Annual Research Report 2014

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1. Research Culture and Environment at the European School of Osteopathy

The central focus for undergraduate and institutional research activity at the ESO is the Research Department; responsibilities include coordinating and facilitating student research as well as implementing institutional research projects and, through liaison with other academic departments, developing research awareness within the school. The undergraduate research curriculum aims to promote strong research-mindedness from an early stage in the MOst programme of study. A research dissertation is a fundamental requirement for graduation. The Research Department actively encourages the dissemination of research findings, by providing hands-on support for alumni or faculty members wishing to present or publish their research, and through awarding a prize at graduation for the most publishable undergraduate project.

The activities of the Research Department are guided by advice from the Research Advisory Board, which has helped define and refine the school's Research Strategy Framework. In addition, the ESO’s research thinking is influenced by a strong commitment to the National Council of Osteopathic Research (NCOR), and to supporting its endeavours directed towards increasing research capacity within the osteopathic profession.

ESO Research Department Mission Statement

*To nurture and develop research awareness and activity at the ESO with a view to supporting and informing the teaching and practice of osteopathy*
2. Structure of the ESO Research Department

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Dr Anne Jakel BSc (Hons) Ost, MSc, DPhil *(secretary)*
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3. Report from the ESO Research Department

Current and recently completed research projects
The Research Department has continued to promote and organize research into osteopathy, publishing research results in academic journals and making research findings available and known to the public.

Efficacy of cranial osteopathy in the treatment of excessively crying babies – a randomized controlled trial

The ESO Research department was awarded 17K by the Sutherland Cranial College of Osteopathy for carrying out this research. In preparation for this clinical study, two initial studies are planned: 1) to test acceptability of using a screen to blind parents to treatment group allocation of their babies; 2) to test the acceptability and credibility of a sham treatment to the babies. Once the results of these pilot studies are obtained and favourable, the execution of the full clinical trial is anticipated in late 2015.

A Delphi-study to investigate the treatment and advice given by osteopaths to patients suffering from asthma

This questionnaire-based approach consists of two parts: the first questionnaire will identify qualified osteopaths in the UK who treat patients with asthma, including identifying osteopaths who have expertise in treating asthma. The second part of the project will use these identified ‘expert’ osteopaths as study participants, with the aim of describing a set of techniques, treatment approaches and short and long-term management plans, that these ‘expert’ osteopaths would generally use to treat a patient suffering from asthma.

Patient reported outcomes in low back pain trials (PROBE)

The Research Department is currently collaborating with Campus Kristiana in Norway, University of Warwick Medical School and Barts and the London School of Medicine and Dentistry on a large systematic review of populations, reporting and outcomes in back pain trials. Work on this has been completed and the results of this research are currently being written up for publication.
4. Peer-reviewed Publications

2014

A systematic review and meta-synthesis of the impact of low back pain on people's lives.
Froud R, Patterson S, Eldridge S, Seale C, Pincus T, Rajendran D, Fossum C, Underwood M.

Anatomical landmark position--can we trust what we see? Results from an online reliability and validity study of osteopaths.
Pattyn E, Rajendran D.

A systematic review of reporting of rehabilitation in articular-cartilage-repair studies of third-generation autologous chondrocyte implantation in the knee.
Bright P, Hambly K.
Journal of Sport Rehabilitation 2014, 23(3):182-191
5. Conference Presentations and Posters 2014

**International Conference on Advances in Osteopathic Research (ICAOR), Sao Paulo Brazil, 7th – 9th November 2014**

*Devan Rajendran.* Does muscle compliance predict low back pain? A small scale blinded electromyotonometric study  
*Oral presentation*

*Joanna Figg-Latham.* Quiet dissent: insights into attitudes, beliefs and behaviours in respect of evidence-based guidance for the management of low back pain among UK osteopathic students and qualified osteopaths. A Qualitative Study  
*Oral presentation*

*Laurence Samuel.* Comparison of Low Frequency Heart Rate Oscillations with the Palpated Cranial Rhythmic Impulse  
*Poster presentation*

