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Saying it doesn't make it so - a reply to Espírito Santo et al

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Dear Editor,

We read with interest the letter to the editor (LTE) by Espírito Santo et al (Espírito Santo et al. 2023) in response to our paper *What's wrong with osteopathy?* (WWWO) (Thomson and MacMillan 2023a). We want to once again thank the osteopathy community for engaging with our arguments and to *IJOM* for the opportunity to deepen the discussion and reflections on our paper. We view the ongoing impassioned discourse surrounding WWWO (van Dun 2023; Thomson and MacMillan 2023c; Noy 2023) as a signal that the issues we put forward in our paper have some salience to the direction that osteopathy might take.

We are pleased that Espírito Santo et al., like others who have offered criticism of our paper (van Dun 2023) consider the issues we have raised as relevant and in need of further considered discussion. However, also like others (van Dun 2023), there is the peculiar contradiction of stating that our concerns are “relevant” but then offering a headline title of their LTE by re-affirming van Dun’s position that there is *nothing* wrong with osteopathy. Merely asserting that there is *nothing* wrong with osteopathy fails to sensibly engage let alone acknowledge the fundamental challenges and problems facing osteopathy and is unlikely to result in any meaningful intellectual and professional progress. In underlining that there is nothing wrong with osteopathy, Espírito Santo et al fail to provide any evidence or compelling argument to support their counterclaims.

In their LTE, Espírito Santo et al., make a number of comments in regards to our paper, some of which we found hard to follow, but we will do our best to respond to the most inaccurate and important. Firstly, Espírito Santo et al., seem to take issue with the “way that the paper was written” and seem to suggest that it is our choice of tone, language and style which are the main issues rather than problems we identify in our commentary. We appreciate that the critical style we adopted in WWWO may be neither familiar nor to everyone's taste. However, we are less concerned with style and more concerned with the substance of our argument, and would like to point out that the tone and style does not seem to have been a barrier to engagement, where currently WWWO remains amongst the ‘most downloaded’ *IJOM* paper in 90 days, and the ‘most popular’ paper in the last 3 years (<https://www.journalofosteopathicmedicine.com/>), and has recently been translated into German - *Was stimmt nicht mit der Osteopathie?* (Thomson and MacMillan 2023b).

Espírito Santo et al., claim that they found our portrayal of osteopathy “disturbing”, “skewed” and “outdated” (pg 1). We were similarly disturbed by the problems facing osteopathy and potential missed opportunities - hence our motivation to write our commentary. Notwithstanding this shared emotional state, our paper was by its very nature an opinion, albeit a critical one. The critical perspective that WWWO adopted is just that, a perspective, which might appear skewed to some or accurate to others. A paper arguing for ‘what’s right with osteopathy’ might appear similarly skewed from a more critical perspective (we note that such a paper has, so far, not

been published). Whilst the authors are welcome to challenge our perspective and hold and express a different view, we are confident that our use of evidence and theory has provided a compelling and authentic interpretation of osteopathy and the problems contained within it.

In regards to the 'out of datedness' of our analysis, Espírito Santo et al's own analysis appears confused. In one breath they state that we are outdated and that we fail to acknowledge contemporary thinking about osteopathy, yet only a few sentences later they themselves rely upon the works of Still and Littlejohn (from over a century ago) as evidence that osteopathy is and has always been practiced in a person-centered and holistic way; clearly these positions are antithetical.

Ignoring this contradiction for a moment, a key claim of Espírito Santo et al, appears to be that the biopsychosocial (BPS) model (or notions akin to it) are (and have always been) built into osteopathy and they go on to provide two justifications. Their first justification is that the BPS model is one of the five structural and functional models and cite the WHO Benchmarks for osteopathic training from 2010 (WHO 2010), which we will explore further in a moment. They also reference an opinion paper from Penney (Penney 2010) as further evidence of the inherent 'BPSness' of osteopathy; such stand-alone opinion papers (including our own) have limited quality or strength to support larger claims such as those made by Espírito Santo et al.

