



Research Article

IJSEHR 2025; 9(2): 38-49
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www.sportscienceresearch.com
Received: 29-11-2025
Accepted: 04-02-2026
Published: 12-02-2026
DOI: 10.31254/sportmed.9202

Utilisation of Manual Therapy for Peripheral Musculoskeletal Disorders Among United Kingdom-Based Physiotherapists: A Cross-Sectional Study

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Abstract

Background: Manual therapy (MT) plays an important role in the treatment of peripheral musculoskeletal (MSK) disorders. The use of MT for peripheral MSK disorders in clinical practice across different workplace MSK settings in the UK is not well known. **Aims:** The aims of this study were to investigate the trends in the use of MT techniques for the treatment of peripheral MSK disorders among MSK physiotherapists in different work settings and explore where physiotherapists learnt these techniques and perceptions of the teaching of these techniques. **Method:** This cross-sectional study recruited MSK physiotherapists in the United Kingdom to complete an on-line survey. The survey consisted of three sections consisting of demographic information, use of MT techniques in practice, and where MT techniques were learnt and perceptions of the teaching. Quantitative and qualitative data were analysed descriptively. **Results:** Thirty-five participants completed the study, with 34 were eligible for analysis. Most sports and private practice physiotherapists used a variety of MT techniques daily or often (3-5 days per week). Most National Health Service physiotherapists used MT seldom or never. Barriers to the use of MT were related to workplace setting for National Health Service physiotherapist's and were enablers for sports and private practice physiotherapists. Most physiotherapists were satisfied with how they were taught MT. Recommendations for improvement included more evidence-based practice, increased practice of MT techniques and use of real-life cases. **Conclusion:** Manual therapy is used more frequently by sports and private practice physiotherapists than physiotherapists in the National Health Service, which were related to workplace enablers and barriers, respectively. The teaching of MT techniques is generally well received, however more practice of evidence-based techniques, using real-life case and providing a balanced approach considering biopsychosocial mechanisms involved in MT is suggested.

Keywords: Musculoskeletal, Physiotherapy, Survey, Manual therapy.

INTRODUCTION

Musculoskeletal (MSK) physiotherapists in the United Kingdom (UK) manage a wide range of peripheral MSK conditions, employing a variety of treatment modalities to optimise patient outcomes. Manual therapy (MT) is one such approach, encompassing a broad range of techniques targeting joints, muscles, connective tissues, and the neurovascular system, and has been shown to be effective in improving function and pain in patients with peripheral MSK conditions [1,3].

Physiotherapists' selection of MT techniques is influenced by multiple factors, including perceived clinical effectiveness [4], where and how the technique was taught, patient requests, prior clinical experience, peer influence, and workplace setting [5,6]. While some UK-based MSK physiotherapists report frequent use of MT, others rarely employ it, raising questions about the underlying reasons for these variations [5]. International research from Indonesia, found that MT utilisation patterns can differ across work settings and professional specialisms, with certain techniques, such as Mulligan's Mobilisation with Movement (MWMs) being more prevalent among MSK practitioners [6]. However, it remains unclear whether similar patterns exist within UK MSK physiotherapy practice.

Existing literature has identified both enablers and barriers to MT use. Enablers reported include patient preference, perceived treatment effectiveness, prior training, and peer influence [4,5,7]. Barriers reported have included time constraints, workplace limitations, and challenges of integrating theory and research

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into clinical practice [8,9]. research into Despite these reports, assessing patterns of specific enablers and barriers in UK based MSK physiotherapists is needed to provide a better understanding for the use of MT in practice.

Training appears to play a pivotal role in reasons for MT utilisation. Chesterton and Skidmore [5] found that UK based MSK physiotherapists often select techniques taught at entry level, such as soft tissue mobilisation (STM), Maitland's mobilisation, and proprioceptive neuromuscular facilitation/muscle energy techniques (PNF/MET), even after several years in practice. Postgraduate and continuing professional development (CPD) courses also influence technique selection [5]. These findings highlight the importance of effective MT education and suggest that reflecting on how MT is taught could inform on future teaching practices.

Despite the role of MT in MSK care, there is limited understanding of its current use in UK clinical practice, the specific techniques employed, and the factors influencing their selection. Furthermore, little is known about physiotherapists' perspectives on how MT is taught at undergraduate (UG) and postgraduate (PGT) level to improve utilisation and clinical decision-making. Therefore, the primary aim of this study was to investigate the current use of MT techniques for treating peripheral MSK conditions among UK-based MSK physiotherapists. The secondary aims were to explore where physiotherapists learned these techniques, the reasons for or barriers against using them, and perceptions on MT teaching. The findings will inform physiotherapy education, guide teaching practices, and support clinical practice.

METHODOLOGY

Study Design

A cross-sectional survey of UK based MSK physiotherapists was conducted from September to October 2024. Ethical approval was gained from the Keele University Ethics Committee. Participants were provided with an information sheet, and informed consent was gained prior to completing the survey.

