaz-Parreño, S., Cuenca-Martínez, F., Paris-Alemany, A., Suso-Martí, L. (2020) Effect of Manual Therapy and Therapeutic Exercise Applied to the Cervical Region on Pain and Pressure Pain Sensitivity in Patients with Temporomandibular Disorders: A Systematic Review and Meta-analysis; *Pain Medicine*, 21(10), pp. 2373–2384. https://doi.org/10.1093/pm/pnaa021.

Lai, Y.C., Yap, A.U. and Türp, J.C. (2019) Prevalence of temporomandibular disorders in patients seeking orthodontic treatment: A systematic review; *Journal of Oral Rehabilitation*, 47(2), pp. 270–280. https://doi.org/10.1111/joor.12899.

Lindsay, E. (2023) *Evaluating an Online Advanced Clinical Massage Treatment on Pain in Adults with Temporomandibular Joint Disorder*. dissertation. The Jing Institute of Clinical Massage and Complementary Medicine.

Macrì, M., Murmura, G., Scarano, A., Festa, F. (2022) Prevalence of temporomandibular disorders and its association with malocclusion in children: A transversal; *Frontiers in Public Health*, 10. https://doi.org/10.3389/fpubh.2022.860833.

Miles, E. (2020) Biopsychosocial Model; in *Springer eBooks*, pp. 259–260. https://doi.org/10.1007/978-3-030-39903-0_1095.

Mnguni, Nkazimulo1; Olivier, B., Mosselson, J. Prevalence of concurrent headache and temporomandibular disorders: a systematic review protocol; *JBI Evidence Synthesis*, 19(1), pp. 263–269. https://doi.org/10.11124/jbisrir-d-19-00255.

Murdoch, S. (2023) *Effects of Jing Method Advanced Clinical Massage in Adults with Chronic Shoulder Pain*. Dissertation. The Jing Institute of Clinical Massage and Complementary Medicine.

Myofascial pain. https://www.physio-pedia.com/Myofascial_Pain. (Accessed 28 March 2024)

Yost O, Liverman CT, English R. From Research Discoveries to Clinical Treatment; Temporomandibular Disorders: Priorities for Research and Care. Washington (DC): National Academies Press (US); 2020 Mar 12. 2, Definitions and Scope: What Are TMDs? (Accessed online) https://www.ncbi.nlm.nih.gov/books/NBK557995/

Palmer, J., Penlington, C. and Durham, J. (2022). Supported self-management in temporomandibular disorders: A systematic review of behavioural components; *Oral Surgery* [Preprint]. https://doi.org/10.1111/ors.12773.

McAllister, M.J. (2018) Depression and pain; *www.instituteforchronicpain.org* [Preprint]. https://www.instituteforchronicpain.org/understanding-chronic-pain/complications/depression.

McAllister, M.J. (2022) Central sensitization; *www.instituteforchronicpain.org* [Preprint]. https://www.instituteforchronicpain.org/understanding-chronic-pain/what-is-chronic-pain/central-sensitization.

Schaay, A. (2023) *An evaluation of the Jing Method of Advanced Clinical Massage for headaches and pain attributed to Temporomandibular Joint Disorder*. Dissertation. The Jing Institute of Clinical Massage and Complementary Medicine.

Sobral, A.P.V., Sobral, S.-d.-S., Campos, T.-M., Horliana, A.-C-R., Fernades, K.-P.-S., Bussadori, S.-L., Motta, L.-J. (2021) Photobiomodulation and myofascial temporomandibular disorder: Systematic review and meta-analysis followed by cost-effectiveness analysis; *Journal of Clinical and Experimental Dentistry*, pp. e724–e732. https://doi.org/10.4317/jced.58084.

Valesan, L.F., Da-Cas, C.D., Réus, J.C., Denardin, A.C.S., Garanhani, R.R., Bonotto, D., Januzzi, E. and de Souza, B.D.M. (2021). Prevalence of temporomandibular joint disorders: a systematic review and meta-analysis. *Clinical Oral Investigations,* 25(2), pp.441–453. https://doi.org/10.1007/s00784-020-03710-w.

