Nature versus nurture segues to choice versus circumstance in the new millennium: one consideration for an integrative biopsychosocial philosophy, art, and science of chiropractic

Monica Smith DC, PhD*

Associate Professor, Palmer Center for Chiropractic Research, Palmer College of Chiropractic, San Jose, CA 95134

Received 28 May 2009; received in revised form 14 December 2009; accepted 19 December 2009

Key indexing terms:
Chiropractic; Health care provider; Professional role

Abstract
Objective: This commentary discusses the evolving sociocultural roles and sociocultural authority of chiropractic.

Discussion: The complex interconnectivity of the biological, psychological, and social aspects of our individual and collective well-being has occupied centuries of “nature versus nurture” philosophical debate, creative art, and scientific work. What has emerged is a better understanding of how our human development is affected by the circumstances of what we are born with (ie, nature) and how we are shaped by the circumstances that we are born into (ie, nurture).

Conclusion: In the new millennium, a cumulative challenge to the emerging integrative biopsychosocial health care disciplines is one of reconciling “circumstance versus choice”; that is, advancing individually and collectively the fullest actualization of human potential through the philosophy, art, and science of autonomy and empowerment.

© 2009 National University of Health Sciences.

Introduction

In this commentary, I present information and encourage further inquiry and dialogue regarding the separate but related concepts of sociocultural roles and sociocultural authority of chiropractic. Perhaps most importantly, I suggest that our fundamental underlying assumptions about the notion of “sociocultural author-

* Palmer Center for Chiropractic Research, Palmer College of Chiropractic, 90 East Tasman Drive, San Jose, CA 95134.
E-mail address: monica.smith@palmer.edu.
Recent scholarly attention focuses laudably on better understanding and appreciating the full diversity of chiropractic patients and their biological, psychological, and sociocultural needs and circumstances. We need to stay mindful that successful development of a comprehensive biopsychosocial approach toward actualizing the full potential for chiropractic health care provision and integrative health care delivery should explicitly recognize the priority and value of individual preferences and choice in matters of health and health care.

Framing the discussion

I borrow loosely from the academic traditions of sociology and anthropology to provide a general orienting framework for the following discussion. From the general perspective of structural functionalism in sociology, the chiropractor-patient relationship can be viewed as an interaction between autonomous individuals while explicitly recognizing the importance of contextual factors such as physical or social constraints that may also influence the actions of the individuals and the interactions between them. Multiple interactions and repeated behaviors may create normative social “roles” for each of the participants in such interactions, as their respective expectations become more entrenched or institutionalized over time. Roles are malleable, that is, autonomous individuals in new interactions with changing situations may adapt through processes such as “role bargaining,” thereby establishing new roles and new norms that may, in turn, initiate or guide further action. Roles and collectivities of roles (ie, roles that complement each other in fulfilling functions for society) can be considered “structural” in the sense that they may manifest as institutions or social structures, such as social arrangements with proscribed economic or legal parameters. Individual and collective roles can be considered “functional” in relation to operative processes such as social change. That is, individuals and collective entities may develop new values that legitimate a greater range of activities as a new social order, thereby creating new functional alternatives to the institutions and structures currently fulfilling the functions of society.

Sociocultural roles

Sociocultural roles are multidimensional, even within a presumably narrow context such as health care provision. For instance, the disciplinary roles of most health care professionals are typically developed in disciplinary isolation during their pregraduate education and training, such that nurses in nursing school are educated separately from medical physicians in medical school. Without adequate preparation, new clinical practitioners “may transition to the workplace unprepared for collaboration at a time when chronic illnesses require the concerted effort of coordinated, fully cooperative health care teams”.

Innovations such as interdisciplinary clinical training programs encourage clinical trainees to explore the terrain of adapting their singular disciplinary roles to fit the actual exigencies of clinical practice; for example, their clinical roles. In other words, disciplinary roles and clinical roles are 2 distinct, though related, concepts. The necessary transition and negotiation between singular disciplinary role and interdisciplinary clinical role may require a substantial commitment, willingness, and ability to explore issues of role if potential clinical collaborations are to be effective, mutually satisfying, and actualized.