Participants

Participants were recruited through a voluntary response sampling method via email to workplaces and on social media. The inclusion criteria were UK based physiotherapists working part-time or full-time in outpatient settings including National Health Service (NHS), private practice, sports and military settings. Individuals who were no longer actively practicing or who did not meet the inclusion criteria were excluded from the study. The on-line survey was sent out to participants over three time points during September and October 2024 to increase the chance of getting participants to complete the survey [10].

Survey Development

The survey was developed using Microsoft Forms platform due to its ease and familiarity of use and streamlining data analysis processes [11]. The survey consisted of five sections comprising of 38 questions in total developed to investigate MT techniques used for MSK peripheral and spinal conditions. Three sections are relevant and reported in this paper and consisted of 25 questions using Likert scale type, multiple-choice and open-ended questions (Appendix 1). Section one collected data on participants' demographics, qualifications, work experience and work setting (Q1-Q12). Section two collected information on participant's use of MT techniques, frequency and confidence of using the MT techniques in practice (Q13-16), enablers for using MT and barriers against using MT in practice (Q17-Q20). Frequency was assessed using multiple choice with participants selecting the options that depicted how often they use the MT techniques as either, regularly (daily), often (three to five times a week), sometimes (one to

two times a week), seldom (once a fortnight), and never. Participants rated their confidence levels from 1 to 5 using a Likert scale, with 1 being least confident and 5 being most confident. Multiple choice asked reasons for using (enablers) or not using (barriers) MT in practice. Participants who selected 'other' could expand on this selection with an open-ended question. The MT techniques that have been investigated in the survey were STM, myofascial release, trigger point therapy (TPT) (no dry needling), joint manipulation, Maitland's mobilisation, MWMs, and PNF/MET. The selected MT techniques were based on previous work assessing treatment choices in MSK physiotherapy [5]. The third section (Q21-25) investigated where physiotherapists had learnt their MT techniques, rating the teaching, and open-ended questions on how they thought the teaching of MT could be improved. The inclusion of open-ended questions allowed for a deeper insight into the participants' beliefs and opinions [12].

Before distribution, the survey was peer reviewed by members of the MSK physiotherapy staff at Keele University, and changes were made to the survey based on the feedback. This peer review was essential to identify any errors and help to improve the accuracy of the study [13]. The survey was developed to take approximately 10 minutes to complete to encourage higher completion rates [14].

Data Analysis

After survey closure, data was exported directly into Microsoft Excel (Version 2409) for analysis. Descriptive statistics were used to analyse the quantitative data. The results are presented as frequencies and percentages. For Likert scale, the descriptives were 5 most confident, 4 confident, 3 neither confident nor not confident, 2, not confident, 1 least confident. Qualitative data from open-ended questions of reasons for (enablers) and for not (barriers) using MT techniques in practice and comments for suggestions on how UG and PGT improvements in teaching were read and categorised into similar themes. A selection of comments within each category are presented.

RESULTS

Thirty-five participants completed the survey. One participant was excluded from the study as they did not meet the inclusion criteria (Figure 1).

Participants' demographic information is shown in Table 1. Most participants worked in the NHS (n=21, 62%), followed by private practice (n=11, 32%). Two participants were sports physiotherapists. 65% of participants (n=22) had 10+ years of clinical experience, and 59% (n=20) had 10+ years' experience in MSK physiotherapy.

Private practice and sports physiotherapists used MT techniques more than NHS physiotherapists (Table 2). All MT techniques were used by over 50% of private practice physiotherapists and ranged from 55% to 82%. Only Maitland mobilisations and MWMs were used by over 50% of the NHS physiotherapists.

The two sports physiotherapists used all MT techniques daily, except PNF/MET, which they did not use (Figure 1 and Table 2). Over 50% of private practice physiotherapists used STM (77%), TPT (62%), and MWMs (54%) daily. Maitland mobilisations were used by 46% of private practice physiotherapists daily, and 23% used them often. Myofascial release was used daily by 46% of private practice physiotherapists and was seldom used by 23%. Joint manipulations and PNF/MET were the least used MT techniques by private practice physiotherapists, with 39% and 15% using them daily, and 38% and 39% using them seldom or never, respectively (Figure 1). NHS physiotherapists did not use MT techniques frequently, with the highest percentages for all MT techniques utilised either seldom or never (Figure 1).

Confidence in Using Manual Therapy Techniques

Physiotherapists' confidence in using MT techniques by NHS, private practice, and sports physiotherapists are presented in Figure 2. Over 50% of NHS physiotherapists were either confident or most confident in using all MT techniques, except joint manipulations, where 57% reported they were not confident or least confident in performing this technique. Over 60% of private practice physiotherapists were either confident or most confident in using all the techniques. Sports physiotherapy reported that they were most confident in all MT techniques except for PNF/MET which were rated as 2 and 3.

