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# Potential unique causes of burnout for chiropractic professionals

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## Key indexing terms:

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## Abstract

**Objective:** The objective of this narrative review is to discuss the potential for burnout in chiropractic practitioners. This discussion is grounded in the job demands-resource model, the conservation of resources model, the unique profession-specific stressors experienced by chiropractors, and information from similar health care professions.

**Methods:** A search using both the indexed (PubMed and PsychLit) and nonindexed psychosocial literature was used. Other resources included the Cochrane Library, articles from governing bodies of the chiropractic profession, trade magazines, and research conferences and symposium proceedings. Articles were analyzed following the grounded theory principles: open coding and memos for conceptual labeling, axial coding and memos for category building, and selective coding for model building.

**Results:** Potential stressors unique to doctors of chiropractic include factors associated with physical workload, role stress, and mental and emotional demands.

**Conclusions:** There are unique chiropractic-specific occupational characteristics that possibly contribute to burnout in the chiropractic professionals. These findings emphasize the need for assessing and measuring burnout and attrition within the chiropractic profession.

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## Introduction

Today, *burnout syndrome* is defined as a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among people who work with the general public in some capacity.<sup>1,2</sup> A key aspect of burnout

syndrome is an increased feeling of emotional exhaustion because as emotional resources are depleted, caregivers feel that they are no longer able to give support at a psychological level.<sup>1</sup> Another aspect of burnout is the development of depersonalization/disengagement, which occurs when the helping professional develops a negative demeanor toward his or her client and/or work-related responsibilities. The final aspect of burnout, reduced personal accomplishment, refers to the tendency of the caregivers to evaluate themselves negatively, such that they are no

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longer effective in working with clients and in fulfilling their job responsibilities.<sup>1,2</sup> Maslach et al<sup>2</sup> have described burnout as “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity.”

To date, a search in specialized scientific databases such as PsychLit and PubMed reveals thousands of scientific publications with “burnout” in the title.<sup>3</sup> Based on this wealth of available research, burnout is highly prevalent in the literature of medical<sup>2,4</sup> and nursing<sup>5-8</sup> professions, and seems to affect other health care professionals including dentists,<sup>9-11</sup> physical therapists,<sup>12-16</sup> and occupational therapists.<sup>17-19</sup> Although burnout has been studied comprehensively in a number of helping professions, information on burnout within the chiropractic profession does not appear to exist.

The importance of exploring burnout in the chiropractic profession is grounded in the theoretical and empirical evidence that is available in similar health care professions. Currently, 2 theory-based models are consistently used in the literature to guide burnout studies.<sup>20</sup> The conservation of resources (COR) model<sup>21-24</sup> and the job demands-resource (JD-R) model<sup>25</sup> (Fig 1). Both theories offer an explanation for the relationship between job resources, job demands, and burnout. Job resources refer to valued things such as employment, job security, job

enhancement opportunities, autonomy, participation in decision making, and supervisor support.<sup>24,26</sup> Job demands include physical and psychological demands (ie, workload, work pace, and time pressures) and role conflict.<sup>25,27,28</sup> Both the COR model and JD-R model agree that when job demands are high and job resources are limited, there is an increased potential for burnout.

Similar helping professionals within the health care system, such as dentists, physical therapists, occupational therapists, and chiropractors, may be exposed to a unique source of stressors (increased demands and reduced resources) because of the autonomous and isolated nature of their practices; their strong reliance on technical skills; their dependence on third-party reimbursements; their constant contact with people and the connected emotional involvement with clients; their relatively high incidence of work-related injury; and their struggles with market competition, regulations, and managed care.<sup>29,30</sup> In addition, many of these practitioners may also assume the role of private business owner, which usually involves a personal financial risk and a significant dependence on third-party reimbursements. These similar occupational characteristics appear to significantly influence the prevalence of burnout in the physical therapy,<sup>12-16,31-34</sup> occupational therapy,<sup>12,17-19</sup> and dentistry professions.<sup>10,11,30,35-39</sup> As such, it may be appropriate to assume that if these occupational