Disciplinary roles may be considered structural in the sense that they are largely shaped during standardized credentialing processes, such as disciplinary-specific education in accredited health professions institutions that prepare and qualify the individual to meet proscribed legal requirements to obtain professional licensure and
relicensure (initial clinical competency testing, and continuing education). Clinical roles, however, are functional, and as “form follows function,” so too may new clinical roles both shape, and be shaped by, the specific environment in which the clinician practices. That is, mutual acculturation, or role bargaining, of all parties can occur, be they clinicians from different disciplines, clinical staff or administrators, or patients. The social ecology or context in which contemporary chiropractors practice varies greatly, and that variation is growing ever greater over time.

The historical norm of solo practice for chiropractors becomes ever less typical, as newly graduating chiropractors increasingly seek out group or multidisciplinary practices, and as the increasing integration of chiropractic into new clinical domains opens new opportunities for chiropractors to practice in interdisciplinary clinical practice environments, such as in Veterans Administration (VA) or other health delivery systems. It is reasonable to posit that singular factors such as patient attributes (eg, values, preferences), provider attributes (eg, additional clinical expertise beyond their basic disciplinary training), and higher-order relational factors such as those that may manifest within a patient-provider relationship (eg, trust) may also vary as the social ecology or context surrounding that relationship varies. For example, the nature of patient-provider relationships within a context of enclosed health care systems such as VA or closed-panel managed care arrangements may differ markedly from those that occur within differing contexts such as open insurance plans or self-pay arrangements.

Such a broad range of unknown potential factors are perhaps most appropriately and comprehensively explored using both qualitative and quantitative approaches, at varying levels of analyses from macro-level to micro-level. Quantitatively, units of analysis operationalized as variables describing ecological context as well as both collective and individual attributes might be best measured along a continuum to better capture and measure the distribution of variation and to better ascertain potential sources of that variation. Useful conceptual frameworks for theoretically grounding such inquiry may be found in multilevel, multidimensional sociological study of the behavior of collectivities. For instance, it is useful to examine collectivities with multidimensional aspects, such as health care delivery organizations, as rational, natural, and open systems. As rational systems, collectivities are oriented to the pursuit of specific goals and exhibit highly formalized social structures. As natural systems, the participants share a common interest in the survival of the collective system and thereby engage in informally structured collective activities to secure that end. As open systems, coalitions of shifting interest groups develop goals by negotiation, and the structure, activities, and outcomes of the coalition are strongly influenced by factors external to the coalition (ie, its environment).

The chiropractor-patient relationship

The nature of any interpersonal relationship may be characterized along a number of dimensions, such as the level of familiarity, trust, or mutual respect, reflected within that relationship. The characteristics of a relationship, in turn, may also be contingent on certain specific attributes of the individuals in that relationship, in this case attributes of the individual patient and the individual health care provider. Important dimensions of sociocultural roles, then, may also vary along a dynamic and complex set of singular factors such as patient attributes (eg, individual patient expectations about their health or patient preferences about their health care options), provider attributes (eg, the health care expertise or cultural competence of a particular chiropractor), and higher-order relational factors such as those that may manifest within a patient-provider relationship (eg, trust, respect).

Far from being static and constant, doctor of chiropractic and patient factors are more likely to be malleable and dynamic, with significant potential for change, particularly over the course of a sustained long-term chiropractor-patient relationship. For instance, a companion report in this Journal describes evidence of noteworthy variation in how individual chiropractors perceive their professional identity as being akin to that of a “specialist” or as a “generalist” in their chiropractic clinical practice; with some indication as well that the perceptions of chiropractors or their chiropractic patients may change over time. Chiropractors believed that their established patients, more so than their new patients, were likely to view the chiropractor as both “specialist” and “generalist,” suggesting that the nature of certain chiropractor-patient relationships may evolve profoundly over time, as patients transition from new to established patients within the chiropractic practice. The sociocultural authority embedded within sociocultural roles, then, may also evolve profoundly over time, perhaps as a function of shifting patient expectations or preferences. Or, patient-specific factors, provider-specific factors,
or higher-order relational factors may change or evolve over time, for other reasons altogether.

