

THE CONVENTIONAL IDENTITY OF CHIROPRACTIC AND ITS NEGATIVE SKEW

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ABSTRACT

Objective: To discuss the professional identity of chiropractic as evident in the profession's literature.

Methods: Structured literature review followed by a pragmatic historical narrative of found artefacts.

Results: The literature appears vague regarding chiropractic's identity.

Discussion: The literature does allow a broad determination that the identity of chiropractic is unimodal gathered around the founding premise of DD Palmer with an informed prediction of a left-skewed, negative distribution of concessional chiropractors representing no more than 30% of all. It appears this minority becomes more dogmatic as it concedes elements of conventional identity and adopts extreme evidence-based musculoskeletal medicine to become a sect of about 0.2% of all. About 70% of chiropractors identify with subluxation in an evidence-informed context and I call this representation the conventional chiropractic identity.

Conclusion: The identity of chiropractic may now be described as conventional when its practitioners adhere to the profession's founding precepts, or concessional when it modifies or ignores these. The majority of the profession can be considered conventional. (*J Contemporary Chiropr* 2020;3:111-126)

Key Indexing Terms: Chiropractic; Identity; Subluxation.

INTRODUCTION

The premise of chiropractic is straight forward; subluxed vertebrae compromise the nervous system, modulating tone and the resultant state of Wellbeing. (1, pp 404, 632, 656, 659) Variants of this idea are found throughout the medical literature of the 16th through 19th Centuries (2,3) and the chiropractic literature of the 20th Century. (4)

Palmer's original contribution was the use of the spinous and transverse processes as levers to manually replace subluxed vertebra (5), thus avoiding the painful medical approach of cauterizing with a hot iron, without

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anesthetic, to create a blister over the spinal segment or creating painful irritation with surgical incision. (6-8) His new method to correct a subluxed vertebra became known as the chiropractic adjustment and these behaviors indisputably constitute conventional chiropractic (9) notwithstanding a vocal minority who think otherwise. (10) That which Palmer founded as 'adjusting by hand' (11) is now colloquially known as 'cracking backs.' (12)

One would think the practice of manually adjusting subluxation would form a consistent identity for the profession Palmer founded but this was not to be. In his mid-1990s thesis (13) examining chiropractic in Australia, sociologist O'Neill noted 'the deceptively simple question "what is a chiropractor" still lacks a definitive answer.' (14) The same question had been posed 20 years earlier by Haldeman, who came to be an eminent member of the profession. He asked 'what is a chiropractor, and what does he do?' (15) Not one of a recent series of 13 papers addressing the question 'what is chiropractic' and reporting 'papers describing the chiropractic profession and chiropractic practice' addressed identity. (16, Table 1)

This question would be answerable with a common professional identity that did not distinguish between the discipline as a body of knowledge forming the science of chiropractic, and the profession as the group of people engaged or qualified in expressing that knowledge, based on standards of practice, codes of ethics and of professional conduct. It is the lack of a professional identity gathering these that the evidence shows to allow contemporary counterfactual argument within and about chiropractic.

This paper applies the methods of a pragmatist to examine chiropractic's professional identity by considering a historical context for adjectives descriptive of chiropractors, such as 'straight' or 'mixer', and 'dogmatic' or 'evidence-based.' Australasia allows a case study of identity as it developed outside North America, the founding home of the profession. In Australasia the delineating terms are 'main-stream' and 'second-stream.' (17)

This paper addresses the research question 'what is the professional identity of chiropractic' and will identify the terms 'conventional', 'concessional', and 'negative left skew' as appropriate descriptors in the 21st Century,

formalizing the split identity that emerged during the first decade of the profession.

METHODS

The literature of professions was searched to establish a contemporary interpretation of 'identity' in the context of a health profession. The discipline's literature as indexed by the Chiropractic Library Collaboration (18) was searched for primary data, and secondary data were found by citation harvesting of returned papers from the initial search. The standard assessment processes used by historians to validate found papers and related resources were applied. Primary sources were evaluated by understanding who wrote it, what questions were addressed, and why? (19) The 6 evaluative questions identified by Garraghan (20) to validate historical artifacts were consistently applied to all papers.

