A Bidimensional Analysis

of

Chiropractic Professional Practice Approaches:

Outcomes and Methods

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A Bidimensional Analysis of Chiropractic Professional Practice Paradigms: Outcomes and Methods

ABSTRACT

The chiropractic profession has been characterized over its history by a great deal of controversy, disagreement and confusion concerning such fundamental issues as scope of practice, professional objective, the role of diagnosis, and desirable patient/client outcomes. This paper analyzes current popular approaches to the chiropractic profession, and suggests an analytical, bidimensional framework to enhance understanding of the relationship among these approaches.

There are currently at least four major, overt paradigms/approaches to the question of chiropractic's professional objective and service role in the marketplace. These approaches are generally characterized as "therapeutic" (sometimes called "evidence-based"), the "traditional straight" (formerly known as "straight"), non-therapeutic (also variously known as "non-therapeutic," "meta-therapeutic," "straight," "objective straight," "vertebral subluxation-based," and "vertebral subluxation-centered"), and "patient-centered".

This paper presents an analytical framework that places these approaches in a matrix consisting of two dimensions: range of patient/client outcomes and breadth of practice methods employed. It explores how various professional approaches are captured by the interface between depth and method breadth. Further, this paper explores the nature of the language used to describe the various practice approaches, focusing on ways in which one approach is elevated at the expense of the others.

The paper presents a recommendation to resolve the semantic and political barriers that have created artificial obstacles to unity, and suggests nomenclature to clarify the true differences in paradigms, to create the potential for mutual respect within the profession, and to clear the way for improved understanding of chiropractic's societal role to stakeholders outside of the profession.

INTRODUCTION

The chiropractic profession has been characterized over its history by a great deal of controversy and confusion concerning such fundamental issues as scope of practice, professional objective, and desirable patient/client outcomes. This paper analyzes current popular paradigms and approaches to the chiropractic profession, and suggests an analytical, bidimensional framework to enhance understanding of the relationship among these approaches.

An evaluation of the writing on the role of chiropractic in contemporary health care reveals a number of approaches. These ideas have been presented in professional trade publications, in countless letters to the editors, and in scholarly publications and conferences. Most notably, the 2000 Conference on Philosophy in Chiropractic Education, co-sponsored by the World Federation of Chiropractic, the Association of Chiropractic Colleges and the National Board of Chiropractic Examiners, presented several papers by authors elucidating one or more of these viewpoints (Gatterman, 2000; Gelardi, 2000; Keating, 2000; Koch, 2000; and McGregor, 2000).

This paper offers a bidimensional analysis of these approaches to chiropractic, and in so doing, attempts to clarify the understanding of chiropractic's role in today's health care milieu, and to provide a mechanism for easing unproductive, intraprofessional conflict. The analysis in this paper is centered on viewing chiropractic practice as composed of two major aspects or dimensions. The first dimension involves the purpose, the "why" of chiropractic. It evaluates answers to such questions as; What exactly does chiropractic offer to the public? What service is it that chiropractic provides? What do people expect to accomplish by receiving chiropractic care?

The second dimension involves the "how" of chiropractic and answers the question, What exactly does a chiropractor do in the encounter with his/her patient? In other words, what methods are encompassed within the chiropractic profession?

Both of these dimensions are a continuum, with a scope of possibilities ranging from narrow to broad. Furthermore, these dimensions are independent from each other, and thus can exist in a wide array of combinations with each other. This paper develops a matrix of interaction of these two dimensions, and in so doing, provides a framework for better understanding the differences and similarities among the multiplicity of approaches.

Dimension I: The Chiropractic Outcome

This dimension evaluates the problem that the person who comes to a chiropractor expects to have resolved. Abbott (1988), in his evaluation of the professions, notes that each profession, in its fundamental state, solves a problem of one kind or another. In this context, this dimension addresses the issue of exactly what problem chiropractic addresses. This is not as self-evident as it seems. Or rather, it can be self-evident for participants within the chiropractic profession, but their answers are often at great odds with each other (for example, compare Donahue, 1990 with Strauss, 1994).

We note a continuum in this regard, from a narrow focus on health-related problems, to greater and greater breadth in problem focus. At the narrow end of the continuum is a focus on solving the "problem" of a limited number of pain conditions in the back and neck. Practitioners solving this "problem" focus on procedures to provide patients with relief (short and/or long

term) from the discomfort of these syndromes. Patients come expecting this service, and these practitioners bring all their professional expertise to bear on satisfying their patients' expectations (See Chapman-Smith, 2000 and Kaminski, Boal, Gilletter, Peterson, & Villnave, 1987).

