



Peer review

“Peer review is the critical assessment of manuscripts submitted to journals by experts who are usually not part of the editorial staff. Because unbiased, independent, critical assessment is an intrinsic part of all scholarly work, including scientific research, peer review is an important extension of the scientific process.” [International Committee of Medical Journal Editors](#)

1. Peer review allows publication of the submissions of highest quality and relevance to the mission of the journal.
2. Peer review helps to identify significant flaws in a submission that may jeopardize the quality of the scientific literature.
3. Peer review provides helpful feedback to the authors so that they can improve the quality of their submission and to make it publication worthy.

Peer reviewers

- support the advancement of chiropractic education research
- establish the validity of research based upon their expertise
- provide feedback to authors so that they may improve their papers
- are able to include that they are a peer reviewer on their CVs
- are able to read some of the latest science in their field before it is published
- sharpen critical thinking skills, which improves their research and writing
- improve the quality of manuscripts that are deemed suitable for publication
- establish their knowledge of the field in the scientific community
- gain insight on the level of quality required for publication
- are recognized for their peer review efforts during their performance reviews
- improve their peer review and scholarly assessment skills
- strengthen the community of chiropractic education researchers

Select the journal you wish to peer review for. Click the link and complete the peer reviewer application form. Editors will match your expertise with manuscripts that are submitted to these chiropractic journals.

[The Journal of
Chiropractic
Education](#)

[Journal of
Manipulative and
Physiological
Therapeutics](#)

[Journal of
Chiropractic
Medicine](#)

[Journal of
Chiropractic
Humanities](#)

Once invited

1. Is the topic or study design in your area of expertise?
2. Do you have time to do a proper review by the due date requested?
3. Are you able to provide a fair and unbiased review?
4. Are you willing to also review one or more revisions if the authors are asked to revise?
5. If you are going to accept the invitation, do it promptly.

After you accept

1. Set aside enough time to perform your review.
2. Follow a systematic process to review the submission (eg, use an appropriate critical appraisal form).
3. After you accept the invitation and you discover a problem that prevents you from completing the review, email the editor immediately for assistance.
4. Confidentiality of the content of the submission, the author names, and your opinions is absolutely critical and your responsibility. Don't share.
5. Be sure your comments are congruent with the journal purpose and style.
6. Be on time with your review. Submit your review to the journal website before the due date.

How to do an awesome review

- Briefly read the paper to get an overview of the topic and main sections of the manuscript. Be sure to glance at the tables, figures, references, and any supplements.
- Next, read the paper a second time for more detail. For each section, type your comments and constructive suggestions into a Word document. Be sure to save your file.
- In your comments, include what was good about the submission.
- Clearly state what needs to be improved and describe how these items can be improved. Provide constructive feedback that will assist the authors in preparing their revision.
- If applicable, suggest additional sources for information, references, statistics, or methods, for how to make the manuscript stronger.
- Use checklists for the study design to help guide your feedback, such as on [Equator-Network](#).
- If you identify one or more fatal flaws, which are errors or problems that cannot be corrected through the revision process, clearly state what these are and why the paper should be rejected.
- Do not feel compelled to go into areas that are out of your area of expertise, but you should still comment on the various sections of the submission.
- Do not use slang, profanity, rude, or demeaning comments.
- Submit your review before the due date. Never be late.

