

Chapter I: Introduction to the Study

This chapter makes a case for the significance of the problem, contextualizes the study, and provides an introduction to its basic components. It describes the research problem or research question and lays out the reasoning behind it. This reasoning is sometimes called a theoretical argument, and it justifies the study, in terms of a need for the information it will provide.

- Background:
 - General description of the areas of concern – set the stage (3-4 paragraphs).
 - Overview of purpose and focus of the study, why it is significant, how it was conducted, and how it will contribute to professional knowledge and practice.

- Problem Statement:
 - State the purpose of the research explicitly and succinctly.
 - Describes the issue or problem to be studied and situates it in a broader educational or social context at the state, regional, or national levels.

- Purpose and Significance:
 - Describes study purpose in a logical, explicit manner. Provides full rationale for why study is important and how it will contribute to professional knowledge and practice.
 - Include explicit statement of significance specific to the topic studied.
 - Why is it important to conduct the study? What is the impact to society?

- Researcher Assumptions:
 - Analyze the theoretical basis for the study
 - Reflects important issues surrounding the topic that the researcher believes to be true as the research begins.

- Definition of Terms:
 - Defines/explains key terms used in the study that do not have a commonly understood meaning.

- Summary:
 - Ties together all the elements presented in the chapter and delineates the contents of the remaining chapters in the Dissertation.

- Research Question(s) and Hypotheses (if relevant):
 - Lists research questions, briefly describes variables (if relevant).
 - A research question should (a) be in the form of a question, (b) suggest a relationship among constructs, and (c) be empirically testable.
 - Hypotheses are declarative statements written in the expected or predicted direction (usually an alternate hypothesis). Such hypotheses are called research, scientific, or theoretical hypotheses and are written in the present tense.

Rubric for Introduction

Area	Assessment			Comments
	Excellent (Met)	Fair (N/A)	Poor (Not Met)	
Background	A general description of the research topic is provided. An overview of the study is provided, including its significance to the knowledge base for the chiropractic profession.	A general description of the research topic is provided. An overview of the study is not provided, and/or its significance to the knowledge base for the chiropractic profession is unclear.	A general description of the research topic is not provided. An overview of the study is not provided, and/or its significance to the knowledge base for the chiropractic profession is unclear.	
Problem Statement	The purpose of the research is explicitly stated. A description of the research problem is made in the context of broader educational or social concerns.	The purpose of the research is unclear. A description of the research problem is not made in the context of broader educational or social concerns.	The purpose of the research is unclear. There is no description of the research problem in the context of broader educational or social concerns.	
Purpose & Significance	A fully developed rationale for the study is stated. The importance of conducting this study, and its impact to society, are explicitly stated.	Rationale for the study is not well developed. The importance of conducting this study, and its impact to society, are not explicitly stated.	No rationale for the study is provided. The importance and impact of the study findings are unclear.	
Researcher Assumptions	The theoretical basis for the study is analyzed, including an exploration of the supporting evidence and important issues affecting the research topic.	The theoretical basis of the study needs further analysis. The supporting evidence and related issues need exploration.	No analysis of the theoretical basis for the study is conducted. No consideration is given to currently supporting evidence or related issues.	

Definition of Terms	Key terms are well defined.	Key terms are only vaguely defined.	Key terms are not defined.	
Summary	A brief summary of the Introduction and entire manuscript is provided.	A brief summary of the Introduction is provided. A summation of the remainder of the manuscript is not provided.	A summation of the material is not provided.	
Research Question(s) & Hypotheses	An empirically testable research question(s) is identified. Variables to be measures are listed. Optional - Hypotheses are listed as declarative statements.	An empirically testable research question(s) is identified. It is unclear what variables will be measured. Optional - Hypotheses are listed as declarative statements.	The research question is vague. Variables are not identified. Hypotheses are poorly constructed or fail to predict outcomes.	

CHAPTER II: Review of the Literature

This chapter situates the study in the context of previous research, presents a critical synthesis of empirical literature according to relevant themes or variables, justifies how the study addresses a gap or problem in the literature, and outlines the theoretical or conceptual framework of the study. The literature cited should support the theoretical argument being made and demonstrate that the author has a grasp of the major ideas and findings that pertain to his or her topic.