Vuong QC, Allison JR, Finkelmeyer A, Newton J, Durham J. Brain Responses in CFS and TMD to Autonomic Challenges: An Exploratory fMRI Study. JDR Clinical & Translational Research. 2020;5(3):224-232. https://doi:10.1177/2380084419872135

Vuong, Q.C., Allison, J.R*.,* Finkelmeyer, A., Newton, J., Durham, J. (2019) Brain responses in CFS and TMD to autonomic challenges: an exploratory FMRI study; *JDR Clinical & Translational Research*, 5(3), pp. 224–232. https://doi.org/10.1177/2380084419872135.

Website, NHS. (2023) *Temporomandibular disorder (TMD)*. https://www.nhs.uk/conditions/temporomandibular-disorder-tmd/. (Accessed 28 March 2024)

Wieckiewicz M., Boening K., Wiland P., Shiau Y.Y., Paradowska-Stolarz, A. (2015) Reported concepts for the treatment modalities and pain management of temporomandibular disorders; *Journal of Headache and Pain*, 16(1). https://doi.org/10.1186/s10194-015-0586-5.

Wigmore, S. (2023) *Assessing the effectiveness of the Jing Method of Advanced Clinical Massage for treating lumbopelvic pain in postpartum runners*. Dissertation. The Jing Institute of Clinical Massage and Complementary Medicine.

Yao, L., Sadeghirad, B., Li, M., Li, J., Wang, Q., Crandon, H.N., Martin, G., Morgan, R., Florez, I.D., Hunskaar, B.S., Wells, J., Moradi S., Zhu, Y., Ahmed, M.M., Gao, Y., Cao,Y., Yang, K., Tian, J., Li, J., Zhong, L., Couban, R.J., Guyatt, G.H., Agoritsas, T., Busse, J.W. (2023) Management of chronic pain secondary to temporomandibular disorders: a systematic review and network meta-analysis of randomised trials; *BMJ* [Preprint]. https://doi.org/10.1136/bmj-2023-076226.

Yap, A. U., Tan, M. W. Y., Foo, J. K. Y., & Lai, Y. C. (2023). Noninvasive interventions for temporomandibular disorders: a scoping review of systematic reviews from 2017 to 2022. *Quintessence international (Berlin, Germany: 1985)*, *54*(9), 772–787. https://doi.org/10.3290/j.qi.b417440

APPENDIX 1 – ETHICS FORM

	CHECKLIST OF INSTRUCTIONS FOR STUDENTS	
1	Complete Section 1 to Section 13	
2	Electronically sign and date	
3	Participation information form	
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:	Nicky Clarke
BTEC Year-group:	2022 - 2024
Date of application:	02/05/2023
Student email address:	info@mandalamassagebrighton.com
Title of research project:	Evaluating the effects of the Jing Method on TMJ pain in people aged 25 – 65.

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? *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.*		X
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? The Graded Chronic Pain Scale Revised	X	
Does your project make use of a new/adapted questionnaire or semi-structured interview checklist?		X

Section 3:

Where is your research being undertaken? In my home clinic at 70 Toronto Terrace, Brighton, BN2 9UW		
If your research is being undertaken outside of your own premises, do you have written confirmation from the establishment involved? If yes, please provide evidence.	N/A	

Section 4:

How will you recruit subjects for this research study?

- Current clients and referrals
- Clients on existing mailing list
- Promote on Facebook and Instagram
- Posters/flyers at local dental clinic

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) (EU) 2016/679
- Inform clients on the initial sign-up form that their data will not be available to third parties and will only be seen by the researcher.
- Clients' names to be replaced by numbers so they will be anonymous.

- All data collected with be password protected stored on personal computer.

Section 6:

Outline your project procedure.