The initial search term was 'identity' and I report that the literature does not return a common, shared professional identity for the chiropractic profession; also, that various professional bodies including the World Federation of Chiropractic (WFC) lack commonality in their understanding of the profession they represent.

RESULTS

The Matter of Professional Identity

In general a profession is an occupation based on skill or education (21) where the holder has autonomy. (22) The themes of professional identity are given as 'selflabeling as a professional, integration of skills and attitudes as a professional, and a perception of context in a professional community.' (23) Chiropractic appears as a profession to the public (24-26) and to health-care peers. (27) Given that chiropractors exist under legislation in over 40 countries (28,29) they are considered as health practitioners and the occupational regulators and education accreditors are overt regarding the need to demonstrate professional skills and attitudes. (30) Indeed, 'Universal Competency 1' of the Council on Chiropractic Education Australasia (CCEA) is 'Practicing Professionally'. (30 p. 10)

The Matter of Chiropractic Identity

Different positions within chiropractic are shown to have different ideas of what chiropractic is or should be (31-34) Individual opinions (35,36) range from it being a drug-free (37) wellness profession (38) treating beyond the spine (39) to only a spine-care profession with manual methods, (40,41) or, in a basic form, centering on the analysis and adjustment of vertebral subluxation. (42)

The literature offers few published intellectual constructs of chiropractic identity beyond the unimodal position given in my introduction. Arbitrary positions are promoted by most commentators with presumed authority and I offer

this critique on the basis of my systematic analysis of the chiropractic literature undertaken in March 2019 using the search string 'papers given as first-level related from chiropractic [mesh] AND (subluxation [ti] OR subluxation [ab])' in the form "'chiropractic"[MeSH Terms] AND (subluxation[ti] OR ("joint dislocations"[MeSH Terms] OR ("joint"[All Fields] AND "dislocations"[All Fields]) OR "joint dislocations"[All Fields] OR "subluxation"[All Fields]))'. 101 papers were returned and all were one or more of opinion, cohort studies with ill-defined terms, literature reviews, or other.

As a pragmatic historian and educator I argue that vagueness envelops the professional identity of chiropractic. My use of the term 'vagueness' is after Swinburne's examination (43) and includes inexactness and imprecision, qualities that are appropriate to describe ongoing argument over basic clinical procedures within chiropractic. To demonstrate polar divergence I present 2 examples: a conflict regarding the role of radiography, and actions by a minority to become part of medicine complete with prescribing rights for listed medications.

The Radiography Cleft

With regard to the clinical use of radiography in chiropractic practice there are 2 strongly held opposing views. I accept this as evidence of a heterogeneity of clinical ideas within the profession. (44-52) My critical interpretation of this heterogeneity is the dissent by 1 group from the opinion of another regarding clinical radiography.

The evidence in this case reveals 2 quite different standards (53-56), each claiming to be best practice for the use of diagnostic imaging in clinical chiropractic. Both groups claim to be evidence-based, with 1 aligned with evidence seen through a biomedical lens and the other with evidence seen through a lens of chiropractic clinical practice. In turn, this leaves educational institutions presented with a choice between 2 conflicting versions of evidence, (57) if indeed a choice is needed to teach clinically-based practice standards regarding chiropractic radiography or the medical view where the diagnostic intent of imaging is different. The debate is acrimonious (46) and ad hominem. (58)

The pragmatist's perspective is that the clinical chiropractic view predates the biomedical view by decades and that pre-treatment radiographs provide important clinical information. Some consider they are required for safety (59-61) while others consider otherwise. (62) A critical analysis of the biomedical approach promoted by the WFC suggests flaws in its basic understanding of clinical chiropractic practice by applying the standards of medical care to a patient under chiropractic care. (63) The inability to understand this distinction seems to underpin the WFC's position

in another matter (64) and I make this point here as it appears the contemporary divided professional identity can be resolved to being 1 of 2 interpretations of clinical practice as a chiropractor. These are either a conventional view through a chiropractic lens or a concessional view through a medical lens.