In regards to the WHO benchmark supporting the BPSness of osteopathy, we contend that this document provides evidence to the *contrary* and that rather than evidencing that osteopathy is imbued with the BPS model, that in fact the WHO document supports our claim of the inherent biomedical nature of osteopathy and prediction for implausible mechanisms ([Thomson and MacMillan 2023](#)). To elaborate, in addition to the BPS model, the other four models/frameworks contained within the WHO benchmark statement are the 'biomechanical model', the 'respiratory circulatory model', the 'neurological model' and the 'bioenergetic model' - we maintain that any sensible reading of the descriptions of these models in the WHO document will confirm their biomedical positioning. For example, in regards to the biomechanical model the WHO document states "the biomechanical model views the body as an integration of somatic components that relate as a mechanism for posture and balance", and that the model guides the osteopath's application of osteopathic manipulative techniques (OMT) to "allow for the restoration of posture and balance and efficient use of musculoskeletal components" (pg 3). In regards to the respiratory model, the WHO (WHO 2010) document states that this model is concerned with "tissue stress or other factors interfering with the flow or circulation of any body fluid can affect tissue health" and that OMT is applied to "address dysfunction in respiratory mechanics, circulation and the flow of body fluids" (pg 3). When describing the neurological model, the WHO (WHO 2010) benchmark states that "of particular importance is the relationship between the somatic and visceral (autonomic) systems" (pg 3). And finally, the bioenergetic model seeks to emphasise "the body in its ability to adapt to various stressors (immunological, nutritional, psychological, etc.)" (pg 3). Rarely does evidence speak for itself, but these descriptions contained within the WHO document appear to be an exception to the rule. These body-focused models reveal assumptions which are consistent with biomedicalism; namely that illness, disease and pain arise from disruption of (and located in) the internal workings of body and that

it is the osteopath who holds power, knowledge and skills to intervene and “restore” balance and “address dysfunctions” (WHO 2010) (pg 3) ultimately through the same and single intervention - OMT.

The second justification that Espírito Santo et al provides that the BPS model is part of osteopathy is their observation that BPS-related manuscripts have been published in *IJOM* since 2005 and hand picks six relevant examples: one primary qualitative study (Abrosimoff and Rajendran 2020) one editorial (Moran 2010), two invited masterclass papers (Fryer 2017a, 2017b) and the other was a commentary/position paper (Esteves et al. 2020). We accept and are encouraged by the growing attention that researchers and osteopathic academics are paying to more person-focused and humanistic theories and frameworks. However, it is worth noting that the single primary research that Espírito Santo et al cite in this aspect of their criticism (Abrosimoff and Rajendran 2020), not only fails to support their claim but in fact clearly undermines it. Specifically, the findings from Abrosimoff and Rajendran’s (2020) qualitative study with osteopaths confirm that biomedical views persist in osteopathic education and practice, and that the application of the BPS model remains fraught with obstacles. Furthermore, to claim that because ‘BPS’ titled papers can be located by a “quick search” (Espírito Santo et al. 2023) (p 2) within a single journal is in no way a reliable indicator of the content of these papers or that BPS models are utilised or embedded within osteopathic practice or education. A recent systematic review of osteopathic practice (Sampath et al. 2021), and a scoping review of osteopathic education (MacMillan et al. 2023) (of which we were co-researchers) provide more rigorous and appropriate methods to assess the validity of such claims surrounding the BPS model in relation to osteopathy.