1 Recruit participants aged 25 - 65 to evaluate the effect of the Jing Method of advanced clinical massage on TMJ pain.
2 Hold initial 1 -1 online consultations with each participant where the study is outlined, and they can ask any questions before consenting to the study.
3 Issue the Graded Chronic Pain Scale Revised questionnaire weekly via Google Forms for weeks 1-6 with no intervention for participants to complete. The results will provide the baseline level of pain within the group.
4 During weeks 7-12 the participants will receive a 55-minute hands-on advanced clinical massage treatment.
5 Treatment will be the Jing Method of advanced clinical massage for the TMJ protocol which includes grounding, amma, myofascial release to the head, neck and shoulders, trigger point therapy to the head, neck and shoulders and external and intra-oral treatment to the masseter and temporalis muscles, stretching and treatment to acupressure points relating to the TMJ.
6 Participants will be required to listen to a 10–15 minute guided relaxation meditation recording at least once in between each treatment. This will include a body scan, bringing attention to the breath and noticing sensations of opposites in the body. The recording will change each week and will be sent via email to the participants after their hands-on treatment.
7 Participants will be required to complete the Graded Chronic Pain Scale Revised 6 days after each treatment and before the next treatment. A reminder email will be sent to each participant.
8 A questionnaire will be completed 7 days after the final treatment and a final questionnaire at week 16 to assess any longer-term effects of the treatment.

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?

9 Participants will attend a 1 -1 online consultation prior to the study commencing. This will include explaining the proposed study and answering any questions they might have before taking them through the consent form, which they will sign when they come for their first treatment. Taking a detailed health history, lifestyle information and questions specifically related to their TMJ.
10 Participants are required to inform the researcher of any other therapies, medication, intervention, or treatment they are taking for their TMJ in addition to the Jing method of advanced clinical massage over the duration of the study.
11 Weeks 1 – 6, Participants are required to complete the Graded Chronic Pain Scale Revised via Google Forms once a week for 6 weeks with no intervention.
12 Weeks 7 - 12, participants will receive weekly hands-on 55-minute advanced clinical massage treatments for the TMJ.
13 Participants are required to listen to the 10 – 15 minute guided relaxation meditation recording at least once in between hands-on treatments.
14 Participants are required to complete and return the Graded Chronic Pain Scale Revised 6 days after each treatment via Google Forms.
15 Participants are required to complete the Graded Chronic Pain Scale Revised again 4 weeks after the final treatment of the study, at week 16.

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	Ambient instrumental music played during each treatment. Playlist will be the same for each participant and the same for each treatment.	
Words		X

Other	Hands-on advanced clinical massage techniques. Self-treatment advanced clinical massage techniques.	

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

For 'Other' please elaborate:

The Jing method of advanced clinical massage for the TMJ protocol from Fairweather and Mari (2015) Massage Fusion. Protocol outline attached.

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 between 25 -65 years of age who have 3 or more of the following criteria.
Pain in the jaw or temple area that is always present.

Pain in the jaw or temple area that comes and goes.

Pain or stiffness in the jaw upon wakening.

Pain in the jaw or temple area affected by chewing hard or tough food.

Pain in the jaw or temple area affected by opening the mouth or moving the jaw forward or to the side.

Jaw habits such as holding teeth together, clenching or grinding.

Pain affected in the jaw or temple area by talking, kissing, or yawning.

Exclusion criteria

Pregnancy
Anyone who has had dental work or surgery within the past 12 weeks.
Anyone who is already receiving any form of treatment for their TMJ pain.
Anyone who has any dental work or surgery planned to take place during the study.

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.

- Qualified and insured therapist
- Ensure participants' details are kept fully confidential and secure.
- During the consultation process and each treatment, the researcher will be observant of the participants emotional wellbeing and will direct them to additional resources if necessary.
- Researcher to ensure the participants know they can tell the researcher to stop the treatment at any time if for any reason they feel uncomfortable or are in pain.
- Researcher to ensure the participants know they can stop listening to the guided relaxation meditation recording if it provokes any adverse feelings or responses.