As mentioned in an earlier study,7 local health care system conditions may differ by locale and therefore introduce variation in the nature of the sociocultural authority experienced by doctors of chiropractic (DCs) practicing in different areas. For instance, chiropractic patients in medically underserved areas may be more likely to use the chiropractor as a first point of contact with the health care system8,9 or chiropractic patients in rural areas may be more likely to seek care for nonmusculoskeletal health problems from their chiropractor.10,11 Similarly, the nature of the cultural/social congruence between DCs and their respective patient or market populations may also differ somewhat by locale, for instance rural versus urban, introducing another potential source of variation in the range of sociocultural roles and sociocultural authority experienced by individual chiropractors.

Sociocultural authority

The notion of “trust” is closely intertwined with notions of sociocultural authority and professional legitimacy on a number of levels, ranging from the immediate intimacy of the individual patient-provider relationship to that of macro-level interactions between collective entities. Interestingly, these multiple perspectives do not always fully align, nor do they necessarily need to align. For instance, an extensive review of “point-in-time” data from multiple cross-sectional public opinion surveys found that even though many Americans may not trust the medical profession as a whole, they do trust their own medical doctor.12 Similarly, a separate analysis of time-series survey data from Gallup, Harris, and National Opinion Research Corporation (NORC) polls documented a waning of public confidence in many American social institutions over the past 30 years, and a particularly noteworthy decline wherein “…American medicine went from being perhaps the most trusted to being one of the least trusted social institutions…”13 as graphically represented in Figs 1 and 2. Both the American general public (Fig 1) and policymakers, or “policy elites” (Fig 2), evidenced this “loss of faith” and now question the presumed authority of the medical profession to advise on matters of health policy, but for different reasons. Historically, the authority of the professions has been legitimized by a sociocultural presumption that professionals are motivated by an altruistic orientation and value neutrality and therefore will subordinate their own self-interest and normative judgments to act as trusted agents on behalf of their clients. Though both the general public and policymakers now explicitly question this historic implicit presumption that physicians can always and fully be entrusted to serve as reliable agents, they apparently do so on different grounds. Policymakers express concerns that physicians who exhibit an unwillingness to care for the poor are failing in their roles as societal agents, that health policy should be less influenced by medical doctors (MDs), and that matters of health care are
primarily a societal and individual responsibility. Chief concerns expressed by the general public are that the needs of patients are being subordinated to cost-containment, and that MDs have become too monetarily motivated or too self-interested in the health care system. Compared with policymakers, the general public also expresses a much higher level of support for the importance of individual choice in health care decisions. The focus of policymakers, then, is on aspects of “social trust” such as the presumptive responsibilities of health professions to society (ie, the collectivities of sociocultural roles and authority). The typical individual of the general public, however, opines the importance of “personal trust” in the more immediate patient-physician relationships and in legitimizing the individual sociocultural role and authority of physicians (ie, the presumption that the physician should, first and foremost, serve to protect the interests of their patients and to also promote the role of the patient to share in the responsibility for both clinical and fiscal decisions in their health care).

At this early stage of socioanthropological inquiry, it would be premature conjecture, and an inaccurate oversimplification, to presume that any profession in entirety may be labeled as either possessing, or not possessing, cultural authority along a given dimension. Rather, as illustrated by the few examples above, the multilevel multidimensional complexity of sociocultural roles, sociocultural authority, and professional legitimacy is evident. Equally complex is the conceptualization and measurement of patient trust of health care providers, health care professions, health insurers, and health care systems. It is important to appreciate the centrality of patient trust to this line of scientific inquiry and to the continuing open dialogue on this topic within the chiropractic profession. We know from empirical data that patients who have their choice of physician and who have a longer relationship with the physician are more likely to trust their physician. The trust of patients in their physicians is one of the strongest predictors of patient satisfaction with their care, and patients who trust their physicians are more likely to adhere to recommendations for their treatment. Further inquiry examining the nature of sustained long-term chiropractor-patient relationships may also inform, and be informed by, the increasingly important scientific evidence base on patient trust.