Enablers and Barriers for using MT

The most common enabler for using MT was known (clinically or research based) effectiveness of the technique for NHS (81%) and private practice (100%) physiotherapists (Figure 3). This was followed by experience using the technique selected by 57% of NHS physiotherapists and 85% of private practice physiotherapists. Both (100%) of the sports physiotherapists selected experience with using the technique and practice setting as an enabler, compared to 82% and 55% of private practice physiotherapists and 57% and 19% of NHS physiotherapists, respectively. Patient requests were enablers for 55% of private practice and 25% of NHS physiotherapists. Five (24%) NHS physiotherapists and one (9%) private practice physiotherapist selected 'other'. Examples of 'other' reasons included "get buy in from patients (feel like they've been treated)" (Participant 27), and "exhausted other treatment options" (Participant 1).

NHS physiotherapists reported more barriers to using MT than private practice and sports physiotherapists (Figure 4). The most common barriers reported by NHS physiotherapists were 'practice setting – MT not advocated (52%), practice setting – MT not required (48%) and lack of time (48%). Lack of time (28%) was the most reported barrier by private practice physiotherapists, followed by practice setting - MT not advocated (18%), and practice setting – MT not required (18%). Lack of skill and lack of confidence were the lowest reported barriers reported for NHS (10%) and private practice physiotherapists (9%). 29% (n=6) of NHS physiotherapists and 18% (n=2) of private practice physiotherapists selected 'other'. These 'other' barriers included "minimal evidence that manual techniques have long term benefits to patients with acute conditions" (Participant 18), and "priorities within treatment time, often more bang for your buck with exercise" (Participant 2).

Environment for Learning of the Manual Therapy Techniques

University setting was where most physiotherapists learnt STM (64.7%), joint manipulations (55.9%), Maitland mobilisations (64.7%) and PNF/MET (61.8%) techniques (figure 5). MWMs were equally learnt at university and as CPD (38.2%), and myofascial release (41.2%) and TPT (55.9%) were learnt in a CPD setting.

Thirty-two participants provided a rating for UG teaching and 21 for PGT teaching. Overall, participants were satisfied with the teaching at these levels. Of these participants, 69% and 66% rated the UG and PGT teaching at either good or very good, respectively. Only 16% and 14% rated the UG and PGT teaching as poor or very poor, respectively (figure 6).

Participant's suggestions for how teaching could be improved at UG and PGT levels were similar (Table 3). The similarities were more time spent practicing the techniques, greater reference to evidence-based practice (EBP) to support the techniques, and clinical reasoning discussion for application. Suggestions for UG teaching also included application to clinical practice and using clinical practicing teachers, and for PGT, a less unbiased teaching approach to the techniques taught.

DISCUSSION

This study found that a variety of MT techniques are used frequently by UK-based MSK physiotherapists for peripheral MSK conditions, but this was dependent on the working environment. Physiotherapists in private practice and sports physiotherapy used MT more frequently compared to the NHS who used MT seldomly. Despite the infrequent use of MT by NHS physiotherapists, all physiotherapists reported they were confident in using MT in most techniques. Reported enablers and barriers to utilisation of MT were different across the settings. Notably practice setting was an enabler for private and sports physiotherapists, but a barrier for NHS physiotherapists. Most MT techniques were learnt at university with majority of physiotherapists satisfied with the teaching of MT at UG and PGT levels.

Manual Therapy Use

This study found that the frequency of using MT techniques was related to workplace setting. Private practice and sports physiotherapists used MT techniques more frequently than NHS physiotherapists. NHS physiotherapists reported that the practice setting and lack of time were barriers to utilising MT for treatment, with most NHS physiotherapists using MT techniques seldomly or never. Despite the limited use, NHS physiotherapists were still confident with using MT techniques (except joint manipulations). A possible reason for the limited use of MT by NHS physiotherapists may be due to the long waiting lists for patients seeking MSK care in the NHS [15]. Long waiting lists for patient appointments may result in patients being unable to be seen as regularly as patients in other physiotherapy settings and requires NHS physiotherapists to prioritise management interventions. MT is often recommended as 'adjunct' therapy [16] and requires regular implementation for effective outcomes [17]. Therefore, NHS physiotherapists may choose interventions such as education, exercise and self-management strategies for long-term management [16].

As one NHS physiotherapist said as a barrier to the use of MT, "priorities within treatment time, often more bang for your buck with exercise" (Participant 2). Sports physiotherapists used a variety of MT techniques daily, including STM, TPT, Maitland mobilisations, MWMs, and myofascial release, and not surprisingly were confident in using these techniques. While only two sports physiotherapists completed the survey, it is possible these findings are common practice in physiotherapists working in a sports setting. Supportingly both sport physiotherapists reported that practice setting and experience using the technique were enablers for the use of MT in treatment. At the London Olympics in 2012, MT techniques were the most utilised treatment modality for elite athletes [18]. One sports physiotherapist's identified patient request as an enabler, and elite athletes expect and find MT beneficial to their management [19]. Akin to sports physiotherapists, private practitioners typically used a variety of MT techniques on a daily or frequent basis and were generally confident in using the techniques. The most popular enablers reported by private practice physiotherapists were known (clinically or research based) effectiveness, experience using the technique and patient requests. These enablers highlight the differences between private practitioners and NHS physiotherapists which include shorter waiting times, more frequent patient treatment sessions, and more variation in the treatment modalities [20]. Supporting the findings of this study, Gleadhil et al [21] found that while physiotherapists thought that evidence is important, it is only one factor, and patients' expectations were important when making clinical decisions. As private practice requires patients to pay for their treatment, patient satisfaction has an influence on the treatment selection by providing shared decision-making [22]. Patients have reported that they expected, valued and viewed MT as 'actual' treatment because they provided immediate symptom relief [20], and expectations are higher if they have had a positive experience with MT previously [23].