Moving along the continuum, another point of view concerning the range of problems to be solved by chiropractors involves the broadening of the number of conditions treated to include a wider range of ailments beyond back and neck pain. Some of these commonly include: headaches, allergies, enuresis, asthma and menstrual ailments, and may even include all medical conditions, up to and including cancer. In this view of the nature of the problems that chiropractors solve, patients come expecting to be treated for a wide range of conditions, and the chiropractor uses all of his or her professional expertise to provide cures for these conditions (See Palmer, 1924).

On the far end of the chiropractic outcome continuum is the broadest range of problems to be solved by chiropractors. This end of the continuum corresponds to the WHO definition of health, in which health is defined as "optimal physical, mental and social well-being, and not merely the absence of disease or infirmity." This viewpoint sees the "problem" that chiropractic solves as not the alleviation of a particular condition or malady, but the provision of optimal function, of maximal physiological efficiency. Patients seeking this care come not to seek relief from pain, or even from illness, but rather to improve their ability to reach optimum levels of physiology and to experience greater levels of physical, mental, and social well-being. The chiropractor working with them brings all of his or her professional expertise to bear to provide this outcome for patients (For more detailed discussion of this approach, see Gelardi, 1996 and Strauss, 1994).

Dimension II: Chiropractic Procedures

The second dimension, perhaps surprisingly independent of the outcome dimension, relates to methods rather than objective. It is concerned with the actual work that chiropractors do in their interaction with their patients, and with the experience the patient receives in the chiropractic office. This dimension describes the actual procedures used in the chiropractor/patient interaction, as opposed to the outcomes dimension, which focuses on the goal of care.

Similar to the outcomes dimension, the methods dimension also ranges from narrow to broad, with the narrow end of the spectrum representing a narrow range of options for the chiropractor to use with patients, and the wide range providing a large number of professional options.

At the narrow end of this scale in chiropractic, the sole professional activity of the chiropractor is the spinal adjustment. At this end, the chiropractor's sole interaction with the patient is to locate, analyze and correct vertebral subluxations. No matter what the patient's intention for seeking care, and no matter what the chiropractor's desired outcome is, the sole method used is the correction of spinal misalignments causing interference with neural physiology. This has long been called "straight chiropractic" by both opponents and supporters in the profession (Strauss, 1994).

In the middle of this continuum, the adjustment is supplemented by the use of physiologic therapeutics and/or extremity adjustment/manipulation. These procedures are part of the mainstream of the profession and are taught at all but two American chiropractic colleges. They have been included as part of some chiropractors' methods since the early part of this century (Beideman, 1995). A chiropractor utilizing these procedures will generally use them in concert with the spinal adjusting service (or spinal manipulative therapy) offered to the patient. It is important to note once again, that the use of these procedures is independent from the outcomes orientation of the patient in the health care encounter.

At the extreme, broadest end of the continuum is the widest range of procedures available for use by the chiropractor. Here the chiropractor may use any of a range of procedures from alternative medicine, in addition to spinal adjustments, extremity adjustments and physiological therapeutics. The list is long, but may include any or all of: acupuncture, colonics, herbal remedies, homeopathy, meditation, aromatherapy, etc. Chiropractic has a long history of incorporating these kinds of procedures within its practice toolkit.

Table 1 illustrates the interaction of these two continua, and how this interaction provides a framework for better understanding the chiropractic profession.

Table 1: 3 X 3 Matrix of Bidimensional Analysis of Chiropractic Profession				
	Patient Outcomes			
Methods	"Musculoskeletal Health"	"Physician"	"WHO Health" Optimum	
	Treatment for Back and	Treatment of Diseases	physical, mental and	
	Neck Pain	and Conditions	social well-being	
Vertebral	Limited scope, limited	Traditional	"Neo-straight	
Subluxation	treatment range (Public's	chiropractic	chiropractic," "non-	
Correction	perception of "straight	_	therapeutic," "meta-	
	chiropractic"		therapeutic," "Objective	
	_		straight chiropractic"	
SMT, Extremity	Limited "Scientific"	New traditonal	"Expanded straight,"	
Manip., PT		chiropractic	Neo-straight plus"	
SMT, Extremity	Alternative approaches to	Naturopathy	"Everything for	
Manip., Alternative	back/neck pain		everybody"	
medicine				

Tables 2, 3 and 4 present more detailed analyses of each cell. We provide a brief description of each, and comments that critics and supporters observe in response to ideological positions in each of the three approaches to desired outcomes. Table 2 represents the three cells under the limited outcomes column (Back and neck pain treatment); Table 3 discusses the three cells under the middle range of outcomes (Disease/condition treatment); and Table 4 presents more detail for the enhancement of physiology/WHO health care approach.

