

Reviewer's report

Title: Development of a Taxonomy to Describe Massage Treatments for Musculoskeletal Pain

Version: 1 **Date:** 16 January 2006

Reviewer: Leon Chaitow

Reviewer's report:

General

REVIEW

Leon Chaitow DO

The objective is important

Consistent use of terminology would certainly be helpful in communication of concepts and methods employed in massage therapy, particularly between professions (massage and bodywork therapy and physical therapy, for example) and in research settings.

Some of the pitfalls of attempting this mammoth task emerge during the reading of this paper, and will be highlighted in this review.

One of the earliest problems appears as the authors attempt to describe just how they have attempted to classify terms. They make clear that within the construct that they have formulated there are overlaps and a plethora of variables

"Many specific techniques are used by multiple styles and almost all are used within more than one theoretical orientation."

They propose:

- 3 classifications under the headings : Intention, Styles, Techniques
- 5 categories listed as Relaxation massage, Clinical massage, Movement reeducation, Subtle Energy, Asian

Each of these categories comprise a number of differing modalities and styles, within which there exist specific techniques capable of being used with varying intentions.

All this is clear enough, although it required several readings before clarity was apparent.

Confusion emerged when the complexity of the task the authors had undertaken was amplified by mention that different techniques are frequently used 'by multiple styles' and 'within more than one theoretical orientation.' And that each theoretical orientation, style and technique 'can be described with a specific purpose or intention.'

All this is expressed in the 'Results' section, early on in the paper. This reviewer was confused at this stage rather than enlightened, mainly by the seemingly convoluted explanatory terminology which had by now included variable usage of the words classification, category, style, modalities, intentions, techniques and orientations.

It is suggested that this segment be rewritten with particular attention given to simplification of the explanatory background - with focus on clarifying the sometimes overlapping use of the words, classification, category and style; as well as modalities and techniques; and orientation and intentions.

To be sure, a reading of what follows does clarify the complexity somewhat, but this segment posed an early obstacle, an irony in a paper designed to create clarity in use of language.

In Table 1 attempts to summarise the different aspects of the terminology proposed by the authors, the overlap mentioned by the authors is apparent. The table gives examples of techniques employed

in different styles by different categories. In reality a far more complicated table is needed to offer a true picture of the overlap of usage - for example strain counterstrain, listed in the table under the heading 'Movement Reeducation' is equally likely to be used in 'Clinical Massage', where it is not listed. It is not suggested that such a complicated Table be created, but it should be made more obvious that the examples given are just that, and that overlap of use of methods between the various categories is likely.

Under the subheading 'Theoretical orientations' the descriptions of the 5 categories (Relaxation massage etc) were clear and unambiguous.

In an attempt to elaborate on the 'orientation' of different aspects of clinical massage the next subheading 'Styles' contains descriptions of the general intention and component techniques of two commonly utilised 'styles', Myofascial Release®, and Neuromuscular Therapy®

This reviewer takes exception to any 'style' or 'modality' or 'system' that expresses 'ownership' of a therapeutic approach. Since all of the component parts of these 'styles' are within general and common usage throughout the manual therapy world, (frequently in the same combinations as described in relation to the 'registered' form), as well as the terms myofascial release, and neuromuscular therapy being widely used, worldwide, without a registration® being attributed to them, it is difficult to understand their presence in this paper.

This is particularly true if, as expressed in this paper in relation to neuromuscular therapy, 'component techniques' include 'post-isometric relaxation' (PIR) and 'reciprocal inhibition' (RI), both of which are hypothesised neurological mechanisms (Ward 1997 p1132) and are not techniques (they are elements of the proposed mechanisms thought to be operating in both PNF and Muscle Energy Technique), unlike 'stretch' or 'percussion' which are patently methods, or techniques. The mistaken naming of PIR as a technique followed a paper by Lewit and Simons (1984) where the effect (PIR) was used by others (Mense & Simons 2001 p 266) to name the method used to achieve the effect. A similar error would result if massage were called 'enhanced circulation technique' simply because that effect resulted from massage.

