



# Great news for segment-specific chiropractors who adjust with intent

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**K**awchuk, Perle, and Leboeuf-Yde are the gift which keeps on giving, and now Downie and a couple of others have joined for the New Year's Parade, with their latest contribution (1) excitedly concluding that '*further research is required to determine the underlying mechanisms of SMT.*'

In short, they used the methods of a Systematic Review, which do not really work with manual clinical procedures such as offered by chiropractors, to conclude that those who practice generic, broad-based spinal manipulation lack specificity. Their second flaw is the presumption that generic spinal manipulation is capable of achieving results equivalent to those by conventional chiropractors. It is not, and while not 'proof' per se, their paper gives a very strong indication that through use of weak methods, there seems to be little evidence that spinal manipulation achieves what the practitioner intended it to achieve.

## Stop the presses

After years of seemingly condemning everything that chiropractors do, (2) this group of researchers on the fringe of conventional chiropractic now conclude there needs to be more work done to understand the underlying mechanisms of manipulative therapy. As with all mediocre

... The authors have delivered a paper which actually reinforces the key chiropractic beliefs that specificity matters. It is just that they do not know how to investigate it.'



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1. Nim, C.G., Downie, A., O'Neill, S. et al. The importance of selecting the correct site to apply spinal manipulation when treating spinal pain: Myth or reality? A systematic review. Sci Rep. 2021;11:23415. <https://doi.org/10.1038/s41598-021-02882-z>.
  2. Leboeuf-Yde C, Innes SI Young KJ, Kawchuk GN, Hartvigsen J. Chiropractic, one big unhappy family: better together or apart? Chiropr Man Ther. 2019;27:<https://doi.org/10.1186/s12998-018-0221-z>.

researchers who rely on continuous funding to support their work this group proposes a swag of new studies, hence new opportunities to receive funding, to investigate 'a more nuanced theory of treatment mechanism'. (1)

On one of the earlier times (2009) such a proposition was suggested, (3) Reggars, an Australian chiropractor indirectly associated with LeBoeuf-Yde (4, 5) through Walker, (6, 7) laughed between refreshments during an after-dinner speech and ridiculed it, (8) regardless of it being peer-reviewed, published and indexed. He suggested that I as the author should undertake studies in philosophy, notwithstanding I already held a *Doctor of Philosophy* award.

It is my strong contention that the art of chiropractic clinical practice is entirely subjective, and in fact it is a shame that these authors who claim specificity is a myth, remain unfamiliar with much of chiropractic's literature including my own proposition of *Perspectival Truth*, (9) a philosophical work.

However this lack of familiarity with the literature of chiropractic is understandable as the authors are on the fringe of chiropractic as being more physical therapists and technicians who happen to hold a chiropractic qualification, than a chiropractor trained in the conventional chiropractic manner. (10, 11) I believe they would all admit to that based on the academic positions they hold. And this is where their latest paper is all foam and no beer, it is a technician's examination of spinal manipulative therapy, and not a chiropractic paper that studies what chiropractors actually do, and the results they obtain

### Kawchuk et al give therapists a wonderful paper

In reality, we should celebrate this paper as a demonstration of the low clinical value of spinal manipulation, especially when applied by people other than chiropractors. You only need to read the column headed '*Clinician qualified, Qualification, Years of experience*' in Table 1 (1) to note that of some 36 or more clinicians, only one group was classified as being chiropractors, specifically Mitch Haas and 5 others, although the authors give these clinicians as '*two chiropractors with 20 and 2 years of experience*' respectively.

Here we have another flaw from the authors of this paper, they seem to have failed to explore comments on the papers they selected. In the Haas case there is a critical comment from Tony Wright, published in the *Australian Journal of Physiotherapy*, (12) who pointed out that the Haas study '*does not evaluate any long-term differences in clinical outcome. It remains possible that*