- Introduction: Describes the content, scope, and organization of the review as well as the strategy used in the literature search.
- Review of Literature:
 - Clearly related to the problem statement, research questions and/or hypotheses.
 - What are the major issues, controversies, etc. that impact your study? Include background on all relevant variables.
 - Reviews primary sources that are mostly recent empirical studies from scholarly journals.
- Use headings and subheadings liberally to logically organize this section; starting broadly and narrowing the focus as the chapter progresses.
- Synthesizes findings across studies; Compare and contrast competing hypotheses and justify the theoretical foundation of this research.
- Notes gaps, debates, or shortcomings in the literature and provides a rationale for the study.
- Theoretical/Conceptual Framework: Outlines hypothesis that is tested in study or conceptual framework that informs the study.
- Summary

Rubric for Literature Review

Area	Assessment			Comments
	Excellent (Met)	Fair (N/A)	Poor (Not Met)	
Introduction	Describes the content, scope, and organization of the review as well as the strategy used in the literature search.	Describes the content, scope, and organization of the review, the strategy used in the literature search was not clearly defined	The content, scope, and organization of the review were poorly described. The strategy used in the literature search was not clearly defined	
Hypothesis	Literature review clearly related to the problem statement, research questions and/or hypotheses	Literature review mostly related to the problem statement, research questions and/or hypotheses. There are some irrelevant information.	Literature review not closely related to the problem statement, research questions and/or hypotheses	
Background/Variables	Background on all relevant variables were introduced. The major issues, controversies, etc. that impact your study were discussed.	Background on some relevant variables were introduced. The major issues, controversies, etc. that impact your study were discussed.	Background on some relevant variables were introduced. The major issues, controversies, etc. that impact your study were not discussed.	
Review sources	There are sufficient literatures included. Reviews primary sources that are mostly recent empirical studies from scholarly journals.	There are sufficient literatures included. Reviews primary sources that are mostly from empirical studies 10 years ago.	There are not sufficient literatures included.	
Organization	Use headings and subheadings liberally to logically organize this section; starting broadly and narrowing the focus as the chapter progresses.	Use headings and subheadings were used. The chapter was not organized by starting broadly and narrowing the focus as the chapter progresses.	Headings and subheadings were not used to logically organize this chapter.	

Analysis	Synthesizes findings across studies; Compare and contrast competing hypotheses and justify the theoretical foundation of this research. Notes gaps, debates, or shortcomings in the literature and provides a rationale for the study.	Articles are reviewed with minimal integration. Competing hypotheses were discussed, but not able to justify the theoretical foundation of this research.	Articles are reviewed individually without any integration. Competing hypotheses were not discussed.	
Theoretical/Conceptual Framework	Hypothesis tested in study is testable or conceptual framework that informs the study was discussed.	Hypothesis tested in study is not testable or conceptual framework that informs the study was not clear.	Hypothesis tested in study is not mentioned or conceptual framework that informs the study was not discussed.	
Summary	A summary of the selected literature is provided, including the significance of this research on professional knowledge and practice.	A summary of the selected literature is provided. The impact of this research is not discussed.	A summary of the selected literature is not provided.	

CHAPTER III: Methodology

This chapter describes the methodology to be used in the research study, provides a rationale for that approach, describes the research setting and sample, and describes data collection and analysis methods. The Methodology chapter should provide sufficient detail about the methodology used that study could be replicated.