**Conclusion**

This commentary offers the speculative premise that sociocultural roles and sociocultural authority of chiropractic health care providers are more truly conceived not solely as a static, dichotomous, macro-level, collective attribute of an entire profession, but rather as malleable and dynamic, multidimensional, and multilevel. Also requisite to gaining a better understanding of sociocultural roles and sociocultural authority of the chiropractic profession is a fuller appreciation for the duality of impulses toward heterogeneity and homogeneity. The impulse toward homogeneity can be witnessed in collective actions such as standardization of disciplinary structures and processes, such as the “rational” pursuit of specific goals for the profession (top-down, inside-out). The history of evolution also teaches us the inherent advantages of heterogeneity, recognizing that a profession also exists as a “natural” and “open” collectivity, hopefully capable of flexible and nimble response to environmental challenges as they arise (bottom-up, outside-in).

**Funding sources and potential conflicts of interest**

The author reports no funding sources or conflicts of interest for this study.

**References**

1. Wade EB. Understanding role: learners’ experience of a new interdisciplinary clinical training program, The UCSF Diabetes Management Program in Primary Care [PhD dissertation]. University of New Mexico, Albuquerque, New Mexico; 2006.
2. Wade E, Smith M. Interdisciplinary clinical training: understanding and communicating clinical roles. Proceedings of the WFC/ACC Education Conference; Cancun, October 26-28; 2006.
3. Dunn AS, Passmore SR. When demand exceeds supply: allocating chiropractic services at VA medical facilities. J Chiropr Humaniat 2007;14:22-7.
4. Adams J, Broom A, Jennaway M. Qualitative methods in chiropractic research: one framework for future inquiry. J Manipulative Physiol Ther 2008;31:455-60.
5. Scott WR. Organizations: rational, natural, and open systems. 2nd ed. Englewood Cliffs (NJ): Prentice-Hall; 1987. p. 20-4.
6. Smith M, Carber LA. Survey of US chiropractors’ perceptions about their clinical role as specialist or generalist. J Chiropr Humaniat 2009;16:21-5.
7. Smith M, Carber L. Chiropractic health care in health professional shortage areas (HPSAs) of the U.S. Am J Public Health 2002;92:2001-9.
8. Callahan D, Cianciulli A. The chiropractor as a primary health care provider in rural health professional shortage areas of the US. Arlington (Va): Foundation for Chiropractic Education and Research (FCER); 1994.
9. Maust A. The chiropractic patient in rural health professional shortage areas of the united states: an exploratory analysis. Richmond (Va): Research Dimensions, Inc; 1994.
10. Barnett K, McLachlan C, Hulbert J, Kassak K. Working together in rural South Dakota: integrating medical and chiropractic primary care. J Manipulative Physiol Ther 1997;20:577-82.
11. Hawk C, Long CR, Boulanger KT. Prevalence of nonmusculoskeletal complaints in chiropractic practice: report from a practice-based research program. J Manipulative Physiol Ther 2001;24:157-69.
12. Blendon RJ, Benson JM. Americans’ views on health policy: a fifty-year historical perspective. Health Aff 2001;20:33-46.
13. Schlesinger M. A loss of faith: the sources of reduced political legitimacy for the American medical profession. Milbank Q 2002;80(2). Available at: http://www.milbank.org/quarterly/8002feat.html.
14. Pearson SD, Raeke LH. Patients’ trust in physicians: many theories, few measures, and little data. J Gen Intern Med 2000;15:509-13.
15. Dugan E, Trachtenberg F, Hall MA. Development of abbreviated measures to assess patient trust in a physician, a health insurer, and the medical profession. BMC Health Serv Research 2005;5. Available at: http://www.biomedcentral.com/1472-6963/5/64.
16. Hall MA, Camacho F, Dugan E, Balkrishnan R. Trust in the medical profession: conceptual and measurement issues. Health Serv Res 2002;37(5):1419-39.
17. Balkrishnan R, Hall MA, Blackwelder S, Bradley D. Trust in insurers and access to physicians: associated enrollee behaviors and changes over time. Health Serv Res 2004;39(4):813-24.
18. Hall MA, Dugan E, Zheng B, Mishra AK. Trust in physicians and medical institutions: what is it, can it be measured, and does it matter? Milbank Q 2001;79(4):613-39.