The Medicine Cleft

The complexity of the argument about seeking medical privileges such as issuing prescriptions for pharmaceutical products is such that this paper can only make the briefest notation that it seems to stem from one or two colleges (65,66) embracing the idea that chiropractic is medicine. My brief summation will commence with a journal that arose independently, in Illinois in 1988. The *American Journal of Chiropractic Medicine* closed after three years of attempting to establish a field of 'chiropractic medicine'. In spite of being a peer-reviewed, indexed journal with appropriate processes and an established editor it came to an ignominious end. The editor, Roy Hidlebrandt, a 1949 graduate of Palmer College, had previously worked with Janse of the National College of Chiropractic (NCC) to establish the *Journal of Manipulative and Physiological Therapeutics*. (67) Throughout its 12 issues the *Am J Chiropr Med* argued its need to exist however the profession thought otherwise and did not embrace it.

NCC, which reinvented itself as a health science university, now delivers chiropractic education as 'a doctor of chiropractic medicine.' (65) The institution has taken this program to Florida (68) which has caused consternation in that state among other institutions competing for the chiropractic-student-dollar. (69) Further, NCC as a university is trying to revive the idea of a journal of chiropractic medicine. (70) Its readership is not known and the lead paper in the June 2019 issue was to do with physiotherapy applied to the viscera, (71) a discipline and a clinical approach traditionally not considered chiropractic nor even a variant within Palmer's founding ideas; (72) the September 2019 issue strays into osteopathy. (73) As another example, Kaiser University states 'Our vision is to be the nation's leading school of chiropractic medicine.' (66)

This 'medicine' cleft is between those chiropractors who consider chiropractic to be the conventional form established by Palmer as the identification and correction of subluxed vertebrae and those who concede Palmer's founding principles and seek to create their own variant of the discipline. From this observation I derive my categories 'conventional' and 'concessional.' In Australia these positions were manifest as 'mainstream' (74) where training occurred in a North American chiropractic college, and 'second-stream' (75-79) when it did not, requiring self-proclamation to claim an identity as a chiropractor. (80)

I summarize these 2 positions by suggesting a chiropractor may either be an expert in spine-mediated health and well-being which frames their approach to health care in a conventional chiropractic manner, or they may take a position of being a manual therapist with some training in chiropractic and see the patient through medical eyes as a diseased or injured person to be managed. This is disease care, the province of medicine. (81)

DISCUSSION

Chiropractic Identity as Founded

Palmer's belief system held his approach as pure (72) on the basis he founded and developed it; in this sense it can be only this foundation concept of chiropractic that is able to be considered as conventional chiropractic; all else is a modification, addition, or a concession of some aspect.

Palmer's early graduates were also certified to teach his methods and this quickly gave rise to a number of different colleges. (82-85) In at least 1 case his graduates formed another discipline, naprapathy. (86) Oakley Smith, an 1899 Palmer graduate (87-89) and Solon Langworthy, another early graduate (1901, 90 p. 38) founded the American School of Chiropractic in Cedar Rapids, (91) nearby to Palmer's school. They co-authored the profession's first recognized text. (92) Their teachings were a mixture of chiropractic and osteopathy and it was this that caused Palmer to coin the term 'mixer.' He wrote 'if you want a mixture of Osteopathy, Orthopedial Surgery, Vibratory Chiropractic and Bohemian treatments, go to Cedar Rapids ...' (72 p. 6)

In 1914 (1) Palmer made his view known that structure and function were closely related, writing 'Behind all abnormal functions, is the change in the structure of nerve tissue and an increase or decrease of nerve vibration.' (p. 28) 'Normal structure' and 'normal vibration of nerves' is denoted by 'tone.' (p. 32) Others (93, pp. 8-13) have reinforced the intimacy of function with structure, in particular small changes termed subluxation that occur between contiguous vertebrae. The clinical behaviors around that premise establish chiropractic as a narrated phenomenon and warrant my approach as a pragmatist to seek meaning among these various narratives.