Helpful hints

- Your primary duties are 1) to identify if there are any fatal flaws that deem the paper unworthy of publication and 2) if there are no fatal flaws, to suggest ways that the authors should revise the manuscript.
- Be familiar with the journal mission, style, and format so that you only make suggestions that are in congruence with journal expectations.
- Save your comments in a Word document. Saving a Word document makes it easy for you to check your spelling before you submit your review and makes sure your comments are not lost.
- While writing your review, use the section headers of the manuscript to organize your comments. Number your comments for each area. This will help the authors respond to your comments and will help you check to make sure they addressed your comments when you review their revision. See examples below.
- Write your review, then leave it for at least 24 hours. Come back and read it again pretending that you are the author. This may help you revise your statements so that your feedback is more effective and kinder to the authors before you submit your comments.
- Create a peer review toolkit folder. Keep the [Equator-Network](#) information and other helpful links and checklists in a folder so you can easily access these tools while peer reviewing.
- If you run across an area you suspect of plagiarism, use the system available from your university (eg, iThenticate) or copy/paste the section of text into Google Scholar to see if there is overlap.
- Do not waste your time correcting spelling, punctuation, or grammar; that is not a peer reviewer's job. If there are excessive English usage, grammar, or spelling errors in the submission, you may give examples, then state the general problem in your comments.
- If you peer review for multiple journals, double check that the comments being submitted are to the correct journal and for the correct manuscript before you submit.
- Make a note "confidential" within the file name or on the first page of the document you are reviewing so that you will not forget that these materials are confidential.
- Consider having a standard list of reviewer phrases that you use often, so you can use them for future peer review.
- If the authors are asked to revise, you will likely be asked to review the revision. Follow the same steps as you did for the first review.
- As you review a revision, note how the authors addressed your comments. Be sure that they made the changes in the manuscript and did not just reply in the comments section. You should also review the other reviewers' comments to see how the authors addressed the other reviewers' concerns. We can learn a lot from the other reviewers' comments.
- If you have a question or concern at any time, contact the journal editor.
- Remember that there is no such thing as a "perfect" manuscript.
- Treat others as you would want to be treated.



After reviewing

- Once you have submitted your review, the journal will email you a confirmation that your review was received. You may forward this to [Publons](#) if you have a Publons account. Publons is a place where you can store and track your reviews confidentially.
- Most manuscript management software posts the status of the manuscript. You can log in as a reviewer and see the status of the manuscript.
- Be sure to keep a log of your reviews, especially if your institution evaluates your performance of your scholarly activity.

More ways to be an awesome peer reviewer

Free Peer Reviewer Training

[Focus on Peer Review](#) is a free online training course in peer review from Nature Masterclasses.

Additional resources

[Committee on Publication Ethics \(COPE\) Guidelines](#)

Ethical Guidelines for Peer Reviewers. This guideline provides an overview of the peer review process, the responsibilities of being a reviewer, and how to conduct and prepare a review.

[Peer Review: The Nuts and Bolts](#)

This document provides information about peer review, its processes, and insights from various perspectives about peer review.

[Peer Review Process Guide](#)

This document offers a worksheet to guide peer reviewers through performing peer review.

[Improving Peer Review: What Reviewers Can Do](#)

This paper describes the peer review process and offers processes for performing peer review.

[Submitting Manuscripts to Biomedical Journals: Common Errors and Helpful Solutions](#)

This paper discusses various errors that authors make and solutions for how authors can correct them.

[Equator-Network](#)

This website has checklists for the majority of research designs. These checklists help guide how authors should be reporting their research. These can be helpful when giving feedback to authors.

Rosenfeld RM. [How to review journal manuscripts](#). Otolaryngology-Head and Neck Surgery. 2010 Apr 1;142(4):472-86.

Garmel GM. [Reviewing manuscripts for biomedical journals](#). The Permanente Journal. 2010;14(1):32.

What does good peer review look like?

Review Sample 1

The topic of this paper is interesting. Exercise and health promotion are timely topics and bringing these issues to light in chiropractic education is important. I commend the authors for their efforts in doing this study as well as having the study reviewed by both their ethics committee and the IRB of their institution. Below are some suggestions for improvement.

Introduction:

1. Avoid making statements that extrapolate. Some statements were implied as facts without proper substantiation. Please include references for statements made as fact. For example, the first sentence in the introduction states that a students' attitude toward regular physical activity is fundamental in developing prevention-oriented behavior, however there was no supporting evidence in the references or in the data of this paper. Please include references.
2. It was also stated that one must do physical activities to understand health benefits, which was not supported by this study nor by the references. Consider providing these additional references, this will strengthen your paper.