Moving on, Espírito Santo and colleagues take a somewhat peculiar issue in respect to our claim that osteopathy has a weak theoretical basis, by pointing out that the papers by Smith (Smith 2019) and Esteves et al (Esteves et al. 2020) are referenced but don’t appear in the section under question. While taking issue with the order and location of our references seems a somewhat minor criticism, it is also inaccurate. We use these precise references to highlight the very fact that others have noticed the weak theoretical basis of osteopathy - our paper should be taken in its totality. We further suggest that our arguments build upon these preceding works by Smith (2019) and Esteves et al (2020), and despite Espírito Santo et al’s reservations regarding our stylistic choices and its impact on engagement with our arguments; we would remind once more that WWWO has sparked discussion, critique and reflection across the profession (van Dun 2023; Thomson and MacMillan 2023c; Noy 2023) and beyond (Nicholls 2023).

Next, Espírito Santo et al state that in WWWO, we put forward a “paradox” (pg 2) by claiming that osteopathy is both aligned with the biomedical model yet lacks scientific rigour. We could not locate where we made that specific claim but assume they are referring to us pointing out that some aspects of osteopathy promote and rely on pseudoscientific theories and mechanisms. Espírito Santo et al appears to make a confused claim by suggesting an incompatibility of osteopathy being both biomedical and unscientific; however such charges are not mutually exclusive and we do not construct such a paradox. Many osteopathic models,

theories and practices which align to biomedicalism also lack scientific evidence or fall short when scrutinised scientifically. It is perfectly possible for osteopathy to make claims that are both biomedical *and* unscientific/pseudoscientific. Some examples of such biomedical and unscientific claims include osteopathic palpation of movement of cranial sutures (Sutherland 1997), manually influencing the heart and pericardium (Bordoni et al. 2019), re-directing flow of the cerebral spinal fluid (Liem and van den Heede 2017) and physically manipulate and influence brain structures (Barral 2021). We argue that science and evidence-based practice has the potential to rid osteopathy of biomedicalism and also consign pseudoscientific ideas to osteopathic history.

Moving onto the issue of monointerventionism, Espírito Santo and colleagues misrepresent our position on touch/hands-on, and we have addressed similar misrepresentations in previous rebuttals to WWWO (Thomson and MacMillan 2023c). Nowhere in our paper do we state explicitly or imply that “manual therapy is not compatible with a person-centered approach” (Espírito Santo et al. 2023) (pg 2). Whilst it might serve those who disagree with our claims in WWWO to strawman our critical stance as advocating a ‘hands-off’ approach, our argument is more nuanced and we suggest a deeper re-reading of this aspect of our paper. Espírito Santo et al., considers our criticism of OMT to be “harsh” and that we want to “diminish the importance” of touch (pg 2), this is another misrepresentation. To reiterate, our position is that given the current evidence, manual therapy does not deserve to be any more or any less important than other interventions which fall within osteopaths’ scope of practice. We neither overplay or underplay touch, but rather say that there is nothing that makes it inherently unique to osteopathy or superior to other interventions, and osteopaths should draw upon a broad range of available therapeutic options and not be bound by professional pressure or historical obligation to ensure that hands-on care remains the cornerstone of osteopathic practice. To that end, we reject Espírito Santo et al’s appeal to tradition when they state that touch/OMT is “intrinsic to the very essence of osteopathy” (pg 2). Osteopathy owes it to the patients that it serves to scrutinise *all* professional assumptions, traditions and givens and change practice accordingly.

In summary, we welcome further discussion and critical reflection on WWWO. Espírito Santo and colleagues assert that our paper was “careless” and “negligent” (p1) however, we would encourage the authors to reflect on making such judgements in light of their demonstrable confusion, contradictions and seemingly cursory and superficial reading of our paper and the wider literature. We hope that WWWO and the ensuing debates help to encourage clinicians, educators and the profession to overcome the professional archaism, dogmatism and parochialism which appears ever-present in some aspects of osteopathy, by thinking critically, openly and honestly about how osteopathy might be otherwise in the face of new evidence, theory and societal needs.

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Conflicts of interest

OT is an Associate Editor for IJOM and AM is a peer-reviewer for IJOM. Neither author were involved with peer-review or editorial decisions of this letter.

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