Chiropractic as an Entity Today

Chiropractic is a reality through its commonality as a ubiquitous health-care practice in some 91 countries (94) with the most recent to introduce legislation being Lebanon. (95) Globally there are about 105,000 practitioners, with most practicing under legislation. (28,29) This statutory identity provides the boundaries for the relevant occupational regulator. In the global sense chiropractic is recognized by the World Health

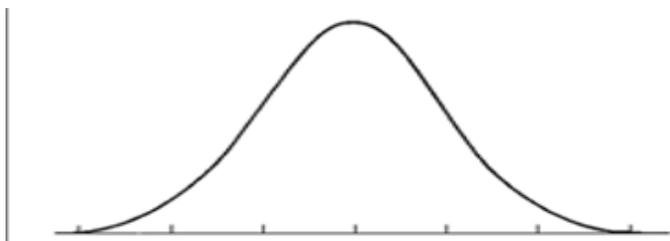


Figure 1. Putative Gaussian distribution of chiropractic identity, after Wardwell, (104) Jamison, (105) Good (106) Kent (107) and Coulter (109)

Organization (WHO) (96) which outlines a range of basic training requirements. A number of conditions treated by conventional chiropractors, notably subluxation, (97,98) are given in the *International Classification of Diseases Tenth Revision, Clinical Modification (ICD-10-CM)*. (99)

Expressions of Chiropractic Identity

The most simplistic interpretation has been addressed, that of 'straight' or 'mixer' together with its origin. This bimodal polarity was used in the 1960s by the American Medical Association (AMA US) as a means to disempower chiropractic. (100) Interestingly, Throckmorton had little concern for straight chiropractors; as legal counsel to the Iowa Medical Society he warned the 'mixers' were more of a menace to medicine. (p. 6 Section F)

Today an extension of this identity is presented by chiropractors from a vocal minority calling for medical prescription rights. (101,102). To counter this, the International Chiropractic Association (ICA), an affiliate of the WFC with the potential to be an alternative global association, has issued a public statement to oppose expanding the chiropractic scope of practice to include the prescribing of 'dangerous drugs.' (103) It is a relatively straightforward conjunction to suggest those chiropractors wishing to practice chiropractic as part of medicine are placing themselves in a concessional position which by definition is weaker than maintaining the conventional chiropractic position of being distinct from medicine.

In contrast to the dichotomous 'straight/mixer' identity, Wardwell, a noted (13) American sociologist, thought of chiropractic that the profession showed a Gaussian distribution of identities. (104) I represent his concept in Figure 1 using imagined data drawn from estimates by Jamison, (105) Good, (106) Kent (107) after Edwards, (108) and Coulter. (109) The literature consistently reports the majority of chiropractors as holding views about subluxation and of the value of evidence and I depict this as 'conventional,' forming the peak of this curve. The empirical rule (110) says about 68% of a normal distribution gathers around this central peak, leaving a left tail and a right tail. Chiropractic shows a small group that statistically fall as the left tail,

progressively rejecting subluxation and insisting only on providing their interpretation of evidence-based care. In Figure 1 I term this tail 'concessional,' representing those chiropractors who concede the foundation premise of chiropractic.

Wardwell's idea had merit at the time he coined it, as the literature of that period shows hard-core tails that were a concern in the 1970s and '80s due to the presence of dogmatic 'straight' positions. (111-113) However it has not been possible to locate current evidence of a right-tail; 1 of the papers returned is a 1996 commentary in a trade magazine by Seaman ('Who are the left-wing and right-wing chiropractors?') (114) that concluded as I do that there is no 'right wing.' He also concluded there is no 'left-wing,' which seems correct in today's terms.

I cannot make any scholarly argument that supports a Gaussian distribution; rather, the evidence is emerging to better understand the unimodal distribution. Richards (115) surveyed Australasian chiropractors to seek their self-categorization from a range of choices of how they viewed their practice style. In very broad terms he found the majority supported a vitalistic view and a minority a mechanistic view. He reported (115) that the mechanistic minority reject vitalism perhaps because of seeing it as a hindrance. (116) To qualify as bimodal these 2 groups would need to be either or about the same size, (117) individually cohesive, and 'have a fair gap between them ... not just random fluctuations.' (118)

The more recent findings of Glucina *et al* (119) reflect Richards' distribution, 'vertebral subluxation is an important practice consideration for up to 70% of chiropractors.' Should this majority be considered as representing the 'conventional' distribution shown in Figure 1 as about 68% (rule of thumb), the tail towards the left would represent the biomechanical, non-vitalistic, concessional grouping, representing at most about 30% of the profession. The resultant left-skewed distribution leaves the majority of the profession, about 70%, grouping towards the right as conventional chiropractors, tailing to-wards the negative left as chiropractic's founding ideas are progressively jettisoned.