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.

- Record each participant's name, contact details and DOB.
- Assign each participant a number.
- All other data stored will be on a separate file under their number only (i.e., anonymous)
- All data will be deleted as soon as the study is completed.
- All data will be stored securely, and password protected.

Section 12

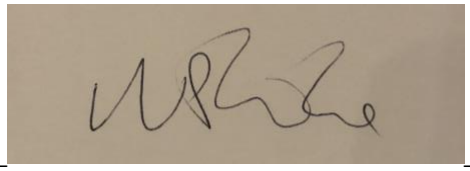
Does any of the following apply to your research study?	YES	NO

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	

Student's handwritten signature:



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

Print Name: Nicky Clarke

Date: 29/06/23

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 on TMJ pain in people aged 25 – 65.

STUDENT NAME: Nicky Clarke
STUDY LOCATION: Mandala Massage Brighton, 70 Toronto Terrace, BN2 9UW
Tel: 07737 142699
Email: info@mandalamassagebrighton.com

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.

What will be expected of you, the participant?

You will attend a 1 -1 online consultation prior to the study commencing.
You are required to inform me of any other therapies, medication, intervention, or treatment you are taking for your TMJ in addition to the Jing method of advanced clinical massage over the duration of the study.
Weeks 1 – 6. You are required to complete the Graded Chronic Pain Scale Revised via Google Forms once a week for 6 weeks with no intervention.
Weeks 7 – 12. You will receive weekly hands-on 55-minute advanced clinical massage treatments for the TMJ.
You are required to complete and return the Graded Chronic Pain Scale Revised 6 days after each treatment via Google Forms.
You are required to complete the Graded Chronic Pain Scale Revised again 4 weeks after the final treatment of the study, at week 16.

What does the initial consultation and research study involve?

This will include explaining the proposed study and answering any questions you might have before taking you through the consent form, which you will sign when you come for your first treatment. During the consultation I will take a detailed health history, lifestyle information and questions specifically related to your TMJ.

Are there any risks involved?

No.

What are the potential benefits to you; the participants?

A significant reduction in your TMJ pain as well as an improvement in your overall wellbeing. Clients of mine who have regular treatment tell me they have better quality sleep, feel less anxious and generally feel better in many ways.

How the results of the study will be used

Your data will be mathematically analysed together with all the other participants' data, and the findings from this analysis will be communicated to the project supervisor and possibly other practitioners. 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 Nicky Clarke. 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: Nicky Clarke
70 Toronto Terrace
BN2 9UW

Tel: 07737 142699
Email: info@mandalaassagebrighton.com

You can put the form in the post, send it electronically, or bring it with you when you come for your first treatment.

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

Thank You.

PARTICIPANT CONSENT FORM

Title of study: Evaluating the effects of the Jing Method on TMJ pain in people aged 25 – 65.

Name of student: Nicky Clarke

- 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:
  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 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):	

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 / NO All necessary statutory, legislative or other formal external approvals have been obtained (e.g., permissions, police checks, external research ethics and governance approvals in the case of research involving NHS staff or patients or Local Authority service providers or users).

YES / NO The design of this study ensures that the dignity, welfare and safety of the participants will be ensured and that if children or other vulnerable individuals are involved they will be afforded the necessary protection.

YES / NO I am confident that participants will be given all necessary information before the study, in the consent form, and after the study if necessary.

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

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

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

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

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

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

APPENDIX 2 – GRADED CHRONIC PAIN SCALE

Graded Chronic Pain Scale (GCPS) (von Korf, 1992) (time period amended from three months to seven days)

Q1. How would you rate your pain on a 0-10 scale at the present time, this is right now, where 0 is 'no pain' and 10 is 'pain as bad as it could be'?

Q2. In the past 7 days, how intense was your worse pain rated on a 0-10 scale (rated as above)?

Q3. In the past 7 days on average, how intense was your pain rated on a 0-10 scale (rated as above)? (That is your usual pain at times you were experiencing pain.)