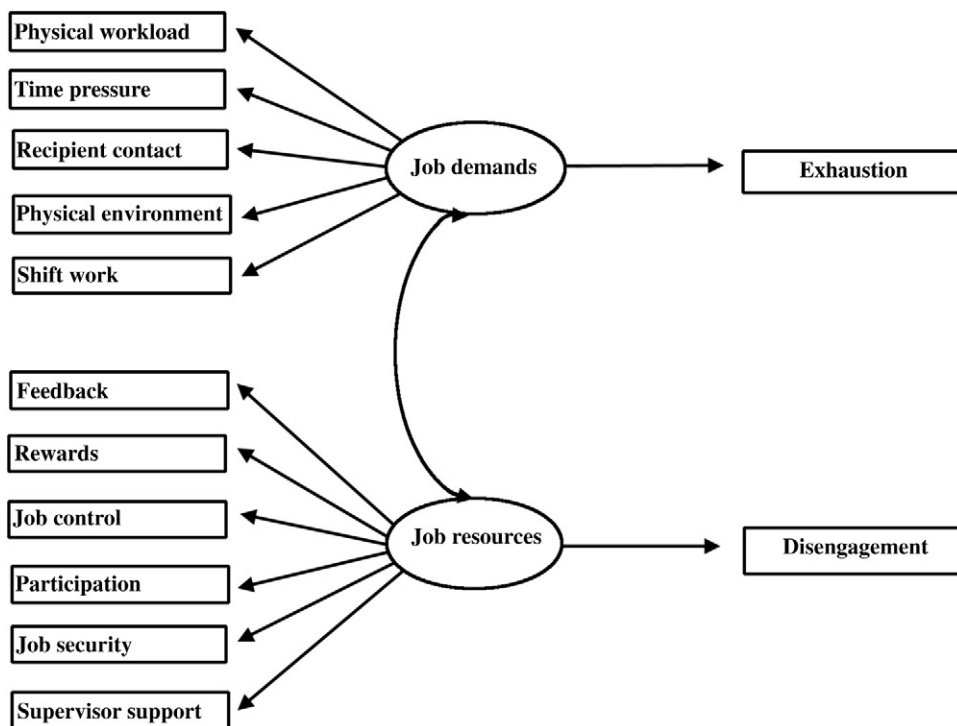


Fig 1. The job demands–resources model of burnout.

characteristics contribute to burnout in the physical therapy, occupational therapy, and dentistry professions, they may also contribute to burnout in the chiropractic profession. If this presumption holds true, then it is appropriate to suggest that the chiropractic profession may be negatively and unknowingly impacted by the consequences of burnout.

In addition to the above-mentioned shared characteristics that predispose various health professions to burnout, chiropractic physicians may also be exposed to a host of other profession-specific stressors that may further increase their risk for burnout. Therefore, the purpose of this literature review is to discuss unique profession-specific stressors and the potential impact of burnout on the chiropractic profession.

## Methods

The foundation of the proposed conceptual framework was based upon a 2-part investigation. The first part involved reviewing burnout prevalence information in similar health professions. As such, a literature search in PubMed using the terms *burnout*, *job stress*, *physical therapy*, *occupational therapy*, *dentistry*, and *manual therapy* was conducted. The search revealed an abundance of systematic reviews, observational and exploratory studies, and experimental investigations from 1974 to 2011. The second part of the search involved literature exploring occupational stressors of the chiropractic profession as applied to the JD-R and COR models. A thematic search of PubMed and PsychLit, as well as the Cochrane Library, professional governing bodies of the chiropractic profession, trade magazines, and research conferences and symposium proceedings, was used.