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3. Ebrall PS. Towards better teaching about the subluxation complex. *Chiropr J Aust*. 2009; 39:165-70.
  4. Innes SI, Leboeuf-Yde C, Walker BF. A failed review of CCE site inspection standards and processes. *Chiropr & Manual Ther*. 2019 ;27(49). URL <https://chiromt.biomedcentral.com/articles/10.1186/s12998-019-0270-y>.
  5. Innes SI, Leboeuf-Yde C, Walker BF. Attempting to explore chiropractors and their clinical choices: An examination of a failed study. *Chiropr & Manual Ther*. 2019 ;27(15). URL <https://chiromt.biomedcentral.com/articles/10.1186/s12998-019-0236-0>.
  6. French S, Pollard HP, Reggars JW, Walker BF, et al. Risk management for chiropractors and osteopaths. Informed consent: A common law requirement. *Australas Chiropr & Osteopat*. 2004 Jul;12(1):19-23. URL <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2051308/>
  7. Walker BF. The new chiropractic. *Chiropr Man Ther*. 2016;26(26):<http://chiromt.biomedcentral.com/articles/10.1186/s12998-016-0108-9>
  8. Reggars JW. Chiropractic at the crossroads or are we just going around in circles? *Chiropr Man Ther*. 2011;19:<http://chiromt.com/content/19/1/11/abstract>.
  9. Ebrall P. The perspective-dependent knowledge claim as an explanation of chiropractic's subluxation conundrum. *J Contemp Chiropr*. 2021;4:52-65. URL <https://journal.parker.edu/index.php/jcc/article/download/157/70>
  10. Ebrall P. The conventional identity of chiropractic and its negative skew. *J Contemp Chiropr*. 2020;3(1):111-26. URL <https://journal.parker.edu/index.php/jcc/article/view/133>
  11. Ebrall PS. *Chiropr Hist*. Finding the professional identity of chiropractic in Australasia: A pragmatic narrative of the Formative Period to 1960. 2020;40(1):49-71.
  12. Wright T. Cervical endplay assessment does not improve the efficacy of cervical manipulation. Summary of Haas M, Group E, Panzer D, Partna L, Lumsden S and Aickin M (2003): Efficacy of cervical endplay assessment as an indicator for spinal manipulation. *Aust J Physiotherapy*. 2004;50(1):57. URL <https://www.sciencedirect.com/science/article/pii/S0004951414602531>

*segmental specificity is more important for some of the potential longer-term effects of manual treatments.'* (12)

Wright makes the point '*it would be prudent for clinicians to continue to apply joint manipulation with a good deal of specificity. It is important, however, to be aware that the effect(s) may not be as specific as we think.*' (12)

Should the Kawchuk group have noted these comments? I think so as they do tend to weaken their use of that one paper (13) by chiropractor Haas. If we leave this one chiropractic investigation aside, we are left with 9 papers by physical therapists. And we must certainly keep in mind the advice of one critical observer, Wright, that '*it would be prudent for clinicians to continue to apply joint manipulation with a good deal of specificity.*' (7)

After all, one of the key learning objectives with 'Neurology 101' is to appreciate that there is '*Specificity in the organization of the autonomic nervous system*', (14) which brings us to two major considerations.

The first is the ongoing false belief that the prime therapeutic intervention provided by conventional chiropractors is spinal manipulation, it is not. Conventional chiropractors provide segment-specific corrections to dysfunctional levels of the spine with a specific purpose and intent. Typically these corrections are called '*adjustments*' given their well defined technical parameters. Regrettably those who can not 'adjust' will, in their ignorance, dismiss this position as one of semantics.

But it is not, it is a clear, technical position. Since 1985 (15) there have been reports of the force and time parameters of the chiropractic thrust. Laboratory equipment is now available with sufficient sensitivity and specificity to allow quantification of the outcomes of this psychomotor skill set as used by chiropractors. It is even more recently that enough theoretical reasons have been identified to propose that it is preferable to consider mobilisation and generic manipulation as separate clinical entities. (16) The HVLA correction used by chiropractors is again a completely different matter in terms of its specificity, and its force and time parameters. (17, 18, 19)

The second is the research methodology which derives a finding regarding spinal manipulation by manual and physical therapists and falsely infers that the findings apply to chiropractors. To their credit, the Kawchuk group has not published in the chiropractic literature and make only a passing reference to chiropractors and their technique in their opening paragraph by writing '*such factors are considered important by many clinicians using manual therapy*' with the citation being Bergman and Peterson's (chiropractors) seminal textbook of *Chiropractic Technique*. (20)

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13. Haas, M. et al. Efficacy of cervical endplay assessment as an indicator for spinal manipulation. *Spine*. 2003;28,1091-6.