*Sonja Jelineck.* Osteopaths in the United Kingdom and Australia: Attitudes, practice, confidence and knowledge with regard to melanoma detection.  
*Poster presentation*

**Chiropractic, Osteopathy and Physiotherapy (COP) Conference, 29th November 2014 in London**

*Amy Beeton.* Exploring the relationship between personality and choice of treatment modality amongst practising osteopaths.  
*Oral presentation*

*Katherine Spens.* Investigating the relationship between post-surgical adhesions, reported pain and scar tissue quality following Caesarean section (CS) surgery using trans-abdominal Ultrasound (TAUS)  
*Oral presentation*

*Liesbet Maenhout.* An experimental study investigating the immediate effects of a direct myofascial release technique on the gliding capacity of mature postsurgical scar tissue.  
*Oral presentation*

*Sonja Jelineck.* Osteopaths in the United Kingdom and Australia: Attitudes, practice, confidence and knowledge with regard to melanoma detection.  
*Oral presentation*
6. Research Prizewinners 2014

The Research Department prize for the most publishable research dissertation in 2014 was awarded at graduation to Joanna Figg-Latham and Sonja Jelineck.

A special prize for outstanding graduate research was awarded to Joanna Figg-Latham at the ICAOR conference in Sao Paulo, Brasil.

Katherine Spens and Liesbeth Maenhout received one prize each (out of three available prizes) for best presentations at the COP conference in London.

7. Academic and Research Links with other Organisations and Institutions

University of Greenwich: validates MOst degree.

In addition, the ESO has research links with the following institutions:

- Barts and The London, Queen Mary School of Medicine and Dentistry, Centre for Health Sciences
- University of Brighton, Clinical Research Centre for Health Professions
- University of Greenwich, School of Health and Social Care
- University of Kent, School of Sport and Exercise Sciences
- University College of Health Sciences, Campus Kristiana, Norway
- University of Warwick Medical School
- University of Southampton, Faculty of Medicine
- Research design Service SouthEast
- Sutherland Cranial College of Osteopathy

8. Future Activities of the Research Department

Objectives of the Research Department for the next academic year include increase in institutional research projects and publication of research findings based on both undergraduate and institutional research as well as establishing research collaborations with other Osteopathic Educational Institutions.

- The effect of rib raising on the autonomic nervous system: measuring heart rate variability in a randomised sham-controlled experiment.

- Exploring the relationship between personality and choice of treatment modality amongst practising osteopaths – a questionnaire study.

- Would a greater understanding of the long-term effects of childhood sexual abuse enhance osteopathic practice.

- A study into the occurrence of the medical profession signposting parents with colicky babies to osteopathy in the cranial field.

- A single case study analysing the outcome of the canine autonomic nervous system using three different complementary and alternative medicines: osteopathy, Bowen technique and massage therapy.

- Bi-lateral measurement of rotation of the cervical spine in motorcyclists to compare left and right degrees of rotation, with regards to the “Lifesaver manoeuvre”

- A critical review of current theories surrounding chronic fatigue syndrome aetiology and the implications of these on osteopathic management of patients with the condition.

- The effect of BLT applied to the talocrural joint on unipedal postural sway in asymptomatic students.

- A study into prevention and management of overuse injuries in pianists.

- Retrospective study of the presenting symptoms and diagnoses of babies treated in the ESO children’s clinic according to their birth process and the influence of the tutors.

- The effect of sub-occipital inhibition on lung function in asymptomatic participants.

- Diaphragm inhibition versus erector spinae inhibition, a comparative study of their effectiveness in increasing the range of motion of the cervical spine.

- Quiet Dissent: insights into attitudes, beliefs and behaviours in respect of evidence-based guidance for the management of low back pain among UK osteopaths.

- Quantum effects and touch: medical reality or fiction?

- The effect of hydration on pain perception.
• Osteopaths, views and experiences of clinical models supporting the diagnosis of somatic dysfunction; a qualitative inquiry

• The effect of an elastic lumbar support and soft touch om body sway during an everyday lifting task.