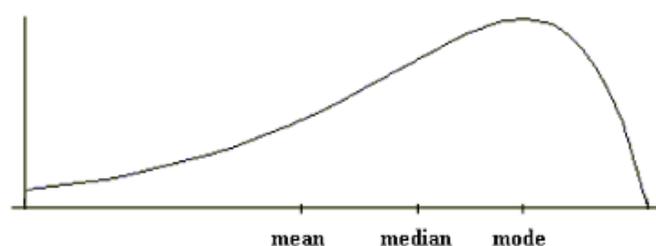


Figure 2. Predictive left-skewed distribution of chiropractic identity presented in this paper

In Figure 2, I attempt to show this distribution as a predictive curve should my findings in this report have substance. Of interest is the placement of the mode which a skewed, unimodal distribution allows. The mode is a representative value as the measure of central tendency and as such it is the 'thought position' around which the data is centered. In this representation I show the identity of chiropractic as unimodal and conventional. The tail must be seen as an aberration, perhaps suggesting a fragile nature likely to fracture from the mainstream, conventional chiropractic identity. This probability has been canvassed. (120-122)

The evidence returned for this paper shows there are many opinions as to what the identity of chiropractic could be and these fall either on the side of Palmer's founding concepts (vitalism), or outside them (mechanism). conventional or concessional.

The Rosner Categories

Rosner, a biochemist with an understanding of chiropractic, published an identity structure drawn from his examination of the literature and summarized in Table 1 with my added clarifications. (123) Rosner's proposition characterizes a profession of complexity with 6 traits that seem to form the shape of conventional chiropractors as they exist in this 21st Century.

It is straightforward for a chiropractor to consider each of Rosner's characteristics and determine the extent to which they practice in this manner or not. The literature suggests that concessional chiropractors would rank low against numbers 3 and 4 with ambivalence about numbers 1 and 2. The reduction of this grid to just 2 points, numbers 5 and 6, serves to distinguish a concessional chiropractic identity from the conventional.

The literature shows a small subset of about 10 chiropractors who completely reject subluxation in addition to the Research Committee of the WFC (46,50,51). Members of the WFC Research Committee resigned en masse at the time of writing this paper and the professional destination of those former members is not yet publicly known. In addition to these, the following have published concessional views: Walker, (120) Mirtz, (121) Reggars, (124) Simpson, (125) Young (126), Perle, (127) and Mirtz with Perle. (128) Walker and Perle hold influence as journal editors. (129) Together with 37 self-proclaimed 'expert chiropractors' (130) and some 150 'signatories' to a specific position of chiropractic politics, (131) these some 200 concessional practitioners represent approximately 0.2% of all chiropractors.

There is also a tangential thread of Danish thought unraveling from what the literature shows is the conventional practice of chiropractic in Denmark. (132) The profession has developed in Denmark regardless

Table 1. Traits of conventional chiropractors after Rosner (123)

Rosner Criterion	Expression in conventional chiropractic
1. Concepts of manual medicine	The context of an holistic approach to the body as an integral whole, greater than the sum of its parts, within ailments may be managed without drugs or surgery.
2. Areas of interest beyond the spine	An understanding that the spine is central to the functioning of the total individual and is reflected in the state of the individual's health, both actualised and potentiated.
3. Concepts of the chiropractic subluxation	An understanding of the functional anatomy and neurophysiology of the spinal motion units and other joints with acceptance that these may become dysfunctional and potentially correctable by manual intervention primarily as spinal adjustment.
4. Concepts of neurology	An appreciation of neurology in the domains of objective findings (motor, reflex, sensory) subjective reports (sensation, pain, autonomic responses) and abstract dimensions (cognitive, affective, evaluative).
5. Concepts of mainstream or alternative health care	Unfettered public access, typically under jurisdictional legislation.
6. Concepts of primary care, first-contact provider, or specialist.	Allowance of practitioner choice from solo private practice to being a member of a health care team.