14. Jänig W, Häbler H-J. Ch 25. Specificity in the organization of the autonomic nervous system: a basis for precise neural regulation of homeostatic and protective body functions. In: EA Mayer and CB Saper (Eds). *Progress in Brain Research*, 2000;122:351-67. URL <https://www.sciencedirect.com/science/article/abs/pii/S0079612308621500>.

15. Adams AA, Wood J. Changes in force parameters with practice experience for selected low back adjustments. *Res Forum*. 1985;1(2):40-8.

16. Evans DW, Lucas N. What is 'manipulation'? A reappraisal. *Man Ther*. 2010 Jun;15(3):286-91. doi: 10.1016/j.math.2009.12.009. Epub 2010 Jan 18.

17. van Zoest GG, Gosselin G. Three-dimensionality of direct contact forces in chiropractic spinal manipulative therapy. *J Manipulative Physiol Thera*. 2003;26:549-56.

18. Forand D, Drover J, Suleman Z, Symons B, Herzog W. The forces applied by female and male chiropractors during thoracic spinal manipulation. *J Manipulative Physiol Thera*. 2004;27:49-56.

19. Triano JJ, Rogers CM, Combs S, Potts D, Sorrels K. Developing skilled performance of lumbar spine manipulation. *J Manipulative Physiol Ther*. 2002 Jul-Aug;25(6):353-61. DOI 10.1067/mmt.2002.126132. PMID: 12183693.

20. Bergmann TF, Peterson DH. *Chiropractic Technique: Principles and Procedures*, 3e. Mosby, 2010.

However given that only 2 of the five authors have an association with a chiropractic institution, it is safe to accept this paper as not representing chiropractic and its techniques. It is an average paper from physical therapists with little to no value for the chiropractic profession.

This paper is one that shows us that SMT is a generalised therapy, far removed from DD Palmer's specific treatment for named conditions. (21)

### Is specificity relevant?

Based on the number of technique systems in chiropractic derived by experts and tested by thousands of practitioners, we have to answer 'yes, *specificity is relevant*.' The major point of difference being that none of such systems are considered as spinal manipulation, they are all developed as segment-specific adjusting techniques. Think *Gonstead Methods*, (22) and *Activator Methods*<sup>TM</sup> (23) just to name two from many others.

But these may well be examples of the 'myth' Kawchuk et al seem all too happy to dispel. So let's look to evidence, and just 3 case reports will suffice:

- ▶ *The Effects of Gonstead Chiropractic Care on a Patient With Primary Amenorrhea: A Case Report and Review of Related Literature*, (24) where the R) occiput and S2 sacral segment were specifically part of the successful care protocol;
- ▶ *Female Infertility and Subluxation-Based Gonstead Chiropractic Care: A Case Study and Selective Review of the Literature*, (25) where S4 was the specific therapeutic target with successful outcomes; and
- ▶ *Improvement in a Pediatric Patient with Craniosynostosis Undergoing Chiropractic Care*, (26) where it is unthinkable for manipulation to be applied. Instead the very specific care was 'contact specific, gentle high velocity, low-amplitude type thrust to sites of spinal subluxations along with craniosacral therapy'.

### Artificial stupidity

In a paper published outside the chiropractic literature, either due to rejections or a deliberate decision to elevate their opinions above those of the chiropractic profession, and in a paper subtly meant to undermine the basic tenets of chiropractic, Kawchuk and his newfound lead author Casper Nim have delivered a paper which actually reinforces the key chiropractic beliefs that specificity matters. It is just that this group do not know how to investigate it.

The greater majority of conventional chiropractors know and understand that their clinical successes are due to their diligent assessment of a patient for spinal dysfunctions which most call subluxations, and then based on their analysis their reasoned selection of the safest and most therapeutically effective intervention. Most will agree that specificity is critical to the clinical outcomes they achieve with their adjustment protocols.

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21. McDowall D, Chaseling M, Emmanuel E, et al. David D. Palmer, the father of Chiropractic: His heritage revised. A story of enlightenment, spiritualism and innovation. *Chiropr Hist*. 2019 Summer;39(1):25-40.

