

Participant Information Sheet for PHASE II

Project title

Older **MA**ster Track and Field **AT**hletes **PercE**ptions and Functional Impacts of **PRe**-Competition **Chi**ropractic **MA**nual Therapies on Plantar Flexo**R** Muscle Strength, Accuracy Motor Skill and Sports Performanc**E** (MasterCare)

Invitation

You are invited to take part in a practice-based performance and clinical study as part of a doctoral mixed-method research project at London South Bank University. Before you decide whether to take part, it is important for you to understand why the study is being done and what it will involve. Please take time to read the following information carefully.

What is the purpose of the research project?

Athletes want to optimise their performance and prevent injuries, and they typically explore many different strategies to give them a competitive advantage in sports events. Worldwide, manual therapies and chiropractic have been increasingly utilised in sports to help elite and masters athletes with pain management, return to sports and rehabilitation after an injury, injury prevention, enhancement of performance, and to recover faster after competitions.

Pre-competition chiropractic and manual therapies may be a way to identify and prevent a potential injury and to contribute to enhancing sports performance in masters athletes. Although there is vast research addressing the role of the best and common practices of chiropractic in older adults, none of them, thus far, have included the ageing athletic population until now.

Therefore, the aim of this project is to explore and increase the understanding of the perceptions of chiropractic manual therapies (CMT), particularly on sports performance competition, how it is experienced by aged 60+ masters track and field athletes, and its potential short-term functional impacts on plantar flexor muscle strength and accuracy motor skill performances. The project should be completed by the end of 2023.

Why have I been invited to participate?

You have been asked to participate because you are eligible according to the following criteria:

- You are aged 60+ active track and field athletes that competes at the national or/and international level.
- You are a registered athlete with the British Masters Athletics Federation (BMAF).
- Your main event is jumping, hurdling, sprinting, distance running or combine (Penta/Hepta/Decathlon).

- You have some previous experience of chiropractic manual therapies.
- You have no history of any surgery or achilles tendon ruptures or/and problems (ie: tendinopathies, etc.) within a six-month period prior to this study.

Do I have to take part?

Taking part in the research is entirely voluntary and your role in this study is also voluntary. It is up to you to decide whether to take part in this research. If you decide to take part, you are still free to withdraw at any time without giving a reason or explanation.

The aim is to recruit athletes aged 60+ of both genders from the above categories. You will ask to perform maximum voluntary isometric contraction (MVIC) strength of calf muscles and then some accuracy motor skill performances (up to 30% of your MVIC). As a participant, you will complete three series of the above biomechanical outcome measures. At the beginning (PRE1), at the middle (PRE2) and at the end (POST). Each of the measures will last 20 mins. Between PRE1 and PRE2 you will rest and be interviewed by Claudio Merkier about your experience with muscle strength and coordination testing. Between PRE2 and POST, you will be provided with CMT. The entire procedure will take about 120 mins. The research will be performed at the athletic venue that you are planning to compete within 24 hours prior to your competition date.

During the treatment intervention it might not be possible to allocate a same sex sports chiropractor. The biomechanical protocol has been tested before with older adults successfully and safe procedure under the supervision of Postgraduate Research Director of Ageing and Exercise Science Professor Kiros Karamanidis and colleagues (Epro *et al.*, 2018).

After completing this part of this project, you will be invited to participate in a 30 mins online interview a few days after your competition. This interview will be informal with close and open-ended questions to explore and understand the perceived impact of chiropractic manual therapies on your sports performance and plantar flexors biomechanical tasks.

Your responses to the questions of both interviews will be recorded, transcribed, and kept confidential. Each interviewee will be assigned a number code to help ensure that personal identifiers are not revealed during the transcription, analysis, and write-up of findings.

What would happen if I decided to take part and opting in the study?

If you decide to participate in it, you will be asked to sign a consent form. However, once you have undertaken

the study, the data (biomechanical outcomes measurements, clinical record notes and words you have spoken) can only be withdrawn up to the point of data analysis (usually around four weeks after the study has taken place) as the data will be anonymised at this stage and your data will not be able to be identified. If you wish to withdraw you may simply contact the researchers and state that you are withdrawing.

What are the possible disadvantages/risks of taking part?

There are no disadvantages of participating in the clinical study. However, no strength tests, and chiropractor's treatment is entirely without risk, so if you have any questions about the biomechanical performance tests and chiropractic care you receive, please ask. The treatment provided is one encounter only, and a follow up treatment may be advised at the participant's discretion. No treatment is entirely without risk.

You should be aware that if you disclose any information that does not align with BMAF conduct of standards, we will have a duty of care to report this to the federation. Any conduct matters will be dealt with through the BMAF's professional conduct policy.

What are the possible benefits of taking part?

There are no direct or immediate benefits to yourself in being involved in the performance and clinical study, however, your participation will potentially contribute to better understanding the functional impact perceptions of chiropractic manual therapies in aged 60+ masters athletes in the UK. There is no compensation for taking part in this study. As a thank you and appreciation for participating in the research, a free of charge individual analysis performance report will be provided to you. This analysis will help to identify if any functional imbalance occurs in the strength and accuracy motor skill performance of your plantar flexor muscles.

Will the data collected in this study be kept confidential?

All the information collected about you and other participants will be kept strictly confidential (subject to legal limitations). Data generated by the study will be retained in accordance with the University's Code of Practice. Digital recordings and records will be stored on a LSBU password protected server accessible only by the project team.

Non-anonymised data (personal data) data will be stored for exactly as long as it is needed in compliance with the General Data Protection Regulations. All personal data will be kept for a period of 10 years after the completion of the project and then destroyed. No information regarding your participation in the study will be shared outside the research team. In the write up of the study all data will be completely anonymised. No names or any identifiable information will be included.

What will happen to the results of the project on completion?

The results and findings of the project will be used to write-up the thesis for the professional doctorate research degree and published in a relevant academic journal. Also, a report of the findings will be provided to BMAF. Should you wish to obtain a copy of the published research, please contact the main researcher.

Who is organising and funding the research?

Claudio Merkier is organising and funding this research as part of his Professional Doctorate (PhD) in Health and Social Care at London South Bank University.

Who has reviewed the project?

The research has been reviewed by the School of Health and Social Care Ethics Panel at London South Bank University

Contact for Further Information:**Lead researcher:**

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If you have any concerns about the way the study is conducted, please contact the Chair of the School of Health and Social Care Ethics Panel: hscsep@lsbu.ac.uk

Thank you for taking the time to read this information and for considering taking part in this study.

Lead Researcher: *ClaudioMerkier*

References

Epro, G., Mierau, A., McCrum, C., Leyendecker, M., Brueggemann, G. and Karamanidis, K. (2018) Retention of gait stability improvements over 1.5 years in older adults: Effects of perturbation exposure and triceps surae neuromuscular exercise, *Journal of Neurophysiology*, 119 (6), pp. 2229-2240. DOI: [10.1152/jn.00513.2017](https://doi.org/10.1152/jn.00513.2017).