Methods:

1. Please provide more detail when describing your methods so that another researcher would be able to duplicate your study.
2. It was unclear how the students were selected and how each group of 15 was formed (e.g., were they recruited? Assigned? Randomly selected? What part of the program were they in? First or second year?) Why wasn't an inactive group selected to compare the 3 groups to? It was not stated why no female chiropractic students were included in this study. These items should be addressed.
3. How some of the measurements were done is unclear; motor coordination was described but measurement was not explained (e.g., was the speed measured or how many activities performed?) Were cardiorespiratory functions measured multiple times and taken at various times throughout the day? (Since blood pressure measurements vary, how many were taken and what time of day?, etc.)
4. Please include in the methods when and how long this study was done.
5. Overall, consider adding more detail about the methods so that the study could be replicated.

Results

1. When reporting data, I would have preferred to have seen more of the actual data and not just the means, including the data on the six individuals who showed 'concerning' values. Also, some of the data reported in your tables do not seem to match with what is in the text (e.g., body fat numbers do not match). Please revise so the results are more accurate.

Discussion/Conclusion:

1. Consider providing better support for some statements. It was stated that doing “little sport activities” is better than doing nothing, however no references were given to support this statement.
2. There were several locations in the discussion that seem to try to link the health of the students with their knowledge and attitudes of health promotion. Because this study did not measure the students' attitudes or knowledge of health promotion, it would be inappropriate to make this statement. Staying with a discussion of the health findings of the students would have been more appropriate.
3. Your conclusion states that chiropractic education should direct chiropractic students' attention toward exercising and that extracurricular possibilities are insufficient. This study did not measure how many extracurricular possibilities are available, if they are being used, and this information should be included.
4. This study did not measure students' attitudes toward exercising, nor did it measure the status of the chiropractic curriculum that addresses attitudes toward exercising and health promotion, thus the statement in the conclusion is not supported by the study and should be removed. To suggest that a prerequisite course is required for the general final examination is neither supported nor refuted by this study, thus should not be made. Therefore, consider removing this statement.

References:

1. More up to date references would be helpful. There may be more relevant and recently published studies that would help support the concepts in this paper. A brief literature review on your topic may help you with this.

Review Sample 2 (of a different manuscript)

This is an interesting survey study of theoretical practice patterns of a limited group of Brazilian chiropractic practitioners.

Abstract -

1. The objective should more clearly state that the investigation was on a very limited group of chiropractors.
2. The abstract conclusion is confusing and does not seem to represent the study. Please reword the conclusion so that it matches the findings of the study.

Introduction -

1. Be sure to use scientific language. Remove slang terms, such as "case-mix." This means different things to different people. Instead, use appropriate scientific terminology.
2. Why were other guidelines that have been published not recognized? AHCP? Mercy? To state that there are no guidelines is concerning. Please include previously published guidelines in the introduction of the paper.
3. In the purpose statement you mentioned consensus. Consensus is a specific method and has certain expected parameters. Did you mean to use this word or did you mean 'trends'? Please review terminology to make sure you are being precise.