## Results

### Literature review

#### Potential stressors unique to the US chiropractic

The chiropractic profession has overcome a variety of struggles since its inception in the mid-1890s. From that time, numerous chiropractors were prosecuted and jailed under the pretense of being a threat to society and for practicing medicine without a license.<sup>40</sup> Other hardships included attempts by the American Medical Association to contain and eliminate the chiropractic profession, including a wide-ranging prejudice by many within and

outside of mainstream health care.<sup>41-44</sup> Since the early 1900s, the profession has made substantial advances, such as obtaining conventional health care recognition, gaining authenticity and access to insurance and managed care plans, receiving research funding by the National Institutes of Health, and including chiropractic physicians in the Department of Defense and the Veterans Administration health care system.<sup>36,42,45</sup>

Yet despite these advances, the chiropractic profession in the United States continues to struggle with unique profession-specific stressors that may place its members at increased risk for burnout. Examples of these unique profession-specific stressors involve philosophical and political differences among leadership groups within the profession, professional-identity inconsistencies, poor public perception and negative media coverage, unique physical demands that result in a risk of suffering from a work-related injury, market competition from other manual therapists (acupuncturists and massage therapists), student loan default rate, threats to autonomy, and various ethical and morality issues.<sup>45-47</sup> The essence of this exploration is to review these unique profession-specific stressors combined with the typical stressors (close interaction with clients, lack of supervisor support, strong reliance on technical skills, profitability) that similar helping professions are exposed to and apply them to the JD-R and COR models as a means of explaining the potential for burnout in chiropractic profession. As such, consistent with the JD-R model, the main job demands of practicing chiropractors include physical workload, mental and emotional demands, and role stress (role ambiguity and role conflict); and the main job resources involved in the practice of chiropractic include job autonomy and social support climate (lack of supervisor support).

#### Physical workload

A source of stress within the chiropractic profession, as well as the physical therapy, occupational therapy, and dentistry professions,<sup>48-53</sup> is a relatively high incidence of work-related injuries. For many professions, injury history, area of practice specialization, or work environment has been identified as potential risk of work-related injuries.<sup>54</sup> The chiropractic, physical therapy, and dentistry professions may be at increased risks for work-related injury because of their exposure to repetitive movements, hand force, static loading, and awkward postures in their work.<sup>54-57</sup> Lorme and Naqvi<sup>58</sup> found that when performing treatments, doctors of chiropractic were subject to dynamic forces that increase spinal loading and could increase risk of injury.

Studies investigating the musculoskeletal demands of chiropractic therapies have suggested a high prevalence of low back pain ranging from 57%<sup>59</sup> to 87%.<sup>60</sup> Mior and Diakow<sup>60</sup> report that 41% of the chiropractors interviewed felt that the postures they assumed while treating patients was the most influential agent in the development of back pain, and that 82% thought that their back pain was further aggravated by continued practice. Homack's<sup>56</sup> survey of practicing chiropractors in New York State suggests that patient handling and delivery of side-posture manipulative procedures are the activities that most frequently result in work-related injury to the practicing chiropractors. Bisiachhi and Huber<sup>61</sup> report differences in the prevalence of musculoskeletal injuries between male and female chiropractors in the United States. Among female chiropractors, the low back was the most common site of injury reported, whereas male chiropractors reported the neck as the most common site of injury.<sup>61</sup> The study by Holm and Rose<sup>62</sup> found a moderate prevalence (41%) of workplace musculoskeletal injuries among doctors of chiropractic, particularly of the wrist, hand, fingers, and shoulder. Furthermore, Holm and Rose<sup>62</sup> note that injuries occurred most commonly in the first to fifth years of practice and that side-posture manipulation seemed to cause the greatest percentage of these injuries.

The few studies<sup>56,58-62</sup> that have investigated injuries associated with chiropractic practice appear to agree that using manual therapy, particularly side-posture manipulation, increases the amount of biomechanical and postural demands on the practitioner applying the therapy. Side-posture manipulation is a trademark modality in the chiropractic profession and is used for the treatment of low back pain.<sup>63</sup> As a result of injury, some chiropractors may change their treatment techniques or their frequency or duration of work, or may choose to leave the profession.<sup>55</sup> This raises the following question: what is the impact of chiropractic-specific work-related injuries on burnout of chiropractic practitioners? Despite the lack of literature on this issue, it may be reasonable to hypothesize that if work-related injuries are as substantial as the literature suggests, then sustaining a chiropractic-specific work-related injury may partially contribute to not only a physical injury but a sense of increased exhaustion, increased depersonalization, and reduced personal accomplishment.