- Introduction: Restates research questions, hypotheses, and variables (if relevant). Describes organization of chapter.
- Research Design: Describes research approach used with rationale for its suitability for addressing the research questions, citing appropriate methodological literature.
- Research Setting/Context: Describes and provides rationale for selection of the research setting.
- Research Sample or Target Population and Data Sources:
 - Explains and provides rationale for type of sample (e.g. a sample within a database such as Medicare) or target population used and how participants were selected
 - Describes characteristics and size of sample (quantitative, qualitative, and mixed methods) and/or data set (quantitative/mixed methods only, if applicable).
 - Describes how the rights of participants were protected, with reference to conventions of research ethics and the IRB process.
- Instruments and Procedures:
 - Quantitative and Mixed Methods: Describes and provides rationale for type of examination procedures and equipment, questionnaires, surveys, and other assessment methods, explains concepts measured, calculation of scores/values, pilot test if applicable, and instrument reliability and validity, with reference to appendices.
 - Qualitative: Describes and provides rationale for any questionnaires or surveys used, such as interview, focus group or observation protocols, with reference to appendices.
 - Copies of materials used in the assessment of the participant or intervention should be included in the appendix. This could include exam forms or survey instruments.
- Intervention (if applicable): If an intervention is used, it is described clearly and in detail.
- Data Collection: Describes and provides rationale for data collection methods and procedures, including how, when, where, and by whom data were collected.

- Data Analysis: Describes and provides rationale for methods and statistical tools (if applicable) used for analysis. Discusses measures taken to enhance study validity. Summarizes results of pilot studies, if applicable.
 - Provides rationale for determination of sample size, alpha level, and statistical tests to be used in the research (e.g. Two-way mixed ANOVA, Pearson's r, or Chi-Square test)
 - List and describe variables being statistically evaluated within the research study
- Role of the Researcher: Explains the role of the researcher in planning and conducting the study; makes explicit relevant researcher assumptions, beliefs, and biases (if applicable).
- Summary: Highlights all the important points in the chapter.

Rubric for Methodology

Area	Assessment			Comments
	Excellent (Met)	Fair (N/A)	Poor (Not Met)	
Introduction	Concise describes the research questions, hypotheses, and variables. Provides an overview of the chapter and organization.	Describes the research questions, hypotheses, and variables. Does not adequately provides an overview of the chapter and organization.	The research questions, hypotheses, and variables were poorly described. Does not adequately provide an overview of the chapter and organization.	
Research Design	The research design clearly describes the research approach used, including rationale for its suitability in addressing the research questions, citing of appropriate methodological literature, and justification of research setting.	The research design moderately describes the research approach used, including rationale for its suitability in addressing the research questions. Limited citations are provided relative to the methodological literature and justification of the research setting.	The research design generally describes the research approach used, including rationale for its suitability in addressing the research questions. No citations are provided relative to the methodological literature and/or justification of the research setting.	
Research Sample/Target Population and Data Source	Fully explains and provides rationale for type of sample /target population or data source used and how participants were selected. Describes participant and data characteristics along with how the rights of the participants were protected.	Limited explanation provided for type of sample /target population or data source used and how participants were selected. Describes participant and data characteristics along with how the rights of the participants were protected.	Limited explanation provided for type of sample /target population or data source used and how participants were selected. Does not describe participant and data characteristics or how the rights of the participants were protected.	

Instruments and Procedures	Fully describes and provides rationale and supporting literature for examination procedures, equipment, questionnaires, surveys, interviews and other assessment methods used in the study. Relevant copies of material used in the assessment, intervention or examination of the participant are provided in the appendix.	Limited description, rationale, and supporting literature for examination procedures, equipment, questionnaires, surveys, interviews and other assessment methods used in the study were provided. Relevant copies of material used in the assessment, intervention or examination of the participant are not provided in the appendix.	The description, rationale, and supporting literature for examination procedures, equipment, questionnaires, surveys, interviews and other assessment methods used in the study were not sufficient. Relevant copies of material used in the assessment, intervention or examination of the participant are not provided in the appendix.	
Intervention (if applicable)	The intervention along with relevant rationale for use and supporting literature are adequately described.	The intervention is moderately described. No relevant rationale for intervention use and/or supporting literature are provided.	The intervention along with relevant rationale for use and supporting literature are not described.	
Data Collection	Describes and provides rationale for data collection methods and procedures, including how, when, where, and by whom data were collected.	Describes data collection methods and procedures, including how, when, where, and by whom data were collected.	Does not describe or provides rationale for data collection methods and procedures, including how, when, where, and by whom data were collected.	
Data Analysis	Describes and provides rationale for methods and statistical tools (if applicable) used for analysis. Discusses measures taken to enhance study validity.	Describes methods and statistical tools (if applicable) used for analysis. Discusses measures taken to enhance study validity.	Methods and statistical tools (if applicable) used for analysis are not sufficiently described. Does not discuss measures taken to enhance study validity.	
Summary	A summary of the methodology is provided, highlighting the important points of the chapter.	A summary of the methodology is provided, highlights of the important points of the chapter were not discussed.	A summary of the methodology is not provided.	

CHAPTER IV: Results

This chapter organizes and reports the study's main results or findings, including the presentation of relevant quantitative (statistical) and/or qualitative (narrative) data.

- Introduction: Provides a brief summary of and rationale for how data were analyzed. Describes organization of chapter according to research questions/hypotheses, theoretical/conceptual framework, or thematic scheme.
- Quantitative:
 - Measures obtained are reported clearly and accurately, following standard procedures.
 - Descriptive statistics are provided on the study sample and results prior to presenting further statistical analysis. Examples might include means, standard deviations, frequencies, etc. Where appropriate, outcomes of hypothesis testing procedures are clearly reported.
 - Results are presented in a logical manner in both statistical form (through tables and figures) and narrative form that reports and explains the statistical results. Some tables and figures may be deferred to the appendices.
 - Headings are used to guide the reader through the results according to research questions, variables, or other appropriate organizational scheme.
- Qualitative:
 - Findings build logically from the problem, research questions, and design.
 - Findings are presented in clear narrative form using plentiful quotes, stories, and “thick description”. Narrative data are connected and synthesized through substantive explanatory text and visual displays (charts), if applicable, not simply compiled.
 - Headings are used to guide the reader through the results according to research questions, themes, or other appropriate organizational scheme.
- Inconsistent, discrepant, or unexpected data are noted with discussion of possible alternative explanations.
- Summary

Rubric for Results

Area	Assessment			Comments
	Excellent (Met)	Fair (N/A)	Poor (Not Met)	
Introduction	Concise provides a brief summary of and rationale for how data were analyzed, describing organization of chapter.	Provides a brief summary of how data were analyzed, describing organization of chapter.	Does not adequately provide a summary of how data were analyzed and does not describe the organization of chapter.	
Organization	The layout of the chapter is appropriately organized with headings, subheadings, tables and figures labeled and represented appropriately.	The layout of the chapter is somewhat organized. Headings, subheadings, tables and figures are used and labeled.	The chapter layout is confusing and disorganized, with inconsistent representation of headings, subheadings, tables and figures.	
Quantitative (if applicable)	Results are presented in a logical manner in both statistical form (through tables and figures) and narrative form that reports and explains the statistical results, including descriptive statistics and discussion of inconsistent or unexpected data.	Results are presented in both statistical form (through tables and figures) and narrative form that reports and explains the statistical results, including descriptive statistics. Discussion of inconsistent or unexpected data are not included.	The results are not sufficiently presented in a logical manner and do not include both statistical form (through tables and figures) and narrative form that reports and explains the statistical results. Discussion of inconsistent or unexpected data are not included.	
Qualitative (if applicable)	Findings build logically from the problem, research questions, and design and are presented in clear narrative form, connected and synthesized through substantive explanatory text and visual displays (charts).	Findings build from the problem, research questions, and design and are presented in narrative form with modest use of explanatory text and visual displays.	Findings are presented, but the development of the problem, research questions, and design are not sufficiently organized and do not provide a coherent narrative.	

Summary	A summary of the results of the study are provided, highlighting the important points of the chapter.	A summary of the results of the study are provided, highlights of the important points of the chapter are not discussed.	A summary of the results is not provided.	
----------------	---	--	---	--

CHAPTER V: Discussion and Conclusions

Most of this chapter serves a similar role as the Discussion section of a journal article and is devoted to interpreting and discussing the results in the context of the study's research questions, literature review, and conceptual framework. It ends with a Conclusion, which in a journal article would be a small separate section.

- Begin this chapter with a brief introduction – provide a brief overview of the chapter's organization and content.
- Summarize the results, with an emphasis on answering the research questions or hypotheses. Did the results support or differ from what you expected? It's important to use non-statistical and non-technical language when possible – this is not a section for readers to have to interpret, it's where you explain to them what the numbers or esoteric outcome measures really mean.
- Relate the results to the conceptual framework described in the Introduction chapter and to the larger body of literature. Point out consistencies and inconsistencies with the results of previous studies. Add observation or patterns that emerged from this study that may or may have been reported in other studies. Reflect on this study's contribution to the field. Note that statements that are unsupported or that over-generalize or over-extrapolate the findings should not be included.
- Provide a section titled "Limitations". A limitation is a weakness or handicap that potentially limits the internal or external validity of the results. Most limitations should have been considered when the study was conceptualized, but some will be recognized during execution. In an order appropriate for your topic and study:
 - Clarify relevant research questions that the study's design could not be or was not designed to address.
 - How generalizable – or not – are the findings to other populations, settings, or conditions (if applicable)?
 - What aspects of the study did not work out as well as expected or hoped for (equipment, questionnaires, location, sham or blinding procedures, scheduling, etc.)?
 - Are there possible sources of bias or any reasonable alternate explanations for the findings and interpretation for the study?
- What are the implications for policies or practices in related fields or professions? Do you have any recommendations for changes or next steps?
- Recommendations for future research: Describe topics that may need closer examination and may generate a new round of research questions for further study.
- Conclusion: End with a strong, clear, concise "take-away message" for the reader. Nothing new should be stated, and there should be no references cited. A Conclusion typically sums up the results, implications, and recommendations in only a few sentences.

Rubric for Discussion and Conclusion

Area	Assessment			Comments
	Excellent (Met)	Fair (N/A)	Poor (Not Met)	
Introduction	A general description of the research topic is provided, including an overview of the chapter's organization and content.	A general description of the research topic is provided; however, an overview of the chapter's organization and content is only modestly represented.	A general description of the research topic is not clearly provided, and an overview of the chapter's organization and content is not provided.	
Results Summary	The results are adequately summarized and the significance to the field of study, previous research, and emergent patterns are relayed in a concise and clearly readable format.	The results are modestly summarized; however, the significance to the field of study, previous research, and emergent patterns are not fully addressed and relayed in a concise and readable format.	The results are modestly summarized; however, the significance to the field of study, previous research, and emergent patterns are not addressed and relayed in a concise and readable format.	
Limitations	The limitations of the study were fully addressed and included relevant research questions the study was not designed to address, the generalizability of the findings, unexpected results or challenges with the study, and inherent bias within the study.	The limitations of the study were modestly addressed and included some information regarding relevant research questions the study was not designed to address, the generalizability of the findings, unexpected results or challenges with the study, and inherent bias within the study.	The limitations of the study were not adequately addressed and only some of the information regarding relevant research questions the study was not designed to address, the generalizability of the findings, unexpected results or challenges with the study, and inherent bias within the study were included.	

Recommendations	Recommendations for future research are clearly listed and topics requiring closer examination along with suggested methodology are included.	Recommendations for future research are modestly listed and some information is provided regarding topics requiring closer examination along with suggested methodology are included.	Recommendations for future research are not adequately listed and information is not provided regarding topics requiring closer examination.	
Conclusion	The conclusion provides a clear and concise “take-away message” for the reader that sums up the results, implications, and recommendations in a few sentences.	The conclusion summarizes the results, implications, and recommendations in a few sentences.	The conclusion does not adequately summarize the results, implications, and recommendations in a few sentences.	

Style Guide

For preparation of the Research Track thesis

You are required to present your work in a manner as specified below. This serves a few functions. The main one is simply to make it easier for members of the Research Track Committee – the people who are evaluating you – by providing a well-organized final product, consistent with the standards of scientific journal requirements.

This guide is mainly written for the final product, the complete, “potentially-publishable” manuscript that fulfills your RT graduation requirement. However, you also need to submit chapters of your thesis at various times throughout your program of study, and this guide should be applied to those, as well. Exceptions may be noted below.

GENERAL REQUIREMENTS

Title page: Your RT thesis should start with a title page, which should include the title, your name, your contact information, the names of your advisor(s) and co-author(s), the date it is being submitted, a table of contents, and a 3-5 sentence paragraph concerning the version.

- **Table of contents:** Note that, as you progress through the program, you’ll be submitting sections and incomplete versions of your thesis on several occasions. The table of contents should provide a clear and concise labeling of what is contained in each version.
- **3-5 sentence paragraph concerning the version:** State whether the title has changed. Also, state whether changes have been made to anything that had already been submitted, such as re-writes of sentences in the Introduction and Methods sections – specify how these changes are visible (colored text, highlighting, inserted comments, etc., and be consistent.) State what sections are new. However, for the final version being submitted for the graduation requirement, simply state “Final Version”.

File name: save your document with a file name that includes your last name, 2-3 words of your title, which version it is (e.g., “Intro v2”, “Intro & Methods”, “Final”, or whatever fits the situation), and the date (e.g., Russell_chiro & gait_final draft 2_4-17-19).

TYPEFACE

- All material must be of a standard typeface (e.g. Arial, Calibri, or Times New Roman.) Use only one typeface throughout the cover letter, title page, main manuscript, and references. Exceptions include special symbols (Greek or mathematical) that can be found in typefaces such as “Symbol” (τ , Δ) or “Wingdings”.
- Use a font size of 11 or 12 points and maintain that same font size throughout the cover letter, title page, main manuscript, and references. Exceptions: for text in tables or labeling figures, use a 10-point font size.

- *Italic type*, if used at all, should be limited to scientific or mathematical symbols (r , t) and foreign phrases (*raison d'être*, *schadenfreude*.)

SPACING

- In general, the text of the manuscript may be spaced either 1.5 lines or double-spaced (Figure 1.) However, single-spacing may be used for tables, long quotations, captions for figures, and reference entries.
- Start each major section (e.g., Introduction, Methods, Results) EITHER at the top of a new page OR with a blank line separating is from the previous sections, as is done in this document.

MARGINS

- All margins (top, bottom, left, and right) should be set at 1 inch.
- The text within the thesis must be left-justified (Figure 2.)

READABILITY ISSUES

- If a paragraph is positioned such that only one line would run over to the next page (a “widow”), instead, leave extra space at the bottom of the first page and have at least 2 lines of that paragraph at the top of the next page.
- Conversely, if a paragraph would begin on the last line of a page (thus having only one line of text on that page – an “orphan”), instead, leave extra space at the bottom and start the new paragraph on the top of the next page.
- The last word of a page should never be hyphenated. Instead, place the whole word on the next page.
- Whatever style is used for section headings, keep it consistent. Using the section headings of this document as an example: “READABILITY ISSUES”, “**Readability Issues**”, “Readability Issues”, or some other style would be acceptable alternatives to “**READABILITY ISSUES**”, as long as the chosen style is used consistently.

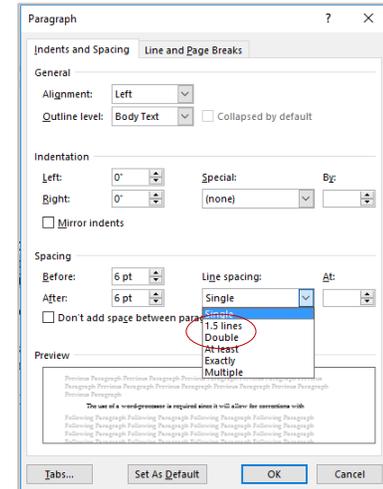


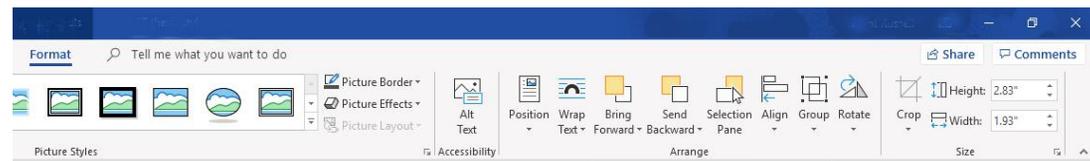
Figure 1



Figure 2

- Number each page, beginning with the title page, in the lower right-hand corner.
- Capitalization: the "C" in “chiropractic” is not capitalized except at beginning of sentence or when used as part of a proper name.
- **Figures:** If you’re uncomfortable with inserting and managing images into Word documents, search for tips on how to use the Format menu (partially reproduced in Figure 3.) “Format” is not always visible – clicking on an image or a text box will make it so. From left to right below, you may find options such as Picture Border, Wrap Text, Align, Group, Rotate, and Size to be particularly useful in placing and editing your figures. Some of these can be accessed simply by clicking on an image or text box – look for a little Wrap Text icon to appear near the upper right-hand corner of the image.

Figure 3



REFERENCE CITATION FORMAT

- All sources must be cited in the Reference section according to the reference style described by the International Committee of Medical Journal Editors; this is sometimes called NLM style (National Library of Medicine) or Vancouver style:

https://www.nlm.nih.gov/bsd/uniform_requirements.html

Quick refresher: For journals that use traditional volume, issue, and page numbers, the citation should look like this:

- Ogata Y, Anan M, Takahashi M, Takeda T, Tanimoto K, Sawada T, et al. Relationships between trunk movement patterns during lifting tasks compared with unloaded extension from a flexed posture. *J Manipulative Physiol Ther.* 2018;41(3):189–98.

For journals that do not use the volume, issue, and page numbering system, but use article numbers instead, the citation should look like the following (“25:16” indicates the 16th article published in their 25th year):

- Gliedt JA, Schneider MJ, Evans MW, King J, Eubanks JE Jr. The biopsychosocial model and chiropractic: a commentary with recommendations for the chiropractic profession. *Chiropr Man Therap.* 2017;25:16.

Citations of systematic reviews from the Cochrane Collaboration should look like the following:

- Cramer H, Lauche R, Klose P, Lange S, Langhorst J, Dobos GJ. Yoga for improving health-related quality of life, mental health and cancer-related symptoms in women diagnosed with breast cancer. *Cochrane Database Syst Rev.* 2017;1:CD010802.

For proper citation of other sources, including conference proceedings, textbooks, and websites, please consult the National Library of Medicine URL above.

- NOTE: The titles of journals must be abbreviated according to the style used in PubMed and/or The Index to Chiropractic Literature. You may not “make up” the abbreviation of a journal.

NUMBERING REFERENCE CITATIONS

- References must be numbered consecutively and sequentially (i.e., 1, 2, 3, 4) in the order in which they are first mentioned in the text.
- In-text citation numbers must be superscripted.¹ Note that the reference number has been placed immediately after the period, with no space in between (in other words, reference numbers should fall outside closing punctuation marks, and there should be space between closing punctuation marks and reference numbers.)
- When multiple sources from your reference list are cited consecutively, cite them like “1-4”, instead of “1,2,3,4”. It’s possible to see correctly-cited sources like this: ^{1-4,8,13,17-20}
- In the final product, do not place parentheses or brackets around reference numbers. ⁽¹⁾ nor [1]
 - **Writing tip:** The requirements above should put into place as one of the last steps before submission. Until that point, refer to references by the first author’s last name [Gliedt] within the text so that it will be easier to revise and rearrange without losing track of which sentences and paragraphs go with each reference. If you can work with 2 computer monitors, side by side, maintain a document titled something like “just the references”, in which you periodically rearrange references according to any changes you make in their order within the text. Once you’ve made your final revision and are ready to submit, then (a) number the citations in “just the references” document, (b) number the references in the text (changing authors’ names to numbers) and (c) copy & paste the contents of the “just the references” document into your manuscript’s REFERENCES section.