Methods -

1. Please include more information so that your study is reproducible. For example, how many people designed the questionnaire? Stating only the "research team" is not clear enough. Please provide more detail.
2. A clear description of the pilot of the questionnaire should be included earlier, in the methods section (not in the discussion section).
3. Remove slang terms such as "quick-fix" since this does not adequately describe the entity.
4. What source did you use to define "maintenance care"? Rupert has published several papers on this concept in chiropractic. Consider using and citing Rupert's work.
5. Please include the total number of practicing chiropractors in Brazil. And, please include the total number of Brazilian members. This will help put the numbers in the study into proper perspective.
6. The limitation to include only the membership association and then only those who participated in previous projects seems to be quite limiting and certainly skews the findings. This is concerning. Please clarify this.
7. It is not clear why the statements about the Brazilian Board of Examiners and the "other" group are being made. It is not clear why they were excluded from the study. Was this done for political reasons? Please explain in the methods why this group was excluded.
8. Please explain the section regarding "... after having defined their own preferred choices."
9. How were the preferred answers determined? Were the answers based on evidence? Or was it only based on opinion? Do all practice chiropractic? What percentage of the time in practice vs research? Was 100% consensus used or were there a few outliers? More details are needed here if any comparison to the "expert" group is to be used.
10. Regarding ethical approval, typically Universities grant this exemption not the authors. It would be important to state if this study was clearly exempted from ethics review.
11. One of the areas in need of greatest improvement is the writing of the case scenarios. Because the wording is so vague and could be interpreted in a wide variety of ways, this wide interpretation may result in a wide variety of answers. For example, stating a patient has only seen 20% improvement after 6 visits, does not tell the practitioner much about timeline. If the 6 visits were over 2 weeks one might respond differently than if the 6 visits were over 6 weeks or 2 months. Without this being clear, no clear conclusions can be made as to the value of the responses. This should be clearly addressed in the limitations section of this manuscript.
12. The outcome measures in the cases are not clearly stated thus has the potential for the practitioner to interpret them in a wide variety of ways. An "acute" attack only implies length of time not severity. If an acute attack of a pain was rated 2/10 on a pain scale and lasted for one week, compared to a 9/10, there might be different answers from the respondents about how to follow up with this patient. Because each respondent was required to fill in these gaps on their own in an arbitrary manner, this would affect the findings and thus should be listed as a limitation to this study. It is no wonder that some of the responses did not match the authors' predetermined ideals.
13. Another concern with the survey instrument is that it states there is no definition for "maintenance care" however, then asks the practitioners if they use maintenance care. Without a clear definition of maintenance care included for the survey taker, the data from this section on maintenance care are meaningless (eg, the do you use maintenance care yes/no data).

Results -

1. Information that should be included that is relevant to the purpose of the study: to include background of the chiropractors, such as years in practice and which college attended.
2. The reporting of the results is confusing. Please do not include discussion or commentary with the results. The results section should only contain results.
3. Do not repeat case scenarios again, (instead consider shortening them) since it appears

redundant and makes the results section a labor to read through.

4. Commentary, once it is moved from the results to the appropriate (discussion) section, should be substantiated with references. Why was scenario B selected for case 1 by the authors? What is the evidence that supports this decision?

5. Remove supposition from commentary about cases. For example, Case 4 it states "If the patient considers that the chiropractic treatment shortened ..." This is sheer supposition and should not be stated as fact. Unless supported by literature that shows that "many patients fail to do so" these opinion statements should be removed.

6. It is mentioned that there were "dissident" opinions. What were the characteristics of this group? Please include additional details such as length of time in practice and college of study compared to the other group. Please remember that the dissidence may be caused from the vague and poorly written case scenarios.

7. Maintenance care does not necessarily mean prolonged treatment for a condition. Please use current references to define this term.

Discussion -

1. There are some doctors who focus more on objective functional outcomes compared to subjective pain symptoms, as this is one of the current trends in healthcare. So for option "F" those who focus on rehabilitation procedures and functional outcomes may tend to make that a preferred choice. The choice "F" does not necessarily imply "maintenance care" or inappropriate care.

2. It is mentioned that "some chiropractors fail to grasp the concept of clinically significant improvement." As a reader, I am not sure how this statement was reached. Without more clear descriptions of the case scenarios provided to the survey takers, I feel that this statement is a leap in logic. No objective outcome measures in the cases were provided to the practitioners; therefore, it would be difficult to claim that the case did or did not have clinically significant improvement, and therefore how could the practitioners make an appropriate decision.

3. If there is a group that tends to select "F" as the reply and ignore immediate symptomatic relief, then why did they not reply with that option for all cases?

4. The "subgroups of chiropractors" that were found need to be more clearly defined.

5. A more complete limitations sections needs to be included. (eg, narrow sample, no outcome measures in cases, no clear time for visits)

References -

1. The references need to be updated. They need to be bolstered to support some of the statements made in the paper.

Overall comments: I recommend this paper be reviewed for English usage and grammar since there are errors in grammar and spelling throughout. Remove slang throughout (eg, "quick fix" "maintenance care"). Keep information in their proper sections (eg, do not include commentary in the results).

This is an interesting topic, however this paper is not ready for publication in its current form. Major revisions are needed. Once the above items are addressed it will make a very interesting paper.