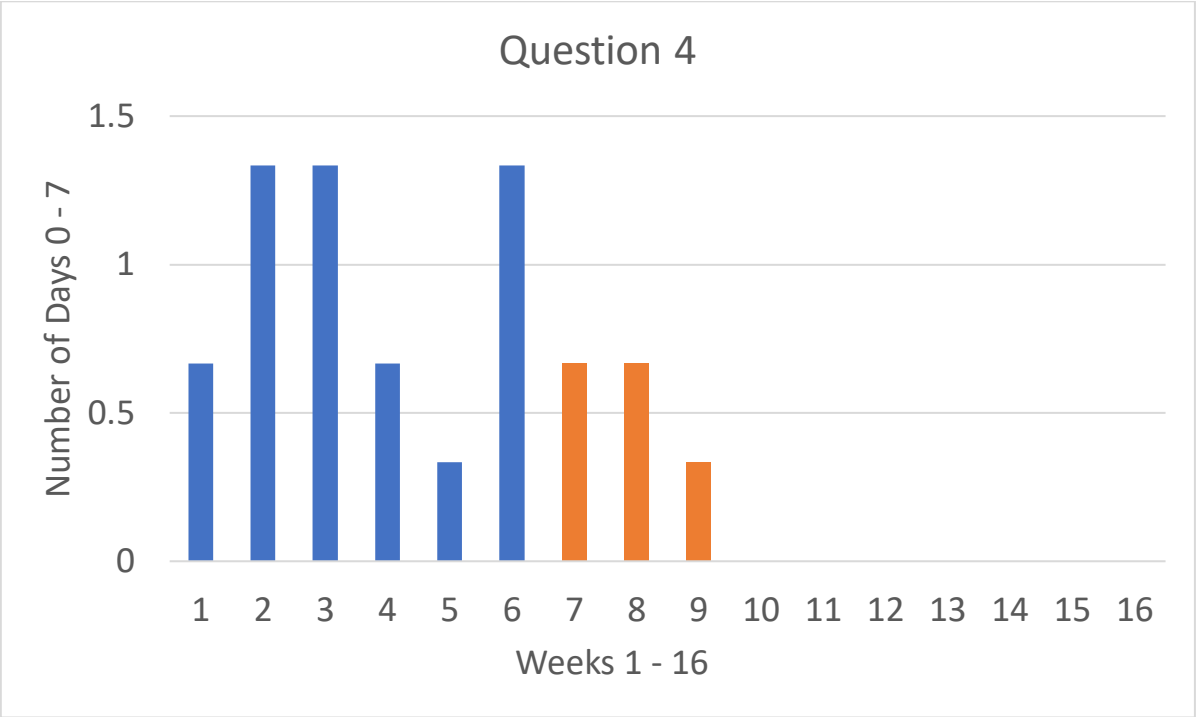
Q4. About how many days in the last 7 days have you been kept from your usual activities (work, school, housework) because of this pain?

Q5. In the past 7 days, how much has this pain interfered with your daily activities on a 0-10 scale where 0 is 'no interference' and 10 is 'extreme change'?

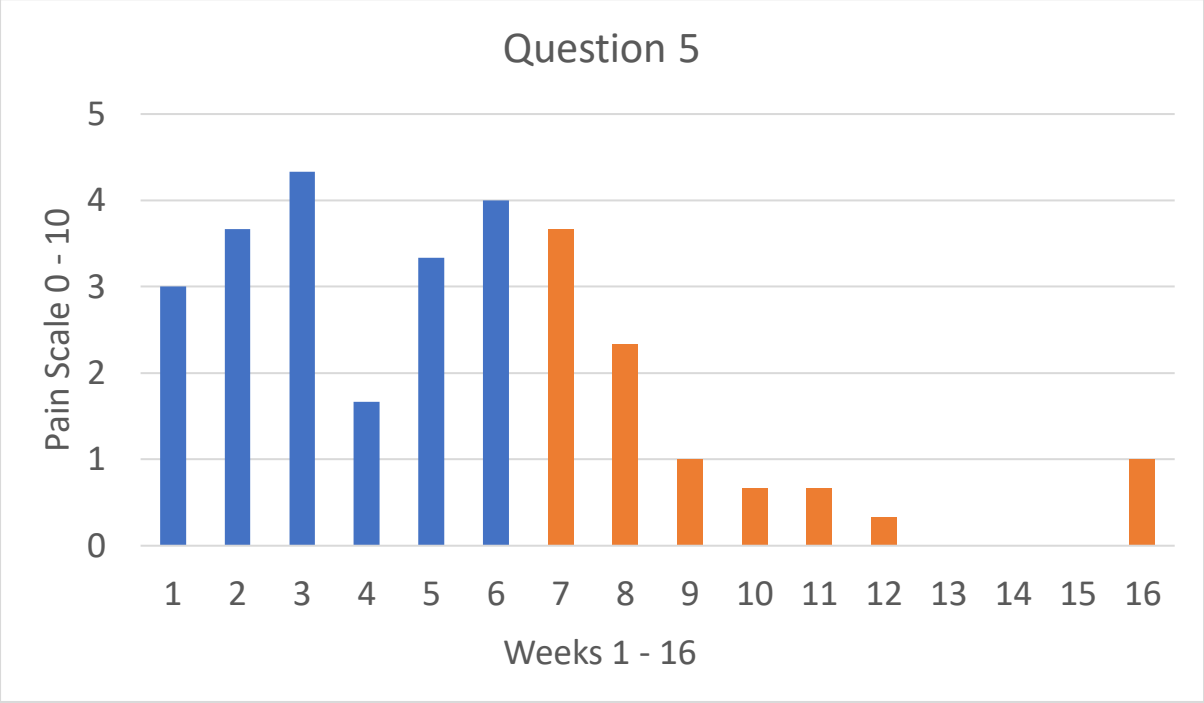
Q6. In the past 7 days, how much has this pain changed your ability to take part in recreational, social, and family activities where 0 is 'no change' and 10 is 'extreme change'?

Q7. In the past 7 days, how has this pain changed your ability to work (including housework) where 0 is 'no change' and 10 is 'extreme change'?