Desired Chiropractic Outcome I: Back and Neck Pain Treatment

This outcome corresponds most closely to the lay perception of chiropractic. The profession is seen as providing a treatment for people suffering with lower back or neck pain. This is the most narrow of the three desired outcomes for chiropractic care.

In support of this position, proponents are likely to point out that it is a "patient-based" approach, since the alleviation of back pain is the primary aim of most patients seeking chiropractic care. They may add that good science supports this position, since SMT has been empirically validated as effective for certain types of lower back pain. They might also argue that in an era of increasing specialization in health care, specialization is necessary for the survival of the profession.

Critics of this approach argue that it limits the use of chiropractic to a small fraction of the population (i.e. only those who have lower back or neck pain). They might also note that it sets up chiropractic in competition with physical medicine, which has better trained diagnosticians, more access to diagnostic and treatment technology, and can more easily market itself, given the institutionalization of allopathic medicine in this country. They may also point out that this approach largely rejects the philosophy of chiropractic, a rejection that flies in the face of the consensus reached at the 2000 WFC/ACC Conference on Philosophy in Chiropractic Education. Table 2 summarizes the back and neck pain treatment model for each of the three options within the method dimension. Contained within each cell is a brief description of the practice type contained within it.

Table 2: Desired Chiropractic Outcomes I: Treatment of Back and Neck Pain			
Method Employed	Description of Practice Type		
Spinal Adjustment only	Narrow outcome, narrow range of methods, uncommon		
Spinal Adjustment (SMT) + PT and/or extremities	Narrow range of patient outcomes, wide range of methods, "Scientific" Use avaliable literature on the effectiveness of SMT on back pain to validate. Physical Medicine (no drugs or surgery)		
SMT + PT + Alternative Medicine	Narrow range of patient outcomes, broad range of methods		

Desired Chiropractic Outcome II: Treatment of a wide range of diseases/conditions

In this approach, the desired outcome of patients expands beyond the alleviation of back or neck pain to include relief or cure from a much wider range of conditions. Under this category conditions treated often include: headaches, allergies, bed-wetting, arthritis, asthma, menstrual ailments, etc.

Proponents of this approach defend it as "patient-based" (since the focus of care is on the disease/condition of concern to the patient). They claim that the service provides a much-needed alternative to allopathic medicine, which is failing to provide safe and effective health care. Some proponents also claim a historical basis, citing some of the early chiropractic writings focusing on treatment and cure of disease (e.g. Palmer 1924).

Critics of this range of outcomes for the chiropractic profession note that there is virtually no empirical foundation to warrant the treatment of these types of diseases/conditions through chiropractic care, except for back pain. They therefore claim that it is unscientific to attempt to treat such conditions. They also note that such an approach forces the chiropractic profession to

compete with the profession of allopathic medicine, which is too powerful in its institutionalization to allow chiropractic to flourish. They argue also that this viewpoint creates a needless duplication of allopathic medicine, with the chiropractic profession and individual chiropractors having less diagnostic expertise, and less access to state-of-the-art technology for diagnosis and treatment. Table 3 summarizes the disease/condition outcomes model for each of the three options within the method dimension.

Table 3: Desired Chiropractic Outcomes II: Treatment of a wide range of diseases/conditions		
Method Employed	Description of Practice Type	
Spinal Adjustment only	Moderate outcome range, narrow range of methods. "Traditional Straight Chiropractic" Treatment of disease by the correction of vertebral subluxation	
Spinal Adjustment (SMT) + PT and/or extremities	Moderate outcome, moderate range of methods. "Traditional Straight Chiropractic, Plus" Spinal adjustments plus a conservative array of PT to treat back pain, neck pain, headache and a number of other conditions	
SMT + PT + Alternative Medicine	Moderate outcome, wide range of methods. Naturopathic approach, "Alternative Medicine"	

Desired Chiropractic Outcome III: Enhanced Physiology and Function (WHO Health)

Those chiropractors who desire this outcome for their patients adopt the definition of health as presented by the World Health Organization (WHO), namely optimal physical, mental and social well-being and not merely the absence of disease or infirmity. They counsel their patients, no matter their reason for seeking care, to desire a more properly functioning physiology, and thus enhance their health. They provide this service largely independent of the patient's symptomatic presentation. They provide care for both symptomatic and asymptomatic people, for people of all ages, and care for all despite the medical status of the person (other than in considerations of contraindications for care) .