that 'government's dualistic action relative to the Danish chiropractic community' may have 'inhibit(ed) the spontaneous evolution of contemporary Danish chiropractic practice.' (133) Its characteristics include nearly half (47% in 2014) (134) of practitioners being trained locally at the country's only chiropractic training program delivered as 'Clinical Biomechanics' (135) and developed to build the profession's legitimacy. (136) As expected the management of low back pain accounts for around half (49%) of all patient visits. (137) Within the Nordic region both maintenance care (138) in the absence of evidence beyond 'reasonable consensus' (139) and infant care is common (140) including for infantile colic, (141) a practice cautioned against in Australia (142) with the suggestion that such practitioners require 'a minimum 2 years of post-graduate training in pediatrics' and Board endorsement. (143)

This unraveling from the conventional is concessional, dogmatic 'evidence-based musculoskeletal medicine' (EBMM)* which sits outside scholarly debate and offers extraordinary propositions (122,144) which have been

countered with argument (145) from philosophical pragmatists in the Eastern tradition, and from the conventional position. (146) That attitude sits outside the conventional or mainstream model of chiropractic and is contrary to much evidence, clinical experience, and patient initiated reports and observations.

This internal Danish inconsistency reflects from the WFC Research Committee (147) with some members signaling a shift away from the conventional position. There is a media report (148) that the behavior of this thread was an embarrassment to the profession at a global meeting in Berlin in 2019. The ICA has formally complained about this to the WFC on more than 1 occasion. (149,150) The behavior is seen as a reason for financial supporters of the WFC to reconsider their position. (151)

On the other hand the ICA represents conventional chiropractic (152) in contrast to the WFC which has adopted a concessional model by putting aside an identity of chiropractic it developed through extensive consultative processes (153) and instead adopting 'principles' of professional behavior (154) reflecting the ideologies of its contemporary leadership group. None of the 20 principles adopted by the WFC provide a professional identity; starting from their Principle One (1) 'We envision a world where people of all ages, in all countries, can access the benefits of chiropractic' they proceed through a non-evidence-based series of emotive statements with none capable of being a statement of identity for the profession they claim to represent. In stark contrast the World Chiropractic Alliance (WCA) (155) sees an identity of chiropractic as 'the only discipline that focuses on correcting subluxations and reducing the stress that interferes with the body's ability to self-regulate and heal.'

So What is Chiropractic?

In the absence of the literature returning an agreed identity of chiropractic alone a theory of chiropractic, (156) the profession is commonly described in terms of different paradigms. (157-160) This presents a dilemma for educators (161) and in the Australasian context there is divisiveness among Australasian educational institutions in the absence of an agreed paradigm of chiropractic that the accrediting body, the CCEA, (30) fails to address. Even the paradigm proposed by the Association of Chiropractic Colleges (ACC) (162) seems to have failed in uniting all colleges in the countries of its members. (163) Paradigm or not, the literature of chiropractic demonstrates vagueness with the matter of professional identity. (164)

This lack of a common agreement of the professional identity of chiropractic may explain the existence of 3 professional associations (165-167) in Australia and a fourth in New Zealand. (168) When the New Zealand

Association was first established in 1921/22 (169,170) it included the few US-trained chiropractors in Australia at the time but this did not last. The first formal chiropractic association in Australia was founded also by US-trained chiropractors, in 1938. (171)

Identity in Australasia

The introduction of legislation in Australia in particular brought 2 disparate groups together, (17,81) the chiropractor trained in North America, commonly at Palmer College, and considered mainstream by commentators, (80 p. 79 Table 2.3.1,172-177) and the practitioner trained in Australia, usually in naturopathy, then osteopathy and eventually chiropractic. Researchers have consistently classified these as 'second stream' (77-80,178,179) although this term is not welcomed by those (180) who may fit the category. (181,182)