Under the subheading 'Techniques' we are told that 43 techniques have been identified in the literature and these are summarised in a separate file. Once again 'post-isometric relaxation' and 'reciprocal inhibition' are listed as techniques. The descriptions of these make clear that what is being described are variations of osteopathic Muscle Energy Techniques (Mitchell et al 1979). Once again hypothesised neurological mechanisms are described as techniques. These proposed mechanisms have incidentally now been shown to be largely erroneous by Australian research (Ballentyne et al 2003)

This reviewer has a variety of additional objections to the content of this section.

1. In describing the intention of 'holding', mention is made of possible 'warming' and 'relaxing' outcomes. A further intention is stated as being 'mobilizing the qi in Asian massage'. This may be the intention in Asian massage but since the concept of mobilizing 'qi' remains hypothetical, this should be expressed in just that way, 'theoretically mobilizing the qi in Asian massage.'
2. Direct pressure is stated to be capable of being used in a variety of ways, including 'to break up adhesions'. This reviewer is unaware of any evidence that suggests that static pressure can achieve this outcome. If there is such evidence a citation is needed.
3. It is also stated that, 'the technique of strain counterstrain is used in Clinical Massage to lengthen the muscle and in Movement Reeducation to convey a sense of ease and comfort and body awareness.' The 'intention' as expressed relative to Clinical Massage to 'lengthen the muscle' bears little relation to the actual clinical effect of use of osteopathic strain/counterstrain (Jones 1981). This is a positional release method that aims to create an 'ease' environment which theoretically allows neurological resetting of sensitized spindles and nociceptors, with the intent of reducing hypertonic states and reducing pain. In muscular terms restoration of normal length is the most that this approach may achieve, not 'lengthening'. The objective, as expressed in relation to Movement Reeducation is therefore more accurate.

The paper then goes on to describe the application of the classification system, as described up to this point, in a neck pain study. A description is offered of the protocol that the massage therapists were asked to apply, involving two 'styles (craniosacral and manual lymph drainage) , three 'related' techniques and also many (13) specific techniques.

Terminology used to label some of the related technique posed the same objections noted previously. In one of these, 'active or resisted range of motion' the constituents are stated to be : post isometric relaxation (PIR), contract relax (CR), reciprocal inhibition (RI) and contract relax antagonist contract (CRAC).

Without being pedantic, and at the risk of repetition, it needs to be clear that while CR and CRAC describe techniques, RI and PIR describe proposed neurological effects of isometric contractions (as used in CR and CRAC), involving respectively, antagonists to dysfunctional muscles (RI) and the muscles themselves (PIR).

Apart from these issues the protocol appears to have logically attempted to create a model for describing what massage therapists actually do when treating dysfunction.

In the discussion it is claimed that this taxonomy enables researchers and therapists to more clearly communicate and use common language. This would be accurate if the use of particular descriptors had universally agreed meanings.

The attempt to define consistent terminology was excellent but flawed due, it is suggested, inherent (inter-professional) differences in the meaning and use of particular terms, as discussed above.

If such obstacles can eventually be eliminated a significant step forward will have been taken.

Until such time the authors are recommended to include reference to these difficulties and to review more widely the definitions and terms they have used, particularly where they have emerged from other professions (e.g. osteopathy).

Input from a broader range of manual therapy experts might rapidly overcome much of this misuse of terms - and this is clearly important in a paper aimed at clarification of terminology.

Leon Chaitow ND DO

Honorary Fellow, University of Westminster, London

References

Ballantyne F, Fryer G, McLaughlin P 2003 The effect of muscle energy technique on hamstring extensibility: the mechanism of altered flexibility. *Journal of Osteopathic Medicine* 6(2):59-63

Jones L 1981 Strain and counterstrain. *Academy of Applied Osteopathy*, Colorado Springs

Mitchell F Jr, Moran P, Pruzzo N 1979 An evaluation of osteopathic muscle energy procedures.

Pruzzo, Valley Park

Mense S Simons D 2001 *Muscle Pain* LippincottWilliams&Wilkins Philadelphia p266

Lewit K Simons D 1984 Myofascial pain : relief by post-isometric relaxation. *Archives Phys. Med Rehab* 65:452-456

Ward R (ed) 1997 *Foundations for osteopathic medicine*. Williams and Wilkins, Baltimore p1132

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions