JOB ANALYSIS OF CHIROPRACTIC BY STATE

A state-by-state statistical report on the nationwide
NBCE Survey of Chiropractic Practice and
companion volume to "Job Analysis of Chiropractic"

A Project Funded, Conducted, and Published by the

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Contributing Writer
Paul D. Townsend, D.C.

Graphics/Design
D.R. Delle Morgan

Statistical Support
James zumBrunnen, M.S.

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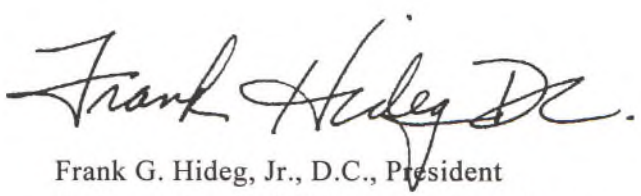

Frank G. Hideg, Jr., D.C., President
National Board of Chiropractic Examiners

Introduction

The data in this volume were compiled by the National Board of Chiropractic Examiners (NBCE), the independent testing agency for the chiropractic profession, during an intensive three-year *job analysis* project. The NBCE funded, conducted and published the *Job Analysis of Chiropractic* as a service to the profession.

In conducting the job analysis project, the NBCE sought to provide the chiropractic health care field with credible, relevant, and accurate references which document chiropractic *as it is defined by those who practice it as a full-time profession.*

A survey instrument typically forms the foundation of a job analysis and allows a job to be dissected into component parts which reveal the nature of a profession and the tasks and functions performed by its practitioners. With the input of numerous state licensing board members, chiropractic college faculty, private practitioners, statisticians, and other professionals, the NBCE designed a 16-page scannable document entitled the "Survey of Chiropractic Practice" (Appendix A), and distributed it during 1991 and 1992 to over 9,000 full-time U.S. chiropractic practitioners.

The *Job Analysis of Chiropractic*

The approximately 5,000 responses to that survey are presented in this publication, *Job Analysis of Chiropractic by State.* An earlier companion volume entitled *Job Analysis of Chiropractic in the United States* describes the chiropractic profession, the process of planning and conducting a job analysis of chiropractic, and an overview of the survey data on a nationwide basis. This second volume provides a breakdown of data on a state-by-state basis.

Slightly modified versions of this survey were also administered in Canada, Australia and New Zealand, at the request of chiropractic officials in those countries. Data from those surveys are presented in two additional volumes: the *Job Analysis of Chiropractic in Canada,* and the *Job Analysis of Chiropractic in Australia and New Zealand.*

Conclusions derived from the U.S. data are noticeably absent in this and the previous volume. Beyond the NBCE's internal utilization of data for examination documentation, those who conducted the job analysis felt that applications of the data could be made by those who utilize the data. For example, academicians may find the data useful for one purpose, while state licensing authorities or individual health care providers may find it useful for quite another.

Throughout the job analysis project, every effort was made to obtain and validate data by conducting the study in accordance with established survey research methodology and according to testing and measurement guidelines.

Survey Participant Selection Process

The selection of chiropractors who would participate in the job analysis study was made on a state-by-state basis. The process began by obtaining a list of currently licensed practitioners from the state licensing board in each state and the District of Columbia. The names of chiropractors licensed to practice in more than one state were eliminated from all lists except that of their state of residence.

Only two requisites existed for participation in the Survey of Chiropractic Practice: 1) that the participant be a licensed chiropractor, and, 2) that the participant be in full-time chiropractic practice. Survey recipients were allowed to determine whether they considered their practice to be full-time.

State-by-State Comparison of Data

The tables in this book contain tabulated information detailing the survey responses from each state. The data are presented in the order in which survey questions were posed. A Fold-out Reference giving survey distribution and response numbers by state has been included inside the back cover to facilitate understanding the state data.

Additional information pertaining to each state was detailed in the previously published, *Job Analysis of Chiropractic.* The data presented in that volume are aggregated data for the entire United States and are *weighted.* Weighting enables non-proportional sample sizes to be combined to accurately represent a population.