Proponents of this desired patient outcome say that their approach is patient-based, since the focus of their ministrations is on improving the patient's physiology, moving the person toward a state of optimum physiology. They note that their approach is based in the roots of chiropractic, based on the philosophy of chiropractic, but yet has evolved to be more consistent with state-of-the-art philosophies of health which recognize that health is more than just the absence of symptoms. Supporters hold that since this view of chiropractic is the broadest application, it provides the profession's best hope for a strong, secure future.

Critics cite the difficulty in providing such a service, given the public's flawed perception of the nature of true health, and the fact that the WHO definition is an idealistic one — most people see health to be in essence the state of being symptom-free. They note that the patient's primary goal is almost always to get out of pain as quickly as possible, and not to improve physiology or optimize level of function. They cite, in other words, the marketing challenge in this orientation. Related to this, they claim that this approach keeps the profession and its members from having access to federal funds, grants and insurance reimbursement.

Critics also point to the lack of available empirical evidence supporting this paradigm, noting that there has been little scientific support of the notion that people under chiropractic care experience higher levels of WHO health (e.g. Nelson 1994), or even that vertebral subluxations interfere significantly with neural physiology. Table 4 summarizes the physiological enhancement outcomes model for each of the three options within the "method" dimension.

Table 4: Desired Chiropractic Outcomes III: Physiological Enhancement (WHO Health Model)			
Method Employed	Description of Practice Type		
Spinal Adjustment only	Broad outcome, narrow range of methods. Chiropractors contribute to optimum physiology by safely correcting vertebral subluxation (independent of symptoms/diseases/conditions present in the patient). Anything else done for patient is not chiropractic		
Spinal Adjustment (SMT) + PT and/or extremities	Broad outcome, moderate range of methods. Chiropractors improve WHO health by correcting vertebral subluxations. In addition, PT procedures are used to enhance the VS corrections or to provide comfort for the patient.		
SMT + PT + Alternative Medicine	Broad outcome, broad range of methods. Chiropractors have access to the full array of natural health procedures, with the focus on improving physiology, independent of the patient's named disease, condition or symptoms.		

DISCUSSION AND PRACTICAL APPLICATION OF SCHEMA

The bidimensional classification system presented in this paper allows for an understanding of the underlying health-related philosophies contributing to particular practice objective modes, whether presented by colleges, professional associations, or individuals. It clarifies the undergirding conceptual approaches that create particular modes of practice, and avoids the pejorative analyses that have plagued progress toward true understanding in the past.

This framework provides a way of classifying particular chiropractic practices into an understandable profile. It provides a means to better understand the semantic issues which have consumed the profession. Following are several of those issues and brief analyses utilizing this framework.

Diagnosis

Abbott (1988) notes that all professions use diagnosis. This is because the professions are based on the resolution of some problem or another, and each problem must be analyzed (i.e. diagnosed) to be solved.

Within this context, then, all chiropractors use diagnosis in their work, just as attorneys and architects do. The issue is the nature of the problem that the chiropractor is diagnosing. If a particular chiropractor is practicing in a mode consistent with a narrow range of patient outcomes, then there will be a need to generate a differential diagnosis, since the outcome is oriented toward a particular condition. If the chiropractor is functioning in a model consistent with the enhancement of overall physiology, without focusing on the alleviation of a particular condition, diagnosis will be focused on an overall health assessment (since the chiropractor is a

primary contact health provider), with particular emphasis on evaluation of physiology to determine the safe and effective application of health-enhancement procedures.

The issue of diagnosis, when evaluated within the schema presented in this paper, is clarified. All chiropractors diagnose within this conceptualization; however, the emphasis and nature of diagnosis supplied for the patient's benefit may differ.

Breadth of Scope of Practice

Long a source of intra-professional conflict, the notion that some practice modes are more "limited" than others can be better understood. As the practice grid lays out, the only true, narrow outcome is the first cell, wherein the practitioner provides the service of the treatment of back and neck pain, and uses only spinal adjustments to do so. In actual fact, there are very few chiropractors who practice in this mode.

Likewise, the very broadest cell is one in which a practitioner offers the wide range of patient outcomes (the WHO notion of health), and uses a wide variety of methods to accomplish these outcomes. There are very few chiropractors who function in this cell as well.

Given that both the broadest and most limited cells are inhabited by very few chiropractors, most practitioners, college presidents and organizational leaders support practice modes that are somewhat in the middle. Realization that virtually all positions in chiropractic have a moderate position has the potential to obviate conflict based on accusations that one approach is more limited than another.

