

## **The Effect of Massage on Emotional Well-being**

*A summary of recent research by SCB (March 2017): edited by DJN*

### Introduction

It's accepted that massage is helpful in reducing stress. The effects are included in the MTI Syllabus (Fox and Pritchard, 2003) and taught on other massage therapy courses. The beneficial result of massage on stress is a claim massage therapists are permitted to advertise. The Complementary and Natural Healthcare Council (CNHC), in conjunction with its profession specific boards (PSBs) and the Committee of Advertising Practice (CAP), endorses the advertisement of massage for the alleviation of stress:

"Massage may be found to...reduce stress, increase relaxation, address feelings of anxiety and tension, and aid general wellness...." (CNHC, 2017).

In an attempt to summarise the research-based evidence to 2013, MTI practitioner, Kate Burton, reviewed several meta-analyses and reported conflicting results (please see the research tab of the MTI website for this review). Massage appeared to reduce heart rate, blood pressure and feelings of anxiety, all known sympathetic nervous system (SNS) responses. However, findings were less clear on other measures of stress such as salivary and urinary cortisol levels, depression/negative mood and perception of pain (Burton, 2013). The reasons for these apparent conflicts seem to be because the studies were not directly comparable – sometimes different methodologies were used, or groups were dissimilar or the treatment sessions didn't really relate to what happens in real life. For example, some participants received either a single treatment session or a series of relatively short sessions of between 15 and 40 minutes in length. This isn't what we usually see in clinical practice.

In the first section of this paper, I compare two studies on massage and emotional well-being in healthy, older, American adults. In the second section, I talk about a more recent study of adults with depression in Exeter, England. Conclusions are drawn on the evidence to date and future directions for research are suggested.

### Massage and well-being in older adults: a comparison of two studies

#### The First American study – what they did

Sharpe et al. (2007) compared the effects of massage and guided relaxation upon the self-reported general physical and emotional well-being of 49 healthy, American adults, aged 60 years or over. All participants were free from diagnosed major physical or mental health conditions, were living at home and had received no massage therapy within the last three months. The participants received two 50-minute sessions of either massage or guided relaxation, on a weekly basis, for four consecutive weeks. They completed questionnaires on their general well-being and perceptions of stress, by interview, both at the start (baseline) and on completion of their course of intervention. Participants were randomly assigned to either the massage or the guided relaxation group. The massage involved a standardised protocol comprising 30 minutes of lying supine and 20 minutes of lying prone.

Myofascial, neuromuscular and Swedish massage techniques were used, although the body areas massaged are not stated. The guided relaxation group received verbal instructions for visualisation and muscle relaxation from a trained research assistant, while lying on a massage table.

### *What they found*

When the participants' emotional well-being was assessed at baseline, 76% of the total sample was rated as having positive well-being, while 18% showed moderate emotional distress and 6% showed severe distress. The results showed significant improvements on almost all outcome measures for the massage group, compared with the guided relaxation group. These measures included anxiety, depression, vitality, general health, positive well-being and perceived stress (the extent to which life situations were perceived as stressful within the last month). The authors conclude that massage enhances well-being and reduces the perception of stress in healthy older adults living in the community. The effect was greater than that which could be attributed to relaxation and attention received from a professional. Considering that this study was performed with people who didn't meet criteria for a mental health diagnosis, the authors predict that massage may be effective against severe emotional distress in older adults (Sharpe et al., 2007).

### *"Even better if..." possible criticisms of the study*

This study has some promising results, but also has a number of limitations. The sample size was small, because many people who volunteered were eliminated for medical or personal reasons. The study was carried out using a healthy adult population which limits its applicability. The use of a standardised massage protocol is unrealistic and a major disadvantage, although the effect of massage still remained significant. Positive outcomes of a person-centred massage treatment programme can therefore be predicted. There was also a potentially confounding difference in the status of the "therapists" in the two conditions. Whereas the massage was given by qualified massage therapists, the guided relaxation was given by trained research assistants, who were accustomed to providing relaxation and meditation sessions in the community. There is no indication of whether these facilitators had qualifications equivalent to massage therapy, such as hypnotherapy or yoga instruction. It is therefore possible that the participants did not believe in their authenticity. However, the researchers attempted to control for this, by asking participants to rate their interactions with the "therapist" on a four-point scale. All participant-therapist interactions were rated as either good or excellent, with no significant group effect.