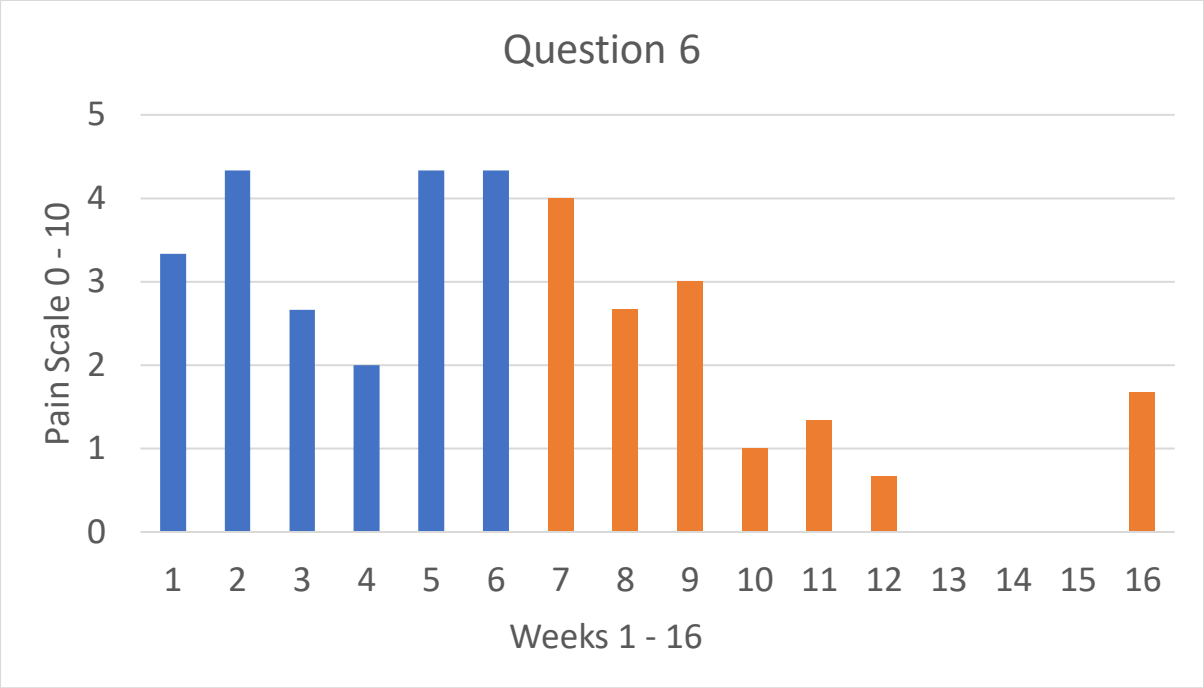
APPENDIX 3 - RESULTS FROM QUESTIONS 4 – 6 ON GCPS REVISED



About how many days in the last 7 have you been kept from your usual activities (work, school, housework) because of this pain?



In the past 7 days how much has this pain interfered with your daily activities?



In the past 7 days, how has this pain changed your ability to work (including housework) where 0 is 'no change' and 10 is 'extreme change'?

APPENDIX 4

Outline of the Jing Method protocol for treatment of the TMJ

Prone

Heat and amma over the drape.

Fascial work

Muscular and trigger point work to posterior cervicals, sub occipitals and upper trapezius

Supine

Holding the head and grounding

Treatment of the sternocleidomastoid for trigger points

Myofascial release of the platysma and clavipectoral fascia

Intra-oral techniques

Treat the masseter, temporalis tendon and pterygoids for trigger points

External treatment of the temporalis

Acupressure points

SI 19 (Auditory Palace), SJ 21 (Ear Door), GB 2 (Auditory Convergence)

Stretches

Manual traction, SCM stretch, masticatory muscles.

Grounding and still work to finish.

APPENDIX 5

Sample script for guided meditation.

Introduction

Thank you for taking the time to listen to this yoga nidra practice.

Yoga nidra means yogic sleep, it's a guided relaxation mediation that aims to take to us to the place between wakefulness and sleep. We pass through this place every day when we fall asleep, but it is fleeting, and we don't notice. When we can remain in this place for longer, we can rest deeply and experience many benefits.

This recorded practice will last around 10/15 minutes. There will be pauses during the practice when you won't hear me talking.

Traditionally, when practising yoga nidra, you lie on your back in a comfortable position, with your arms spread out to the sides, but you don't have to be in this position, you can sit or lie in whatever way is comfortable for you. Use blankets to keep warm and a pillow for your head, sometimes a pillow underneath the knees is comfortable too.

It's normal for thoughts to come up during yoga nidra. Let them come and go, try not to engage too much with them, if they become too distracting you might find it helpful to silently remind yourself "I am practicing yoga nidra".

Try to remain still, if possible, but if you need to shift into a more comfortable position, of course do.

My instructions are invitations. If something doesn't feel right to you, you don't have to do it. You can just rest and listen.

Remember too that you can come out of the yoga nidra at any time by wiggling your fingers and toes and beginning to stretch and slowly move.

Ok, let's begin…

Arrival

Settling now into your comfortable position. You might be lying down on your back, or you might be sitting. Whichever is most comfortable for you… And shifting a little now, making some final adjustments so that you are as comfortable as can be.

Not closing your eyes just yet… choosing a point to focus on and letting your gaze gently soften. Now slowly closing your eyes.

Listening to the sounds around you… noticing first the sounds inside the room. Just listening… no need to judge or analyse what they are… just holding your awareness with the sounds.

Now feeling the air or the covers upon your skin… noticing the temperature and the texture.