• An investigation into the immediate effect of muscle energy technique when applied to the flexor compartment of the forearm in relation to grip strength, muscle fatigue and recovery time.

• Osteopaths in the United Kingdom and Australia: attitudes, practice, confidence and knowledge with regard to melanoma detection (a questionnaire-based quantitative study with qualitative elements).

• The effects of sub-occipital inhibition on vessel diameter & peak systolic velocity in healthy subjects measured by 2D & Doppler ultrasound of the right carotid artery.

• Perception of osteopathy among family physicians in Tallinn, Estonia

• Is there any correlation between painful subacromial impingement tests and levels of activity, with or without the presence of trigger points? A prospective study.

• How do osteopaths understand and manage developmental coordination disorder?

• Comparing the reliability of using a figure rating scale or observation in the diagnosis of obesity at the ESO clinic.

• Difference between perceived quality of life of osteopathic students across a range of osteopathic educational institutions: A quantitative study.

• An experimental study investigating the immediate effects of a direct myofascial release technique on the gliding capacity of mature postsurgical scar tissue.

• The effectiveness of balanced ligamentous tension (BLT) when applied to C3-T3 group in increasing cervical spine range of movement.

• Does osteopathic manipulative therapy of the thoracic spin have an effect on peak systolic flow volume of the brachial artery?

• Pelvic floor muscle dysfunction in ante and post-partum woman: a narrative literature review.

• A profile of the prevalence and treatment of musculoskeletal multi-site symptoms in an osteopathic teaching clinic.
• An investigation into the effects of active plantarflexion and dorsiflexion of the left and right ankles of motorcyclists.

• An experiment to investigate whether an osteopathic direct myofascial technique working on the posterior structures of the diaphragm can affect pelvic torsion (innominate rotation).

• What do osteopaths believe to be viable processes for engagement in the NHS? A qualitative study

• Osteopathic stress increase pain? An algometric comparison of pain perception within the upper shoulder musculature in osteopathic students, contrasted with a random control sample, to distinguish whether osteopathic exam/ clinic stress increase pain perception.


• The effects of mindfulness mediation on pain perception and their application to the osteopathic management of patients.

• The impact of the integrated M(Ost) degree at the European School of Osteopathy on the ability to palpate a rise in temperature with the dorsum of the hand without contact.

• Is perception of pain altered by becoming a manual therapist? An algometric study of pain perception in osteopathic students at varying undergraduate levels.

• Why do patients attend osteopathic practices in circumstances where treatment at a National Health Service (NHS) practice is available?

• Cranial osteopathy for stress management in undergraduate students.

• Are doming of the diaphragm and mid-lumbar HVLAT techniques having short term effects on the peak systolic flow rate in the common femoral artery?

• The effects of stress on hypertension and the application of the Eeman technique to control blood pressure.

• Non-specific low back pain: a literature review on the efficacy of osteopathic manual and complementary therapy versus non-steroidal inflammatory drugs as a treatment approach.

• The importance of the application of positional vectors in a high velocity thrust.

• Comparison of low frequency heart rate oscillations and the palpated cranial rhythmic impulse.
• The effect of Muscles Energy Technique (MET) applied at the extraocular muscle (EOM) and the effect on body sway.

• Osteopathy in elite sport: opportunities, career paths and specialism- a qualitative study
• On the role of exercise therapy in osteopathic practice in UK.

• Investigating the possible relationship between post-surgical adhesions, reported pain and scar tissue quality following Caesarean section using transabdominal ultrasound.

• The effects of changing undergraduate practitioner on patient progression and self-reported post-treatment reactions.

• A comparison of academic stress levels, between nurses and osteopathic students.

• An MET technique on the temporomandibular joint and its effect on the cervical spine range of motion.

• Touch and the treatment of depression- A critical literature review.

• The attitudes and perceptions of osteopaths to emotional release in relation to treatment.

• A comparative, pilot study of the perceived and experimental pressure pain thresholds of football players, rugby players and control.

• A quantitative study into whether a balance ligamentous tension technique on the ankle complex can cause a change in Heel angle of an individuals gait cycle.