22. Gonstead Chiropractic Society Australia. Home. Accessed 20 November 2021. URL <https://www.gonstead.com.au>

23. Australian Spinal Research Foundation. Interactive Activator Methods Training. Accessed 20 November 2021. URL <https://spinalresearch.com.au/resources/activatortraining/>

24. Gauthier E. The Effects of Gonstead Chiropractic Care on a Patient With Primary Amenorrhea: A Case Report and Review of Related Literature. *J Ped, Maternal, Fam Health Chiropr*. 2010;3:116-21. URL <https://vertebralsubluxationresearch.com/2017/09/11/the-effects-of-gonstead-chiropractic-care-on-a-patient-with-primary-amenorrhea-a-case-report-and-review-of-related-literature/>

25. Schwanz JW, Schwanz JT. Female Infertility and Subluxation-Based Gonstead Chiropractic Care: A Case Study and Selective Review of the Literature. *J Ped, Maternal, Fam Health Chiropr*. 2012;4:85-984. URL <https://vertebralsubluxationresearch.com/2017/09/10/female-infertility-and-subluxation-based-gonstead-chiropractic-care-a-case-study-and-selective-review-of-the-literature/>

26. Alcantara J, Doucet J. Improvement in a Pediatric Patient with Craniosynostosis Undergoing Chiropractic Care. *J Ped, Maternal, Fam Health Chiropr*. 2010;2:35-40. URL <https://vertebralsubluxationresearch.com/2017/09/11/improvement-in-a-pediatric-patient-with-craniosynostosis-undergoing-chiropractic-care/>



As a philosophical pragmatist I see this and accept it as being the way that chiropractic is. Kawchuk et al give chiropractors no reason to change while casting aspersions on the work undertaken by physical therapists. It is they who deserve to feel duded by this paper of *Artificial Stupidity* and all the *Journal* can do is repeat the advice of physiotherapist Wright, 'it would be prudent for clinicians to continue to apply joint manipulation with a good deal of specificity.'

Conventional chiropractors know this, anyway.

### A profession of extremes

As I write this editorial in late-December 2021 most parts of Australia are coming out of lockdown. The exception is Western Australia, a left-wing state with an isolationist policy. To show how the rest of the country thinks about WA, the business that is *Cricket Australia* which looks after the game of cricket in Australia, have chewed their cigars and removed from Perth, the capital city of WA, the rights to host one of what we call the 'Ashes' games. This is a big deal, the equivalent of the World Cup in baseball in the US.

Still, conventional chiropractors in WA remain busy, having ridden out the lockdowns and other restrictions. However while most chiropractors across Australia remain busy, there are some who choose not to be. A Sydney practitioner, who participated in a nude bike ride in Melbourne, posted on his social media page:

*my practice is slow. But the good thing is that I never have to rush a patient which means better outcomes. If anyone wants to book an appointment with me directly, I can acquire a room... but it might be after some of the other practitioners have gone home... as then there would be a room available. And I'm fine with working in the evening 😊 (27)*

Melbourne's radio news reported (6 December 2021):

*'Dozens of cyclists rode through Melbourne naked at the weekend. The World Naked Bike Ride is an annual international clothing-optional bike ride in which participants ride together to peacefully protest issues including body image, cyclists safety and alternative lifestyles. NSW-based chiropractor Michael Trowbridge came down to Melbourne for the weekend to take part. "It was very liberating," he said'. (28)*

We present Dr Trowbridge below:

Photo by PAUL ROVERE. Published by The Age, Melbourne. Captioned: 'Michael Trowbridge and Annette take part in the 2021 Naked Bike Ride in Melbourne, Australia.' Link above.