Through the Grandfathering process at the time the statutory register was opened state by state, those states with a second-stream cohort allowed any person with an established practice to nominate themselves as a chiropractor or osteopath or naturopath and commonly all three. Only one state, Western Australia (WA), is noted (80) for holding a strict position on the required level of education to allow registration, limited to graduates from the United States and Australia's first accredited chiropractic program (183) at the Phillip Institute of Technology, Melbourne (PIT). The implication is that WA established chiropractic as a mainstream or conventional profession, an anomaly now the state is served by a local program at Murdoch University which teaches concessional chiropractic as evidenced by it being a signatory to the position statement relegating subluxation to history by the International Chiropractic Education Collaboration (ICEC). (184)

Broadly speaking, as chiropractic was settled in Australia the American-trained chiropractor graduated from a conventional mainstream program and the Australian-trained did not. Mainstream is defined by Peters and Chance as 'the philosophy, sciences and art of chiropractic from its discovery by DD Palmer in 1895 in Davenport Iowa, through its development at the Palmer School of Chiropractic by BJ Palmer, and at other chiropractic colleges, dealing with spinal relationships and neurological integrity and taught in residential courses at standards acceptable to the statutory examination and registration authorities of the day (primarily in the United States and Canada.' (179) By exclusion the definition of second-stream is chiropractic that is not mainstream and includes manipulation called 'chiropractic manipulation' by medical practitioners, physiotherapists' and others. (185,186)

This distinction continues today with 2 Australasian institutions (187,188) formally relegating the

subluxation as 'only of historical interest' and just two (189,190) of the remaining four claiming to deliver a curriculum that includes all 6 of Rosner's traits. Second-stream chiropractors now lead 3 of the 4 professional associations, (191-193) with New Zealand being the exception. (194)

How Did This Happen?

The development of chiropractic as mainstream and second-stream in Australasia is addressed in detail by me elsewhere. (17,80) In brief, the profession in Australia developed under the auspices of chiropractors trained at the Palmer school in America, representing the mainstream of chiropractic. A second-stream of self-proclaimed therapists variously as osteopaths, chiropractors, or naturopaths, or all three, formed a small collective of questionably trained practitioners, some of whom who persist today. Australasian education was based on models put forward in 1975 by Winter (171) and the main-stream association. (195) The purpose of Winter's report was to provide the curriculum for a university-level program of chiropractic education for which the entry level was matriculation to address what he saw as the lowest possible standard for registration being set by an inquiry conducted by the state of New South Wales (NSW). (196)

The NSW Inquiry recommended 'broadly, that all practitioners who manipulated, provided they had been in practice for 4 years, should be registered as chiropractors.' (196 p. 7, 3.1.3) It is this abrogation of a reputable standard of education which informs my understanding of concessional chiropractic as being that form of chiropractic which concedes or omits the Palmer foundations and at 1 time in Australia included osteopaths, naturopaths, and untrained persons; the model endorsed by the NSW recommendation. That 'second-stream' of chiropractic could be today's 'concessional' chiropractors as evidenced by the published narratives as shown in this paper.

CONCLUSION

Regardless of my axiological bias toward Palmer's founding idea the evidence shows that chiropractic may be considered as a unimodal profession, one that gathers about Palmer's founding imperatives with some who progressively reject them and tail away to a concessional identity which at its extreme represents EBMM Note: The term 'evidence-based musculoskeletal medicine' or EBMM emerged during the peer-review process and I adopt it as a descriptor of concessional chiropractic.

There is no more appropriate term than 'conventional' to describe evidence-based chiropractic in the mode of the founder's intent. The 6 Rosner traits (Table 1) represent an appropriate characterization of conventional

chiropractic. The literature reveals that there are chiropractors including those who are closely associated with a global body of national associations (WFC) that concedes that Palmer's ideas have no contemporary credence. The most appropriate category for these is 'concessional' on the basis of them conceding that the founder of the profession is irrelevant, as are his original concepts.

My conclusion is that when emotive interpretations and political agendas are stripped from the literature, the evidence shows that the professional identity of chiropractic is skewed with a negative left tail representing no more than 30% of the profession who concede Palmer's founding concepts by abandoning or modifying his ideas to suit their own agendas, whatever they may be, and about 70% grouped as conventional chiropractors in the manner of the founder. Predictive modeling shows the 'identity mode' is firmly gathered within the conventional majority.

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