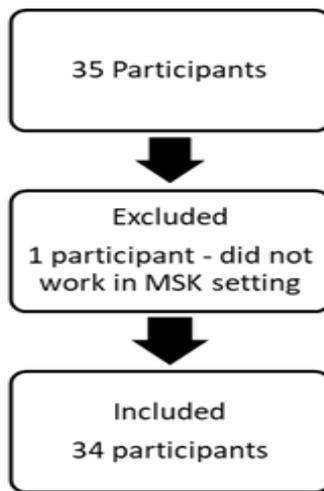


Figure 1: Flow diagram of participants included in the study

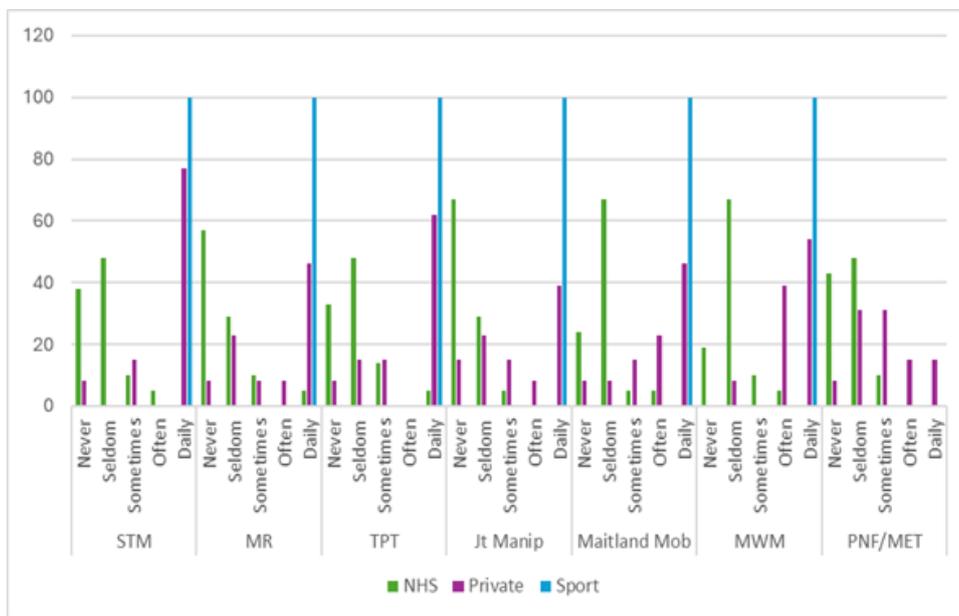


Figure 1: Frequency of Using Manual Therapy Techniques in the NHS, Private Practice and Sports Physiotherapy

National Health Service – NHS; Private – Private Practice; Sport – Sports Physiotherapists; STM – soft tissue massage; MR – myofascial release; TPT – trigger point therapy; Jt Manip – Joint manipulations; Mob – mobilisations; MWM – mobilisation with movement; PNF/MET – proprioceptive neuromuscular facilitation/muscle energy technique; Seldom – once a fortnight; Sometimes – 1-2 times per week, Often – 3-5 times per week

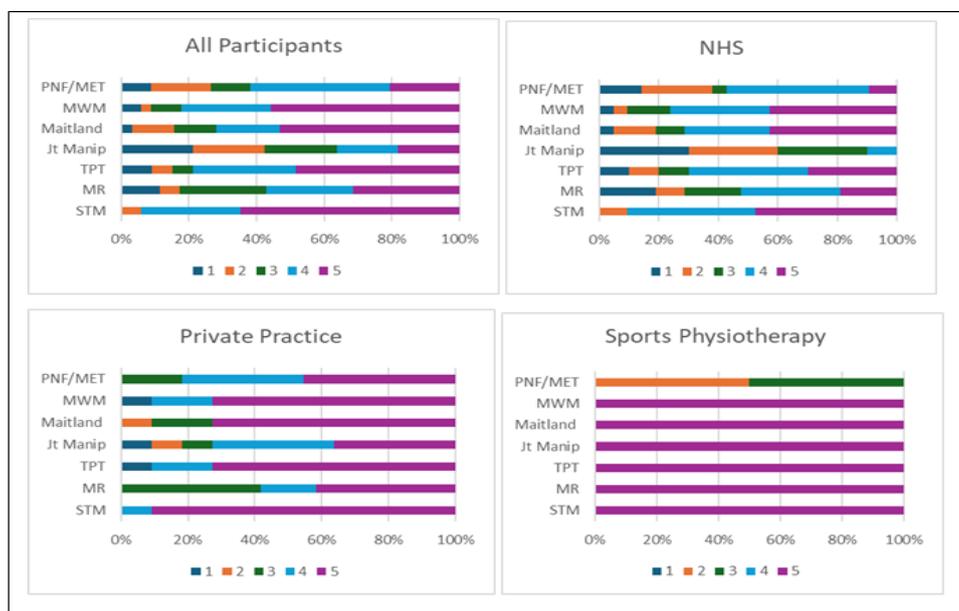


Figure 2: Confidence levels of using manual therapy techniques for all participants and NHS,

private practice and sports physiotherapists. Ratings were 1, least confident to 5, most confident.

