

Looking forward, looking back: Slim Dusty, Apple

The work of Suh

Phillip Ebrall

Those chiropractors in the '30y plus' club will remember the excitement around the work of Suh as it happened. The *Journal* is delighted to pay tribute to Suh's work and thanks Dr Joseph Ierano for his writing to accompany the video we publish and index on the record.



The abiding question is, what happened to Suh's discoveries? Why do they seem to have come to a dead-end? With the hindsight of history and with a little help from my colleagues Dr Lou Sportelli, Dr Reed Phillips, and Dr Tony Rosner. I will give the hard news that his work seems to have promised more than it delivered. Let me explain.

The *University of Colorado* was one of the first institutions outside the private chiropractic college framework of education to become engaged with research of relevance to chiropractic. We have to face up to the fact that at the time, chiropractic colleges were generally weak in the matter of serious research.

Suh held a PhD and along with some others was looking into the bio-mechanics of the spine, hopefully as it related to chiropractors. Suh's discoveries were hailed as a major event particularly since he was the first individual to receive a *National Institutes of Health* (NIH) grant related to chiropractic research. However the profession over-blew it. As one advisor told me 'the hype was unbelievable'.

The hype of the times promised amazing new outcomes and answers that were much greater than any single 'finding' could possibly accomplish. However this 'making of noise' served the profession well as the AmCA became involved, perhaps reluctantly and secondary to the active interest being shown by the ICA. Also the Foundation for Chiropractic Education and Research (FCER) then came into the picture.

The FCER's engagement is perhaps the marker of the major shift in the profession's attitude to research, and it is thought that the example of Suh, as a PhD-level researcher provided the

impetus for now notable researchers like Jay Triano to undertake their doctorate and firmly establish a new level of scholarly work in chiropractic inquiry. It is understood the FCER supported Triano in part, as they later did with me for my doctorate in which I was a grateful recipient of an FCER Research Fellowship. (1)

But Suh's findings did not travel well. Nor was his funding renewed for reasons yet to be discovered. However Suh's scholarship was certainly the wake-up call that caused a major shift in the attitude of the profession toward research.

As such, today it is appropriate to consider Suh's work (2, 3) as one of the early 'events' that focused the profession on the value of doctoral-level research, properly conducted and well-reported. This was a paradigm shift, remembering that it takes a significant event to shift a profession's way of thinking, and the shift was towards the value of scholarly inquiry to validate and advance the profession rather than litigation or legislation.

Die-hard Palmer alumni will cry poor as to the considerable and scholarly inquiry of BJ Palmer also failing to maintain impetus, however I would suggest that political issues had more to do with this; at that time Nugent's 'do-or-die' steamrolling to standardise and accredit chiropractic's educational institutions (4, 5) can be considered to have pushed research aside.

While we can learn from history that there was not a huge outcome from Suh's work in Colorado we must remember the significance of it marking the beginning of serious interest by both the ICA and ACA on the need for and imperative of research for the profession.

Similar questions and consideration can apply to the work of Sato, (6) of Sandoz, (7, 8, 9) and of 'Cleveland's rabbits', (10) giving the profession three pockets of deep intellectual inquiry spread around the world. The burgeoning research (11) was gathered into what is now a seminal text by Kirkaldy-Willis. (12)

It may be very much to the profession's eternal detriment that it lacked mechanisms to multiply these early efforts into meaningful findings that would provide irrevocable evidence for the mechanisms associated with spinal correction, however it may be that this specific use

- 9. Sandoz R. Chiropractic care of the aged patient. Ann Swiss Chiropr Assoc 1985;8:167–91
- 10. Agos S. Cleveland's rabbits: The use of animals to study vertebral subluxation. Chiropr Hist. 2016;36(1):63-9.
- 11. Kirkaldy-Willis W, Cassidy D. Spinal manipulation in the treatment of back pain. Can Fam Physician. 1985; 31:535-40.
- 12. Kirkaldy-Willis WH, Burton CV. Managing low back pain New York: Churchill Livingstone. 1992.