One issue which makes these results difficult to interpret is lack of clarity in the definitions of some of the outcome measures. Some measurements are well understood such as those for anxiety and depression, but others are less well-defined such as those for self-control, vitality and positive well-being. It would have been useful if brief definitions of these terms had been included.

A further issue with this and all other studies of massage efficacy is a lack of data on the "dosage" of massage required for a positive therapeutic outcome, that is, the frequency and duration of sessions, as well as optimal intervals between sessions. In this study, 50-minute sessions were given twice weekly in concordance with previous studies and because the therapists judged 50 minutes to be the minimum duration needed for positive outcomes to be achieved. This relatively intensive treatment programme meant some participants had to be eliminated if they looked unreliable in terms of attendance.

## The Second American study – what they did

Munk and Zanjani (2011) also investigated the effects of massage on self-reported outcomes for healthy adults aged 60 years and over. A key difference between this study and that of Sharpe et al. (2007) is that the massage and control groups occurred naturally, rather than being chosen by the experimenters. Clients who had received massage during the last year were randomly sampled from eight clinics, while the non-massage group was randomly assigned from the electoral register. All participants completed a questionnaire concerning their quality of life, which was used to measure physical and mental health outcomes. Most of the parameters measured were clearly defined, including physical functioning, bodily pain, role limitations owing to physical and emotional issues, social functioning, energy/fatigue, general physical and emotional health and changes in health. The sample size was considerably larger than that recruited by Sharpe et al.: 144 participants in total, 63 who received massage and 81 who did not. As with Sharpe et al., all participants lived independently in the community and could therefore be assumed to be reasonably healthy and independent, although participants were not excluded on health grounds; 57% were living with more than one diagnosed health condition. The self-chosen massage group had higher levels of education and income compared to the control group. This might be expected as massage is often pricey, requiring a higher income to support it. In turn, education levels often correlate with higher incomes. Mean scores were higher on all outcome measures for the massage group, although this was only significant for role limitations owing to emotional issues. However, a strong non-significant trend was evident for both general emotional well-being and role limitations owing to physical conditions.

### *What they found*

The authors predict that massage may serve as a therapeutic adjunct to medication and psychotherapy in those with depression. They suggest that specific benefits may include improvements in body image esteem, pain management and the therapeutic value of touch. Similarly to Sharpe et al. (2007), they also predict that massage could play a preventative role in a decline in emotional well-being. They recommend that future studies could involve immediate intervention following a major life stressor, known to trigger depression, such as the loss of a spouse or reduced independence. However, they also acknowledge the ongoing challenge of accessibility of massage to older people, owing to financial constraints and practical difficulties with transportation to a clinic. They suggest that these obstacles could be overcome by further inclusion of massage therapy in health insurance plans, introducing schemes which would reduce the cost of treatment to the client. They also discuss the benefit of increasing the availability of on-site massage therapists in care homes (Munk and Zanjani, 2011).

This study is more applicable to the general population. The groups were naturally occurring and more diverse, including those with physical and mental health conditions. Also, the massages received are more likely to have been person-centred treatments, rather than a standardised protocol.

### *“Even better if...” possible criticisms of the study*

The issue of effective “dosage” of massage still remains. Although frequency of treatment, duration of massage sessions and treatment period were analysed for the experimental group, these results were not reported. Furthermore, the intervals elapsing since participants’ most recent treatment sessions were not factored into the analysis. In order to investigate this further, future studies could

compare participants who did not receive massage with several different massage groups, assigned according to different levels of intervention. Healthy participants and those with a range of health conditions could be recruited, in order to reflect natural population diversity, although these differences should also be factored into the analyses. Ideally, person-centred massage treatments should be given, in order to increase ecological validity of the findings.