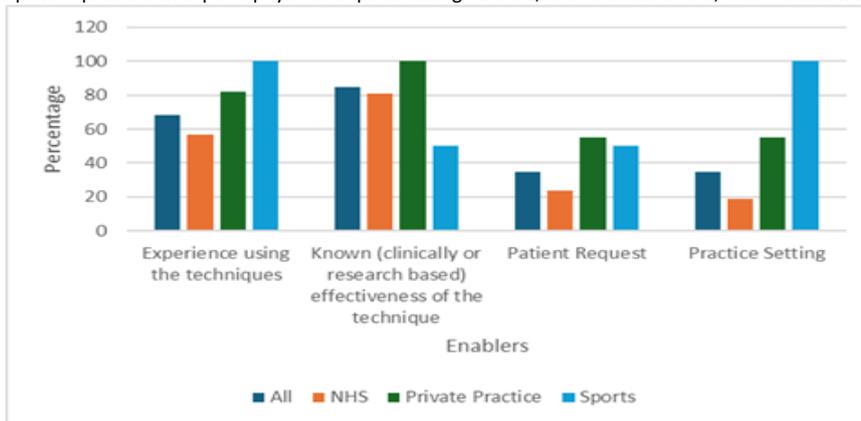


Figure 3: Enablers for using MT in clinical practice in NHS, private practice and sports physiotherapy

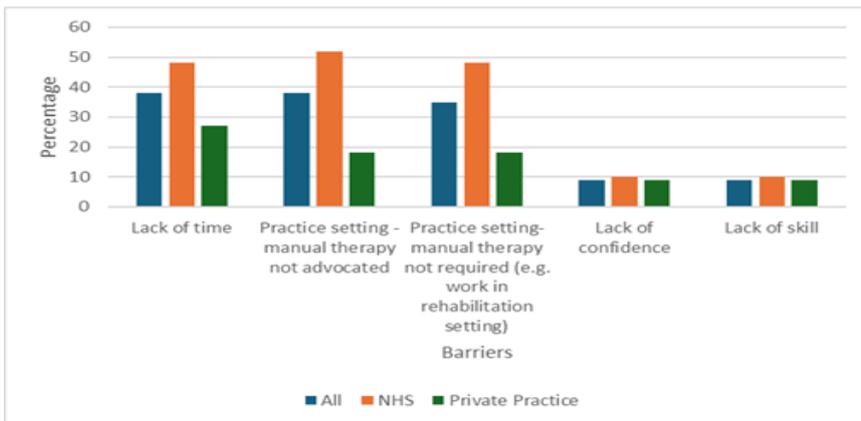


Figure 4: Barriers to using MT in clinical practice for NHS and private practice physiotherapists

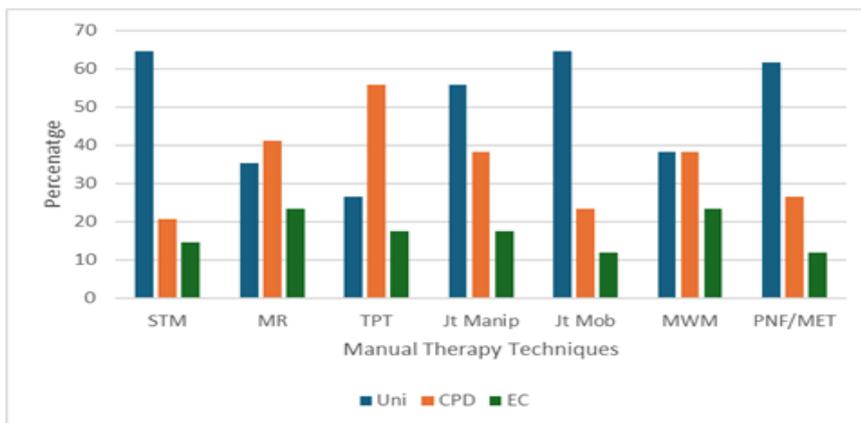


Figure 5: Learning environments of manual therapy techniques for all participants
Uni – University, CPD – Continuous Professional Development; EC – Extra-curriculum