### Role stress

Within the job demand category of the JD-R model, concepts such as role ambiguity and role conflict are

emphasized.<sup>25</sup> Role ambiguity typically refers to an individual's lack of clarity about his/her expected behavior from a job; whereas role conflict refers to a type of social conflict caused by an individual being forced to take on separate and incompatible roles (ie, business owner and physician).<sup>64</sup> The construct of role stress and its influence on burnout within the chiropractic profession may involve the profession's unique public perception and identity stressors.

Within the United States, the chiropractic profession has struggled with establishing a clear identity that is both accepted and relevant to the public.<sup>43</sup> This struggle may, in part, be due to the presence of 2 opposing philosophical and political forces within the profession. Two predominate governing bodies in the United States, the American Chiropractic Associate and the International Chiropractic Association, represent the profession at large, often resulting in contradictory scenarios with regard to lobbying, public relations, leadership, and advancement of the profession.<sup>45</sup> Although the situation is more complex, the 2 opposing views are sometimes simplistically referred to as "straights" vs "mixers." Although each side sees chiropractic potentially addressing a wide range of diseases and conditions, the "straight" view focuses on the "chiropractic adjustment" and attributes poor health to "chiropractic subluxations" that interfere with the flow of "vital energy," whereas the "mixer" view supports a broader scope of treatment (eg, a "mixer" will "mix" in other therapies in addition to manipulation, such as physiotherapeutics, diet, exercise) and has a more musculoskeletal and evidenced-based practice focus.<sup>45</sup> These philosophical differences clash during lobbying efforts among leadership groups within the profession and, as a result, may further exacerbate the professional-identity inconsistencies and public perception uncertainties that shadow the profession. These political conflicts resulting in inherent poor public perception and identity discrepancies stressors may have prevented the chiropractic profession from establishing its cultural authority over any specific domain of health care and, therefore, may be the source of significant stress among its practitioners.<sup>43</sup>

Cultural authority allows a profession to impact perception and influence the public.<sup>65</sup> Delinquencies in creating its cultural authority may be the result of the varying public perceptions of the chiropractic profession and the chiropractic profession's internal struggle with establishing a universal identity.

Within the profession, an individual chiropractor may specialize in a number of available techniques and methods in his or her practice.<sup>66</sup> The practice of

chiropractic is multifaceted and, for many, involves a vast array of healing arts and modalities such as manipulation, massage, strength training, various physical therapy modalities, traction, and nutritional consultation.<sup>67</sup> These varying views and practice styles may result in confusion for the public in that patients, medical physicians, the managed care industry, and individual chiropractic practitioners themselves have different perspectives on defining the profession.<sup>68</sup> Thus, identity problems combined with poor public comprehension may threaten the future vitality of the profession. The end result of these incongruencies makes it plausible to hypothesize that the identity and public perception discrepancies that shadow the chiropractic profession may partially contribute to a sense of increased emotional exhaustion, increased depersonalization, and reduced personal accomplishment.

### **Mental and emotional demands**

Increased susceptibility for burnout in health care professionals may be the result of spending their careers focusing on the needs of others.<sup>69</sup> In addition to the mental and emotional demands involved in direct patient care, doctors of chiropractic also battle issues that threaten their ability to maintain a satisfactory income (eg, managed care, Medicare regulation, scope of practice restrictions, national health care reform).<sup>70-72</sup> These issues may serve as a source of mental stress and thus may have an impact on the prevalence of burnout. In an attempt to understand profitability and viability insecurities, Zhang and colleagues<sup>71</sup> sought to investigate chiropractic students' knowledge and attitudes of education and financial investments. These authors, along with Coulter et al,<sup>41,67</sup> suggest that the present-day chiropractic student invests a similar amount of time, effort, and finances to pursue a career in chiropractic as does the present-day medical student. These investment issues raise an important line of questioning, especially in terms of return on investment and career expectations. Edwards et al<sup>73</sup> suggest that differences between what medical doctors might have reasonably expected for their career and how their career actually turned out may have implications on burnout. Furthermore, Edwards et al<sup>73</sup> suggest that students and practitioners, in general, who invest time, effort, and finances into their education would expect to be rewarded with a profitable career.