And feeling your body supported by the surface underneath you. Gently resting. Starting to go inside. Allowing the body to soften and begin to relax. Relaxing the tongue. Letting go of tension in the jaw. Relaxing the arms. Letting go of tension in the hips. Relaxing the legs.

Taking some deeper breaths. With each long exhalation letting go and relaxing as the head and body become more comfortable and soften into the surface beneath you.

Pause

Rotation of Awareness

Now rotating the awareness around the body. When I name a part of the body just hold your awareness there.

Now rotating the awareness around the body. When I name a part of the body just hold your awareness there.

Now rotating the awareness around the body. When I name a part of the body just hold your awareness there.

Right hand thumb - 2nd finger - 3rd finger - 4th finger – little finger - palm of the hand - back of the

hand - right wrist - forearm - elbow - upper arm – right shoulder - armpit - waist - hip - right thigh - knee – calf - ankle - heel - sole of the foot - top of the foot - right big toe - 2nd toe - 3rd toe - 4th toe – right little toe.

Left hand thumb - 2nd finger - 3rd finger - 4th finger – little finger - palm of the hand - back of the

hand – left wrist - forearm - elbow - upper arm – left shoulder - armpit - waist - hip

Left thigh - knee – calf - ankle - heel - sole of the foot - top of the foot - left big toe - 2nd toe - 3rd toe - 4th toe – left little toe.

Now go to the back of the body.

Right heel - left heel - right calf - left calf -right thigh - left thigh

Right buttock - left buttock - lower back - middle back - upper back - the entire spine

Right shoulder blade - left shoulder blade - back of the neck - back of the head.

Top of the head - forehead - right temple - left temple - right ear - left ear - right eyebrow - left

eyebrow - middle of the eyebrows - right eye - left eye - right nostril - left nostril - right cheek - left cheek - upper lip - lower lip - both lips together - chin - jaw - throat - right collarbone - left

collarbone - right side of the chest - left side of the chest - upper abdomen - navel - lower abdomen

right groin - left groin - the pelvic floor.

The whole right leg – the whole left leg – the whole right arm - the whole left arm - the whole face - the whole head - the whole torso - the whole body - the whole body resting - the whole body relaxing.

Awareness of the breath

Moving your attention now to your breath. Counting backwards from 21 down to zero. If you lose count or get to zero, just start again at 21. We'll start together… 21, 20, 19, 18. And continuing to count down to zero in your own time.

Now letting your attention to your breath just softly fall away.

Opposites

And now feeling opposites in the body.

Connecting to the sensation of the left arm being fully grounded and as heavy as can be. Now the left arm being as light as a feather, effortlessly floating.

The right arm being grounded and heavy and now the right arm, effortlessly floating, as light as a feather.

And the left leg. Heavy and grounded, now as light as can be, the left leg, effortlessly floating.

And the right leg fully grounded and heavy. Now the right leg, as light as a feather, effortlessly floating.

Now connecting to a feeling of the whole body. The whole body grounded, resting, and at peace.

Images

And now to a phase of connecting to images. Recalling or imagining a person, animal, place, or thing that makes you feel safe. Somewhere or something that makes you feel peaceful and calm… or you can use the space you are in right now.

Connecting first to the sounds… what sounds do you hear, just letting the sounds come to you.

And then the smells… what do you smell here?

And what does it look like, what are the colours around you, what is the light like, what do you see?

Just letting any images come and go…

Letting experiences arise – letting everything wash over you – letting any images dissolve…

Allowing yourself just to be.

Lots of pauses in this section

Return

Coming back slowly.

Listening to the sounds around you.

Beginning to move your hands and feet.

Taking some deeper breaths.

Perhaps beginning to stretch a little.

You might want to slowly sit up, or you might want to continue resting where you are. Whichever is more comfortable for you.

Thank you so much for listening to me to this yoga nidra meditation practise. I hope you have enjoyed it and find it helpful. Try to practise it again if you can during the week.

I look forward to seeing you soon.

Namaste