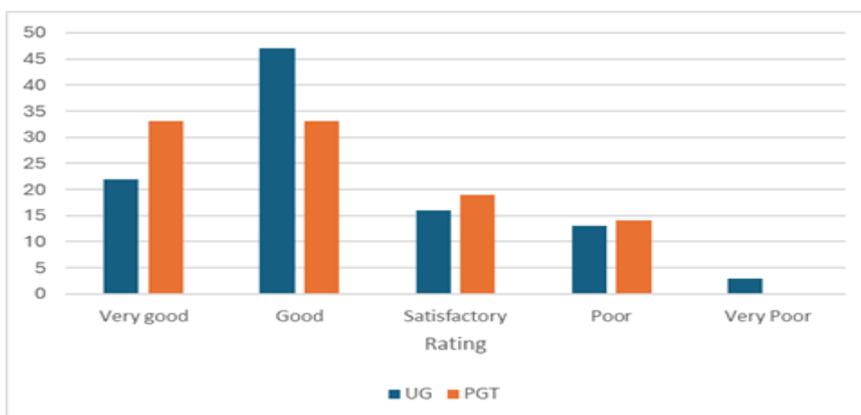


Figure 6: Participants perceptions of experiences with teaching at undergraduate and post-graduate courses. UG – undergraduate, PGT – Post-graduate

Table 1: Participants' demographic Information

Categories	N (%)
Gender	
Male	10 (29)
Female	22 (65)
Prefer not to say	2 (6)
Age (years)	
20-29	9 (27)
30-39	6 (18)
40-49	12 (35)
50-59	6 (18)
60-69	1 (3)
Degree/Qualification	
Bachelors	21 (62)
Masters	12 (35)
Other	1 (3)
Location gained degree/qualification	
United Kingdom	32 (94)
Australia	1(3)
Europe (excluding United Kingdom)	1(3)
Job Setting	
NHS Physiotherapist	21 (62)
• NHS Band 6 Physiotherapist	• 9 (27)
• NHS Band 7 Physiotherapist	• 8 (24)
• NHS Band 8 Physiotherapist	• 4 (12)
Private Practitioner	11 (32)
Other – Sports Physiotherapists	2 (6)
Physiotherapy experience (years)	
Less than 2 years	1 (3)
2-5 years	6 (18)
5-10 years	5 (15)
10+ years	22 (65)
MSK Outpatient setting experience (years)	
Less than 2 years	3 (9)
2-5 years	6 (18)
5-10 years	5 (15)
10+ years	20 (59)
Returned to practice in last 6 months	
Yes	2 (6)
No	32 (94)

Table 2: Manual therapy techniques used by musculoskeletal NHS, private practice and sports physiotherapists

Techniques	All N (%)	NHS N (%)	Private Practice N (%)	Sports Physio N (%)
Soft Tissue Massage	19 (54)	8 (38)	9 (82)	2 (100)
Myofascial Release	15 (43)	5 (24)	8 (73)	2 (100)
Trigger Point Therapy	21 (60)	10 (48)	9 (82)	2 (100)
Joint Manipulation	11 (31)	3 (14)	6 (55)	2 (100)
Maitland Mobilisation	22 (63)	12 (57)	8 (73)	2 (100)
MWM	23 (66)	12 (57)	9 (82)	2 (100)
PNF/ MET	13 (37)	4 (19)	9 (82)	0 (0)

MWM – mobilisation with movement; PNF/MET – Proprioceptive neuromuscular facilitation/ muscle energy technique; NHS – National Health Service; Physio – Physiotherapist

Table 3: Participant suggestions for improvement on teaching in undergraduate and postgraduate courses

Themes	Raw data example comments
Undergraduate	
Greater time and opportunity to practice techniques	“More time practicing techniques” (P 34) “More regular teaching sessions with practice and feedback” (P 31)
Evidence based practice	“More evidence base” (P 6) “More time spent discussing evidence review” (P 21)
Authentic learning and application to clinical practice	“Real life case studies” (P 4) “More relevance to practice” (P 6) “More detail about the expectations that a patient may have” (P 10)
Clinical reasoning	“Ensure it aligns with clinical reasoning” (P 15) “Discussions on clinical reasoning and effects” (P 18)
Teaching staff	“Have actively treating clinicians teaching it who are using it daily in practice” (P 18) “Maybe needs to be taught by a chiropractor or osteopath” (P 23)
Post-Graduate	
Greater time and opportunity to practice techniques	“More hands-on experience needed” (P 2) “More time spent practical learning” (P32)
Up to date and evidence-based practice	“More evidence-based and targeted approach” (P 12) “Utilise the evidence base to inform practice” (P 29)
Balanced teaching and unbiased approach	All postgrad courses tend to have under-lying biases, therefore teaching not always balanced (P 9) “Not being too stuck on one approach” (P 35)
Clinical reasoning	“Aligned with clinical reasoning” (P 14)

P - Participant

Learning of Manual Therapy Techniques

Most MT techniques in this study were learnt during a university course with only myofascial relief, TPT and MWMs being learnt more or equal as CPD courses. Chesterton and Skidmore [5] found that the treatment selection of MT techniques depended heavily on those taught at UG level followed by those taught on PGT courses. While this study did not investigate whether where the technique was taught impacted decision-making, this study found that the majority of physiotherapists were satisfied with the teaching of the MT skills, however 14 to 16% rated the teaching on university courses as poor or very poor. Taking this current study and Chesterton and Skidmore [5] findings into account, highlights the importance of effective teaching of skills for MT utilisation.