Market competition may serve as a source of mental and emotional stress within the chiropractic profession. Whereas the number of practitioners is growing and competition from other healing professions is increasing, insurance reimbursements to chiropractors seem to be

decreasing.<sup>74,75</sup> Data from the Institute for Alternative Futures<sup>76</sup> suggest that a slowing economy, along with the recent increase in health insurance premiums, has a dampening effect on the rate of growth in demand for chiropractic services. In addition, Cherkin et al<sup>77</sup> suggest that patients seeking manual treatment of musculoskeletal conditions, in a form that is similar to chiropractic spinal manipulation therapy, may choose to seek services from massage therapists who outnumber chiropractors and are growing in both numbers and market share.<sup>78</sup> Competition from acupuncturists, osteopaths, and medical physicians, some of whom are also demonstrating an increased interest in manual therapy, further adds pressure.<sup>78</sup> In addition, there may be a supply and demand issue regarding the number of chiropractors within the profession. Data from the US Department of Commerce<sup>74</sup> indicate that the total reported net income for chiropractic offices and clinics rose from \$6.56 billion in 1992 to \$7.68 billion in 1998, which is about 2.8% per year. Because the number of practicing chiropractors has been increasing,<sup>74</sup> these figures may show that chiropractic income may be decreasing steadily, thus adding to burnout factors.

As we look to the future to strengthen the profession and develop our research agenda, potential stressors unique to doctors of chiropractic should be addressed. These burnout factors include those that are associated with physical workload, role stress, and mental and emotional demands. Investigations into these complex factors should include a focus on intervention as well as prevention. Using the COR model<sup>21-24</sup> and the JD-R model<sup>25</sup> may assist with these efforts.

### **Limitations**

This article provides a discussion of the topic of burnout and the chiropractic profession and was not intended to be a systematic review of the literature; therefore, key articles related to this topic may have not been included. Terms describing psychological stress and burnout are sometimes used inconsistently in the literature, which is a potential additional limitation to this study. The evidence available for the chiropractic-specific stressors has not been held to a high level of academic rigor. The data within the chiropractic literature have generally suffered from sampling biases and are vulnerable to biases stemming from subjectivity and imprecision. In addition, some experts may question the approach of comparing chiropractic to dentistry, physical therapy, and occupational therapy. Arguments over the autonomous nature of physical

therapy also reduce the strength of the presented potential occupational correlations.

## Conclusions

Doctors of chiropractic may be exposed to a unique source of stressors because of the autonomous and isolated nature of their practices, their close contact with patients, and their strong reliance on technical skills. Many of these practitioners may assume the role of private business owner, which usually involves a personal financial risk and a significant dependence on third-party reimbursements. These occupational and practice characteristics appear to influence the prevalence of burnout. Doctors of chiropractic have seen major changes in the health care environments in which they practice in many countries.

In summary, as the chiropractic profession faces many of the same challenges as other health care providers with decreased reimbursement, changing patient payer types, changing patient and payer expectations, and diminished profit margins, it also faces a unique set of profession-specific stressors such as increasing market competition challenges (both internally and externally), identity and poor public perceptions inconsistencies, a relatively high prevalence of work-related injuries, and a high student loan default rate. Common challenges within the health care arena, combined with the noted chiropractic-specific stressors and the chronic work-related stressors of caring for individuals, may pose a hazard to the chiropractic profession at large. As chiropractors face increasing conflicts, both internally and externally, the need for assessing and measuring burnout and attrition within the chiropractic profession becomes increasingly apparent.

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