Pejorative terms such as "Straights," "Mixers," "Medipractors," "Super Straights," etc.

Such terms as those mentioned above, have long been in use in the profession and are almost exclusively used in a deprecatory sense. As Keating (2000) notes, "In chiropractic, it seems, one doctor's principle is often another's heresy." The terms have been used to escalate conflict, to reduce useful dialogue, and to further widen schisms rather than foster fruitful interaction within the profession.

The bidimensional analysis presented in this paper provides a value-free framework to discuss the different approaches to chiropractic care. Rather than historical, value-laden terms such as those listed above, the framework allows for a thoughtful analysis of professional ideologies, and a more productive dialogue as chiropractic positions itself for the twenty first century.

Chiropractic Physician

There has been much controversy over the use of the term "chiropractic physician." Given the matrix analysis presented in this paper, the nature of this term is clear. The word physician can clearly apply to those chiropractors who are focusing on the treatment of either back and neck pain or a broader range of diseases/conditions. Chiropractors functioning in the categories enhancing physiology enhancement resist the title "physician" (Strauss 1994).

Evidence-based Care

All levels of chiropractic care depend on evidence for their efficacy. Differences in desired patient outcomes and methods employed change the nature of the evidence required. For example, a limited-outcomes practitioner will require evidence that a particular treatment modality is effective in alleviating back or neck pain, in order to incorporate the method into

practice. A broad-outcomes, WHO health practitioner will require evidence that a particular procedure improves overall physiology.

In other words, despite the presentation in the chiropractic media over the past several years, the need for an evidence basis for practice is independent of the nature of the desired outcome for care, or for the methods used to accomplish the goal. Evidence is always required, although the nature of the evidence and the question the evidence supports, will differ.

Patient-Based Care

As the analysis indicates, all care provided by the chiropractic profession is "patient-based" in that it provides a solution to a particular problem of a patient. For a limited outcomes practitioner, the patient basis is evidenced by their focus on alleviating the patient's symptoms. For a broad outcomes practitioner, the patient basis is demonstrated by his/her commitment to improve the patient's physiology in accordance with their professional objective.

The chiropractic profession can come to an understanding that all care provided for the patient is patient-based, and that this focus is independent of both the outcome desired from the chiropractor/patient interaction and the methods used to accomplish the professional objective.

Future Research

This paper has presented a conceptual framework for analysis of the chiropractic profession's objectives and methods. Research further exploring the bidimensional matrix analysis of the chiropractic profession should focus on empirical validity of the framework. In particular, researchers need to operationalize the measure, and determine the ability of these two dimensions to discriminate between different practice types. In all probability, cross-sectional, self-report survey instruments will need to be developed, and then tested for reliability and validity.

Once operationalized, there are a number of useful research questions which can be asked using this analytical framework such as, What are the proportions of chiropractors in each cell? It may well be that the intra-professional conflicts in chiropractic, long framed by professional leaders in public forums, can be resolved using a phenomenological approach, wherein the actions of individual chiropractors can come to bear on creating the profession's unified identity.

In addition, the role of the professional associations within this matrix are ripe for analysis. Where do members in each of the major national chiropractic organizations tend to fall in terms of practice mode? How do association charters and constitutions reflect the issues raised in this paper? How do colleges and the ideologies they support fit the schema?

CONCLUSIONS

This paper evaluates current, popular paradigms and approaches to the chiropractic profession, and suggests an analytical, bidimensional framework to enhance understanding of the relationship among these approaches.

It presents an analytical framework placing the various chiropractic approaches within a matrix consisting of two dimensions: range of patient/client outcomes and breadth of practice methods employed. It explores how various professional approaches are captured by the interface between desired patient outcome range and method breadth.

In addition, this paper has demonstrated how the framework can be used to analyze some of the semantic and substantive issues in the profession relating to various practice approaches. In particular, we provide brief analyses of the following six issues: diagnosis, scope of practice, the use of pejorative monikers ("super-straight," "mixer," "medipractor," etc.), the chiropractic physician label, and evidence and patient-based chiropractic. Traditionally in chiropractic, these debates have focused on ways in which one approach is elevated at the expense of the others. The bidimensional framework presented in this paper avoids these value-laden debates and provides a neutral and effective framework for analysis.

This paper acknowledges that disparate elements within the chiropractic profession need to engage in a constructive discourse in order to advance the profession, and to expand the use of chiropractic care by the public. We suggest that the framework presented in this paper may provide a vehicle to carry this discourse. We believe it has the potential to forge mutual respect within the profession, and to clear the way for improved understanding of chiropractic's societal role to stakeholders outside of the profession.

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