Physiotherapists stated that MT teaching could be improved at both UG and PGT level by having more time and hands-on practice of the MT skills, greater use of EBP and clinical reasoning in the teaching of the practical skills. These are important characteristics and skills needed to be an effective physiotherapist and should be part of physiotherapy education [24]. Implementing or enhancing EBP promotes enhancement in clinical reasoning skills and decision making [25]. However, physiotherapists have reported a lack of time, uncertainty at what constitutes good evidence as barriers to implementing evidence in practice [26]. Thus, it is important that courses include EBP into teaching to address these barriers and ensure that clinicians understand when to implement MT in practice which is safe and clinically reasoned.

MT is a specialty tool that includes frequent and purposeful touch [27] providing more hands-on practice can improve skill and confidence of the MT techniques which is important considering that touch is a key aspect of building therapeutic alliance [27]. Therapeutic alliance enhances patient rapport and encourages patient-centred practice to improve outcomes and patient satisfaction [22]. Furthermore, patient expectations and past experiences affect the benefits of MT, highlighting the importance of appropriate clinical reasoning and MT application to enhance effectiveness [20]. Similarly, Chesterton et al. [28] found that MT was an area that new graduate UK physiotherapists felt

they were ‘not well’ prepared for in clinical careers, highlighting a greater emphasis on teaching and practicing of MT skills.

Physiotherapists also recommended that including more real-life cases and the teaching done by practicing clinicians in UG courses. Case-based learning is a recognised pedagogical method using authentic clinical practice scenarios to enhance student’s clinical decision making [29]. Using case-based learning aids in translating theory into practice which is more effective when it is connected to real-world case examples [29,30]. It has been suggested that actively practicing teachers can provide up to date practical points and clinical cases, sharing recent real-life patient stories to help students with understanding and application [30]. Thus, it is important for teaching staff to stay up to date and confident in the MT techniques for accuracy and liaise with current practicing physiotherapists for developing ‘real-life’ cases and / or help with MT teaching sessions.

Physiotherapists also recommended that in PGT courses the teaching could be more balanced and unbiased in their approach. Often PGT courses for CPD are on certain MT techniques and present evidence to support its use. These MT techniques are targeted at specific patients and physiotherapists may find it challenging to apply them in a clinical setting [9]. Physiotherapists have reported barriers to applying theory and research into clinical practice which is also applicable to applying MT clinically [9]. These barriers include challenges with understanding the technique, understanding the terminology used of the MT techniques and understanding the actual research evidence to inform and apply to clinical practice [9]. To inform and provide a more balanced and up-to-date approach to teaching MT, it has been recommended that teaching MT should not be taught as passive and prescriptive techniques but based on their biopsychosocial context [31]. The clinical outcomes of MT involve not only the mechanical stimulus of the technique, but the therapist-patient dynamics and the complex neurophysiological processes involved [32]. Providing physiotherapists with a broader view of the factors involved in MT will aid in a greater understanding for clinical decision making.

Limitations

This study is not without its limitations and should be considered when interpreting the findings. This study only had a small sample size of 34 participants; therefore, may not be representative of the target population. The data for this study was collected over a small timeframe of five weeks due to time constraints which affected the number of participants involved in this study. While only two sports physiotherapists completed the study, these were included as they may be reflective of this cohort and it was thought that their input was valuable. Having a longer period for data collection would have enabled other methods of recruitment to be explored and potentially lead to a larger number of participants completing the study to enhance validity.

This survey asked physiotherapists where the physiotherapists learnt each MT technique, the survey asked for responses regarding university, CPD and extra curriculum courses. To improve the accuracy of where physiotherapists were taught each MT technique, options should include both UG and PGT selections.

CONCLUSION

This study found that MT use is influenced by workplace setting. Sports and private practice physiotherapists utilised a range of MT techniques and used these much more frequently than physiotherapists in the NHS. The barriers to MT implementation of practice setting and lack of time reported by NHS physiotherapists reflected the work environment. Sports and private practice physiotherapists also reflected the work setting and included practice setting, experience using the technique, known (clinically or research based) effectiveness, and patient requests.

Overall physiotherapists were satisfied with how MT was taught at UG and PG level. Taking recommendations from the survey into account, teaching of MT could be improved by having more hands-on practice time, using real-life scenarios, more evidence base and balanced approach to MT. From a current perspective and understanding, teaching should include the biopsychosocial mechanisms involved in MT.

Acknowledgments

We would like to acknowledge the contributions of the musculoskeletal team at the physiotherapy department at Keele University for reviewing and providing feedback during the survey development.

Conflicts of interest

None declared.

Financial Support

None declared.

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Survey

Study Title: Trends in the use of manual therapy techniques for the treatment of spinal and peripheral musculoskeletal disorders among UK physiotherapists.

