HOW TO WRITE MANUSCRIPTS AND RESPOND TO REVIEWERS' COMMENTS FOR 'SPORTS BIOMECHANICS'

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The purpose of this paper is to outline the fundamental writing principles for the manuscripts to be submitted to Sports Biomechanics and how to respond to the reviewers' comments after a review. General and section-specific writing guidelines are presented along with the recommendations for the preparation of the point-by-point responses to the reviewers' comments.

KEY WORDS: publication, writing principles, manuscript format, peer-review, author instructions.

INTRODUCTION:

The ultimate end of a research study is dissemination of the findings through publications. The peer-review process is a safeguard of the quality of the scholarship in the publications and a manuscript must survive the peer-review process to make a publication. It is of crucial importance for the authors to develop a high-quality manuscript to pass the first round of the review without being rejected and to revise the manuscript successfully in response to the reviewers' comments after a review.
The average acceptance ratio of the manuscripts submitted to 'Sports Biomechanics' (SB) for the last 12 months was approximately 27%, which means about 3/4 of the manuscripts submitted were rejected at various stages of the peer-review process. Reasons for rejection include unsuitable topic, poor writing (paper structure, expressions, and grammar), inadequate sample size, poor scholarship (study purpose/questions, justification of the study, and research design), etc., and the majority of the manuscripts were rejected after the first round of the review due to poor scholarship in the manuscript. The purpose of this paper is to outline the general manuscript writing principles for the manuscripts to be submitted to SB and recommendations for the preparation of the responses to the reviewers' comments.

STANDARD MANUSCRIPT FORMAT:

'Original Research' and 'Teaching Biomechanics' manuscripts should be organized in the standard format: 'Abstract', 'Introduction', 'Methods', 'Results', 'Discussion and Implications', 'Conclusion', 'References', 'Tables', 'List of the Figure Captions', and 'Figures'. 'New Method and Theoretical Perspective' manuscripts are also expected to follow this format in general with minor deviations. A 'Review' or 'Letter to the Editor' may deviate significantly from the standard format.

GENERAL WRITING PRINCIPLES:

1. Read thoroughly and comply with the author instructions. The current author instructions can be found at the SB Manuscript Central site (http://mc.manuscriptcentral.com/rspb).
2. The manuscript must be tightly organized around the study purpose and questions. For example, do not introduce any surprises in the 'Results' section that were not mentioned in the 'Methods' section. Do not include any items that are not related to the study purpose/questions. Also place items in the right sections. For example, do not place any method items in the 'Results' section.
3. The manuscript should be concise but sufficiently in detail. Avoid lengthy descriptions of the items presented in detail in other publications. While keeping the manuscript concise, provide sufficient details of the aspects unique to the study so that others can replicate the study based on the information provided. The manuscript should be reasonably self-contained.

4. The writing should be succinct. Avoid wordy sentences and paragraphs. Hit the main points with clarity. Avoid lengthy paragraphs but keep the paragraphs in reasonable lengths with a key theme in each paragraph. Long paragraphs are at best confusing and distracting.
5. Use figures, tables, and equations strategically as they can enhance the manuscript's readability substantially. A figure can be as effective as hundreds of words. A lengthy list of descriptions/items may be replaced with a table. Equations can clearly show the definitions of the key parameters.
6. The manuscript should be reader-friendly. Avoid any attempts that may hurt the manuscript's readability such as an excessive use of non-standard abbreviations. While avoiding colloquial expressions not suitable in scientific writing, make sure to use plain English as much as possible. It is also important to remember that not everyone is an expert in the content area and technical terms need to be defined and explained properly for non-specialist readers.
7. The manuscript should be free of spelling/grammatical errors as much as possible. Run the spelling/grammar checker before submitting the manuscript. For non-English speakers, it is essential to involve someone fluent in English in the writing process. A manuscript can be rejected immediately by the editor on the sole basis of poor English/writing.

SECTION-SPECIFIC WRITING PRINCIPLES:

Title: Use an informative and specific title which reflects the research purpose/design of the study. A good title allows readers to predict the contents of the paper. Avoid using too abstract or broad a title.
Abstract: Summarize the main findings of the study and conclude with clear statements off the research questions of the study. Refrain from including explanatory statements in the abstract. Include the purpose, key methods, main results (including values and statistical results), and conclusions in a single paragraph. Exclude any unnecessary details.
Introduction: Keep in mind that the main purpose of the 'Introduction' section is to justify and present the study purpose. Develop a novel study purpose and a set of meaningful and specific study questions. Along with the justification of the study purpose, an underlying theoretical framework should be included. Plain descriptive studies with no specific research focus or theoretical framework won't be accepted. Include study questions that can be answered by the theoretical framework and study design, not by subjective observations/speculations.
The 'Introduction' section is not the place for an extensive literature review. Present a big-picture literature review to justify the study purpose, instead of detailed reports on individual studies. Include the justification of the study design (factors) used in the study as well. It is recommended to organize the 'Introduction' section in 4-6 paragraphs in about two double-spaced pages.
Methods: Build the 'Methods' section tightly around the study questions so that it contains only the method items that are essential for answering the study questions. Avoid lengthy descriptions of the items that can be found in detail in published papers. While using the references strategically makes the manuscript concise, it is important to provide reasonable details to keep the manuscript sufficiently self-contained. Include sufficient details of the method items unique to the study so that others can successfully replicate the study with the information provided.
The 'Methods' section typically contains items such as participants, trial conditions, experimental setup, data collection procedures, data processing and variable computation, data analysis, and statistical analysis:
1. Include sufficient participant information (such as physique, age, and skill level) as interpretation of the results can be influenced by the participant characteristics. It is essential to use an appropriate sample size. Studies using a small sample size without a strong justification can be rejected immediately by the editor with no further consideration.
2. Present clearly the details of the trials collected, such as the movements studied, repetitions, and specific trial conditions.