## The effect of massage on patients with anxiety and depression

A recent study by Collins (2016) aimed to investigate qualitatively the effects of massage on recovery from mental illness. The participants consisted of three females aged 50-60 years and a male aged between 30 and 40 years. All participants had diagnoses of depression, while one female had an additional diagnosis of anxiety. All were receiving medication for their mental health symptoms, but none were currently receiving psychological therapy. The participants received four 60-minute massage sessions from one therapist over two months. They were asked to keep a qualitative diary of their mood and emotions in between sessions and were interviewed by another therapist on completion of the study. Participants were allowed to choose which body areas were massaged, meaning that the treatments were individually tailored. The participants' interviews were transcribed and analysed qualitatively for themes, using a descriptive phenomenological method. The analysis led to a working definition of the process of recovery: a life lived as healthily and happily as possible, with self-acceptance, self-directed support and resilience when support is lacking. Massage was concluded to be an effective form of mental health support, which if ongoing, could reduce the need for other forms of treatment and contribute to recovery. No adverse effects of massage were found, although some participants reported its effect to be too limited to justify the expense. The effects of massage were found to be similar to those of mindfulness, in inducing a sense of deep relaxation. Participants also reported that receiving care within the therapeutic relationship was an important factor in enhancing their self-esteem.

The greatest strength of this study is that it involved bespoke treatment programmes.

### *“Even better if...” possible criticisms of the study*

The author, a mental health nurse, acknowledges that she has no academic background and that she undertook the project alone, with limited funding and access to research literature and without academic training or support. As a result, a number of issues concerning the methodology and the presentation of the paper make the findings difficult to interpret. The author reports that the duration of actual massage treatments varied, depending on how much time the participants spent talking during the initial consultation. Equally, although each participant received four sessions, the intervals between sessions were reportedly variable. Because no quantitative information on the duration of massage sessions or the intervals between them is reported, the “dosage” of treatment received is unclear. The qualitative results were obtained using a descriptive phenomenological method of qualitative analysis. The process involved is not clearly explained, meaning that the reader would need to undertake substantial further research in order to understand the method sufficiently to replicate or modify the study. Consequently, the findings concerning the role of massage in recovery from mental illness are presented with no clear indication of how the author reached these conclusions. The author also acknowledges that the sample size was extremely small, limiting the ecological validity of the findings (Collins, 2016).

A further issue concerns the medication used by participants, which is not documented in detail. This information needs to be included to account for any medication effects. The author suggests in her conclusions that massage reduced the need for medication in some participants, but again, details were not included.

Future research using similar methods could benefit from including a client interview at baseline as well as on completion of the intervention, so that the effects of massage can be more fully evaluated. In addition, simple quantitative assessments of emotional well-being, such as those used by Munk and Zanjani (2011) would facilitate interpretation of the findings. Qualitative aspects could then be added, using approaches such as Grounded Theory or Content analysis. This paper also highlights the need for more training in research methods for massage therapists wishing to conduct their own studies, so that they are in a position to produce high quality work, which can contribute to our evidence base and strengthen our reputation.

## Conclusions

Research indicates that massage therapy has a positive impact on emotional well-being, in both healthy adults and those with mental health conditions. However, a range of methods have been used, which present challenges when comparing studies. A key theme is that the amounts of intervention given are highly variable, as there is no clear indication in the literature of how much massage therapy is needed for a positive outcome. The populations studied are heterogeneous, both between and within studies, making it impossible to determine any differential effects of massage, depending on participants' emotional well-being at baseline. Further research could benefit from systematically investigating the role of mental health status and different levels of massage intervention in determining treatment outcomes. Clearly defined outcome measures are also essential in order to determine the specific effects of massage. A more global issue relevant to all massage research is the need to make training in research methods more accessible to massage therapists, regardless of their educational and career background.

## References

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