This survey will involve understanding the use of manual therapy techniques in physiotherapy within the UK and this information can help to improve learning of manual therapy techniques for the future. Furthermore, this survey will help us to find the current trends of the use of manual therapy.

Section One - Physiotherapists' background characteristics

1. How would you describe your Gender?
 - Male
 - Female
 - Prefer not to say
 - Other

2. If selected "Other" please specify your gender.

3. What is your Age?
 - 20-29 years old
 - 30-39 years old
 - 40-49 years old
 - 50-59 years old
 - 60-69 years old
 - 70+ years old

4. What degree/ qualification do you have? Select the highest qualification that you have.
 - BSc
 - Masters
 - PhD
 - Other

5. If selected "Other", please specify the degree/qualification that you obtain.

6. Where did you receive the degree?
 - United Kingdom
 - United States of America
 - Canada
 - Australia
 - New Zealand
 - Asia
 - Europe (excluding United Kingdom)
 - Other

7. If selected "Other", please specify where you received your degree/qualification?

8. What is your job occupation currently?
 - NHS Band 5 Physiotherapist
 - NHS Band 6 Physiotherapist
 - NHS Band 7 Physiotherapist
 - NHS Band 8 Physiotherapist
 - Private Physiotherapist
 - Military Physiotherapist
 - Other

9. If selected "Other", please specify your job occupation currently.

10. How many years of experience have you got working as a Physiotherapist?
 - Less than 2 years
 - 2-5 years
 - 5-10 years
 - 10+ years

11. How many years spent working in MSK outpatient setting?
 - Less than 2 years
 - 2-5 years
 - 5-10 years
 - 10+ years

12. Have you returned to practice in the last 6 months?

- Yes
- No

Section Two - Peripheral limbs

This section focuses on both the upper and lower limbs of the appendicular skeleton. Upper limbs include the shoulder and the upper limbs distally. Lower limbs include the pelvis, the hip and the lower limbs distally.

13. What manual therapy techniques do you use to treat musculoskeletal upper and lower limb conditions in practice? Please select only that apply to you.

- Soft Tissue Massage (effleurage, petrissage)
- Myofascial Release
- Trigger Point Therapy (no dry needling)
- Joint Manipulation
- Maitland's Mobilisation
- Mobilisation with Movement
- Proprioceptive Neuromuscular Facilitation (PNF) and/or Muscle Energy Techniques
- Other

14. If selected "Other", please specify the manual therapy techniques you use to treat musculoskeletal upper and lower limb conditions.

15. Please select how confident you are at using manual therapy techniques in practice? (1-5)

- 1 being the least confident and 5 being the most confident.

	1 Least Confident	2	3	4	5 Most Confident
Soft Tissue Massage					
Myofascial Release					
Trigger Point Therapy (no dry needling)					
Joint Manipulation					
Maitland's Mobilisation					
Mobilisations with Movement					
Proprioceptive Neuromuscular Facilitation and/or Muscle energy techniques					

16. Please select how often do you use manual therapy techniques in practice?

	Regularly (daily)	Often (3-5 times a week)	Sometimes (1-2 times in a week)	Seldom (once a fortnight)	Never
Soft Tissue Massage					
Myofascial Release					
Trigger Point Therapy					
Joint Manipulation					
Maitland's Mobilisation					
Mobilisations with Movement					
Proprioceptive Neuromuscular Facilitation (PNF) and/or Muscle energy techniques					

17. What are the enablers (reasons) for you in using manual therapy techniques in practice? Select all those that apply.

- Experience using the techniques
- Patient's request
- Practice setting
- Known (clinically or research based) effectiveness of the technique
- Other

18. If selected "Other", please specify the enablers (reasons) for you in using manual therapy techniques in practice.

19. What are the barriers for you in using manual therapy techniques in practice? Select all those that apply.

- Lack of skill
- Lack of confidence
- Lack of time
- Practice setting – manual therapy not advocated
- Practice setting – manual therapy not required (e.g. work in rehabilitation setting)
- Other

20. If selected "Other", please specify the barriers for you in using manual therapy techniques in practice.

Section Three - Previous Learning for the Peripheral Limbs

This section focuses on both the upper and lower limbs of the appendicular skeleton. Upper limbs include the shoulder and the upper limbs distally. Lower limbs include the pelvis, the hip and the lower limbs distally.

21. Where did you learn these manual therapy techniques?

	University	CPD course	Extra Curriculum Course
Soft Tissue Massage			
Myofascial Release			
Trigger Point Therapy (no dry needling)			
Joint Manipulation			
Maitland's Mobilisation			
Mobilisations with Movement			
Proprioceptive Neuromuscular Facilitation (PNF) and/or Muscle Energy Techniques			

22. What is your experience with the teaching of manual therapy at Undergraduate level?

- Very good
- Good
- Satisfactory
- Poor
- Very poor
- Not applicable

23. How can manual therapy be taught better at undergraduate level?

24. What is your experience with the teaching of manual therapy at postgraduate level?

- Very good
- Good
- Satisfactory
- Poor
- Very poor
- Not applicable

25. How can manual therapy be taught better at Postgraduate level?