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^{1.} Ebrall P. Research Fellow, Foundation for Chiropractic Education and Research: 1995, 1994, 1993.

^{2.} Suh, CH. The Fundamentals of Computer Aided X-ray Analysis of the Spine. Relevant texts and extracts. J Biomechanics. 1974;7:161-9.

^{3.} Suh, CH, Sharpless, SK, MacGregor RJ, et al. Researching the Fundamentals of Chiropractic. ACA J Chiropract. 1975;IX:S-17.

^{4.} Gibbons, R.W. (1985). Chiropractic's Abraham Flexner: the lonely journey of John J. Nugent, 1935-1963. Chiropractic History. 5:45-51.

^{5.} Gibbons, R.W. (1997). Historical perspective: John J. Nugent, DC (1891-1979). Journal of the American Chiropractic Association. January:33-5.

^{6.} Sato A, Schmidt RF. The modulation of visceral functions by somatic Afferent Activity. Jap J Physiol. 1987;37:1-17.

^{7.} Sandoz R. Some physical mechanisms and effects of spinal adjustments. Ann Swiss Chiropr Assoc undated 91-141 Held as physical issue in the Ebrall collection.

^{8.} Sandoz R. Some physical mechanisms and effects of spinal adjustments. Ann Swiss Chiropr Assoc 1976;6:91-141 Google Scholar https://ci.nii.ac.jp/naid/10016400801/ [Note: this paper is not indexed by the Chiropractic Library Collaboration (as of 2018)

of science to elicit these mechanisms was not ideally suited to the reality of the chiropractic encounter.

Looking at present research activity it seems that the profession is somewhat repeating work (13) to reinforce what is already well established as tenets within the profession. I guess there is an argument in favour of testing our tenets, at which point my question would be 'at what cost'? Not just in terms of money spent, but as the real cost in terms of what are we not investigating that could really advance chiropractic towards being the primary mode of non-medical care for people with long-COVID for example.

Monika Buerger (14) is working to advance these ideas and makes the observation '... the adjustment helps the patient better process their world'. The profession must also be appreciative of the doctoral research by Donald McDowall (15) that builds on DD's starting position and points to a future direction to explore in detail the clinical effects of the things that chiropractors do to strengthen an individual's tonal abilities to 'live better'.

Chiropractors must never lose sight of the wisdom of DD Palmer who, over a Century ago, wrote:

'Life is the expression of tone. In that sentence is the basic principle of chiropractic. Tone is the normal degree of nerve tension. Tone is the expression in function by normal elasticity, activity, strength and excitability of the various organs as observed in a state of health. Consequently, the cause of disease is any variation of tone - nerves too tense or too static.' (16)

An understanding of chiropractic's founding position and some significant events from *'looking back'* helps us to better *'look forward'* and work harder to create the profession's future as specialists with the *neuro*musculoskeletal systems

Phillip Ebrall

Professor of Chiropractic

BAppSc(Chiropr), GC Tert Learn Teach, MPhotog, PhD, DC (Hon), FACCS, FICCS

Research Scientist: History and Philosophy - Chiropractic [Field 220299]

pebrall@me.com

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^{13.} Eklund A, De Carvalho D, Pagé I, et al. Expectations influence treatment outcomes in patients with low back pain. A secondary analysis of data from a randomized clinical trial. Eur J Pain. 2019 Aug;23(7):1378-1389. DOI 10.1002/ejp.1407. Epub 2019 May 20. PMID: 31034102; PMCID: PMC6767754.

^{14.} Beurger M. Interview with Marcus Chacos. Clinical applications of chiropractic philosophy. Australian Spinal Research Foundation. URL https://drive.google.com/file/d/1mxwABwydJ9lMaSZ6zJYHm3RZL89gaWDB/view?usp=sharing

^{15.} McDowall DA. Daniel David Palmer's heritage and his legacy of tone to chiropractic (Diss). Southern Cross University. DOI: https://doi.org/10.25918/thesis.121

^{16.} Palmer DD. The Chiropractor's Adjuster: The Text-Book of the Science, Art, and Philosophy of Chiropractic. Portland, OR: Portland Printing House, 1910.