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27. Trowbridge M. Facebook post. 4 Feb 2019. [https://www.facebook.com/swansearchiro/?\\_\\_cft\\_\\_%5B0%5D=AZX0UKz-nrs-Hm2G3dJmGTphNqqkwqeol3iMjdLWdVC5BEywU1FR0JZli5xaMS3xCjAR1VnUPv9zgDDHT11z-4eiqzBzBGrglGKDvWuB9GQYrcFcsQ0Z2WTXBVn2QstHNRw2LB Ro8bOpAGrDOs\\_rak-l&\\_\\_tn\\_\\_=-UC%2Cp-R](https://www.facebook.com/swansearchiro/?__cft__%5B0%5D=AZX0UKz-nrs-Hm2G3dJmGTphNqqkwqeol3iMjdLWdVC5BEywU1FR0JZli5xaMS3xCjAR1VnUPv9zgDDHT11z-4eiqzBzBGrglGKDvWuB9GQYrcFcsQ0Z2WTXBVn2QstHNRw2LB Ro8bOpAGrDOs_rak-l&__tn__=-UC%2Cp-R)
28. 3AW 693 News Talk. News: "Very liberating": Naked cyclists ride through inner-Melbourne'. URL <https://www.3aw.com.au/very-liberating-naked-cyclists-ride-through-inner-melbourne/>

My question is, why did the reporters single-out a nude *chiropractor* in a public place, and promote that in words and pictures across multiple media? (Note: *The Age* and *Radio 3AW* have common ownership, and it is NOT Murdoch). Fate? Coincidence? Or a planned publicity stunt?

Doesn't our profession have dignity anymore, or is this all part of the failing US experiment in Wokism? Will the Australian registration board which hunts down chiropractors for daring to suggest they may assist with gastrointestinal reflux, take any notice of a 'chiropractor' doing a nudie run in public and seeking media coverage? My bet is the Board will ignore it.

As for me, I prefer to keep my clothes on, and those who know me are grateful for that. But it must be said that our profession ranges from those happy to work out of medical rooms in Sydney's CBD alphabet district, see a handful of patients, and travel to another city to ride naked in the streets, to those who are just too darn busy doing what a chiropractor does. Last year (27, [2 August 2020](#)) Dr Trowbridge found it worthy of a post to show off his colourful face mask. Insignificant trivia, but a member of our profession and deserving of our respect.

On the other hand, a colleague of mine just relocated his clinic in Brisbane's CBD and cared for 29 patients on his first morning in his new chiropractic rooms. I might just fly the thousand miles to Brisbane to have a look at his new clinic, complete with an architect-designed Principal's Desk, and accept the privilege of an adjustment while I am there. Then we can have lunch, and I'll fly home again.

And not a bloody bicycle in sight!

Happy New Year to all readers. We need to wait until 1 February to wish Happy Lunar New Year, but what the heck, enjoy being a chiropractor and know that what you do, wherever and however you do it, provides an immensely valuable contribution to our society.

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### Note

A Systematic Review (SR) is often seen as the 'go-to' methodology for those lacking the initiative to develop and undertake original inquiry. It has usefulness when the search methods and string development are used to probe the vast base of literature to find papers that may be connected in some way.

The idea of filtering found papers down to a handful and then drawing a new conclusion from the multiple conclusions of others is the point where SRs fail. The greatest weakness is that a SR collects a set of of 'Type N of 1' papers where a small number, in this case 10, of papers by authors with inconsistent training apply a range of different methods for a range of different purposes and report a range of different outcomes. These are collected and

massaged to fit a broad research question constructed by the review team from different research projects in an attempt to derive a meaning of value from the work of others.

A 'Type N of 1' paper is one which is unique to one group of researchers addressing one particular question using one particular method, and reporting one outcome. It is not possible to standardise a research question across a collection of such reports as these authors admit, it '*was not possible to pool the results for meta-analysis due to heterogeneity in study design, the SMT application, and participant characteristics.*' (1, Data Synthesis)

Yet the authors proceed to draw a sweeping conclusion at odds with the broad findings in their article. They demonstrate this can appear to be done with the assistance of statistical manipulation which is essentially meaningless in the real world of clinical practice.

The Cochrane Collaboration uses the SR to report big data from big studies addressing a highly controllable examination of the performance of a highly controllable product, mostly a pharmaceutical application. In this situation, SRs tend to work and give an idea of expected outcomes should that pharmaceutical product be used in any one individual patient who happens to roughly match the study groups; in this sense they extrapolate from the general to the specific with no guarantee the specific will match the general.

The one good thing about SRs is their ability to mine the literature and find pieces of work that approximate the ideas of the people conducting the SR. In the field of manual medicine they are a weak tool to attempt to agglomerate a range of individualised approaches to give a meaningful conclusion.