Except where indicated, the data presented in this volume (*Job Analysis of Chiropractic by State)* appear in *unweighted* form. The purpose of publishing unweighted state data is to provide state agencies, organizations or individuals with state data which may be utilized to meet various needs.

Data in this volume are presented on three scales:

1) **a zero-to-100 point scale** (as in the *percentage*-based tables on pages 2-4 and 14-15 of the survey form);
2) **a zero-to-four point scale** (as related to *conditions, frequency* and *risk* on pages 5-13 of the survey form);
3) **a zero-to-16 point scale** (as related to *importance,* a factor derived from combining frequency and risk).

To enable readers of this document to estimate the approximate accuracy of the data presented for each state, *standard errors* appear in the table on the opposite page. The standard errors for the states are provided in three columns, each corresponding to one of the three scales noted above. The standard errors in these tables can be used to calculate a

range of values which, with a 95% probability, is likely to include the true population value.

To calculate this range as it applies to the data in subsequent pages, the reader should double the standard error. That number should then be both added to and subtracted from the value presented in the table.

For example, on page 1 of this book, the percent of male practitioners in Alabama is reported as 88.3. This is based on a sample of 103 responses out of Alabama's 420 licensed chiropractors.

To address the possible variation between the true population value and the number obtained through sampling, refer to the *Percentages* column of the table on this page. Alabama has a standard error of 4.0 for data reported as a percent. Double this number. The total is 8.0.

Then subtract 8.0 from 88.3 (producing a difference of 80.3) and add 8.0 to 88.3 (producing a sum of 96.3). The range of numbers becomes 80.3 to 96.3, which means that there is a 95% likelihood that the percent of full-time male chiropractors in the state of Alabama is between 80.3 and 96.3.

In like manner, the range of numbers for the other two scales can be calculated on a state-by-state and question-by-question basis.*

* * *

* The standard error for each state can vary from question-to-question. However, to simplify the process and provide the reader with a reasonable approximation, a single, relatively large standard error per scale per state is provided.

STATE	STANDARD ERROR		
	Percentages (Zero-100 Scale)	Conditions, Frequency, and Risk (Zero-4 Scale)	Importance (Zero-16 Scale)
Alabama	4.0	.10	.44
Alaska	3.3	.09	.36
Arizona	4.5	.12	.50
Arkansas	4.3	.11	.47
California	3.2	.08	.36
Colorado	4.3	.11	.47
Connecticut	4.1	.11	.45
Delaware	5.3	.14	.58
D.C.	10.5	.27	1.15
Florida	4.0	.10	.44
Georgia	5.1	.13	.56
Hawaii	4.4	.11	.48
Idaho	3.3	.08	.36
Illinois	4.5	.12	.50
Indiana	4.1	.11	.46
Iowa	5.6	.15	.62
Kansas	4.4	.12	.49
Kentucky	4.7	.12	.51
Louisiana	4.6	.12	.50
Maine	4.5	.12	.50
Maryland	4.0	.11	.44
Massachusetts	4.0	.10	.44
Michigan	4.4	.11	.49
Minnesota	4.2	.11	.46
Mississippi	4.3	.11	.47
Missouri	4.6	.12	.51
Montana	2.3	.06	.25
Nebraska	3.2	.08	.36
Nevada	4.1	.11	.45
New Hampshire	3.9	.10	.43
New Jersey	4.4	.11	.48
New Mexico	3.9	.10	.43
New York	4.0	.11	.45
North Carolina	4.0	.10	.44
North Dakota	2.9	.08	.32
Ohio	4.3	.11	.47
Oklahoma	4.8	.13	.53
Oregon	4.3	.11	.48
Pennsylvania	4.8	.13	.53
Rhode Island	3.5	.09	.39
South Carolina	4.5	.12	.50
South Dakota	3.0	.08	.33
Tennessee	3.8	.10	.42
Texas	4.7	.12	.52
Utah	4.5	.12	.50
Vermont	5.2	.14	.57
Virginia	3.9	.10	.43
Washington	4.3	.11	.48
West Virginia	3.9	.10	.43
Wisconsin	4.2	.11	.46
Wyoming	3.5	.09	.39