3. Include concise but sufficiently in-depth descriptions of the data collection and processing methods.
4. Pay attention to the inflation of the experiment-wise Type I error when multiple comparisons are conducted (Knudson, 2009). Descriptive studies with no specific research question tend to include a large number of dependent variables and neglect the experiment-wise error while making an equally large number of decisions. A specific study focus helps authors to reduce the number of dependent variables.
5. Carefully select meaningful dependent variables that are directly associated with the research questions (hypotheses) and pay attention to the inter-dependencies among the selected variables.

Results: Keep the 'Results' section as concise as possible with only the result items that are directly associated with the study questions. This section is not the place for interpretation of the results. Do not include any method or discussion items in this section.

Use tables and figures strategically. With most numeric data (descriptive statistics) placed in the tables and figures, authors can focus on the main factor effects and the text becomes less distracting. Refer to the tables and figures parenthetically wherever possible. Avoid presenting redundant numeric data in the text that are presented in the tables and figures.

Do not distinguish 'p < 0.01' from 'p < 0.05'. Stick to the critical significance level presented in the 'Methods' section only. Avoid using expressions such as 'almost significant' or 'strongly significant'. Refrain from using 'p < 0.05' repeatedly in the text. Provide the effect sizes (Knudson, 2009).

Use SI units and do not give results to too many significant figures; consider how accurately you can measure or calculate a variable and determine the appropriate number of decimal places accordingly.

Discussion and Implications: This section also should evolve from the study questions. Do not include discussion items that are not directly related to the study questions. This section is not the place for any ungrounded subjective speculations/observations or generic explanatory statements. Items typically found in this section include in-depth interpretations of the key results of the study, comparison with the previously published data, implications of the results, validation of the methods (if placing it in the 'Methods' section is not possible), limitations of the study, and suggestions for future studies.

Separate this section from the 'Results' section so that practitioners can skip the 'Results' section but understand the findings of the study, and their implications for sport performance or injury prevention, from this section alone.

Conclusion: Summarize the main scientific findings in the context of the study's purpose and questions. The conclusions (answers to the study questions) should be provided by the research design, not by subjective observations and speculations.

References: Ensure that the paper contains adequate referencing. Only the references used in the paper body ('Abstract' to 'Conclusion') should be included in the 'References' section. No reference used in paper body should be omitted. Check reference details, ensuring that all references given in the main body and in the reference list correspond in terms of the author(s) and publication year. Follow the SB citation and reference formats outlined in the author instructions (http://mc.manuscriptcentral.com/rspb).

Tables: Place the tables after the 'References' section. All tables should be referred to in the paper body. Keep the table caption as concise as possible but sufficiently meaningful. Place the caption at the top of the table. Place lengthy descriptions in the table footnotes. Tables should be laid out with clear row and column headings and units, where appropriate. Organize the table in such a way that readers can understand the contents clearly.

The tables should be self-contained and abbreviations/symbols used should be explained within the table in the footnotes. Avoid using unnecessary abbreviations and symbols. Include all details such as the unit(s), sample size, and statistical results in the table. Tables should be created within the document so that they can be edited by the editorial staff.

Figure Captions: Place a list of the figure captions after the tables. The figure captions should be informative. A figure should be self-contained and any abbreviations or symbols

used in the figure should be explained in the caption. When multiple figures are used in a figure, each figure must be explained clearly.
Figures: Submit figures as separate image files such as JPG and TIF. Figures must be of camera-ready quality. Pay attention to the relative proportion of the figure and the text used in the figure including the axis scales. Texts should be clear and legible. The design, size/ratio, and aesthetics of the figures matter.

HOW TO RESPOND TO REVIEWERS' COMMENTS:

The general principles for how to respond to reviewers' comments are:
1. Keep it professional, no emotional response! Authors should understand that, if taken properly, reviewers' comments (constructive criticism) can strengthen the manuscript substantially. After the initial reading, allow sufficient time to cool down. Start the revision when you are professionally ready.
2. Respond point by point to reviewer by reviewer (and the editor). Do not combine the responses. Highlight the revised section in the manuscript using colored text.
3. After clearly understanding the points raised by the reviewers, make your action plans point by point: to accept or to rebut. You do not have to accept/follow the reviewers' criticism/suggestion always. Start with minor items first and deal with the major items last.
4. Prepare the point-by-point responses in an elaborate manner. Avoid simple 'yes'- or 'no'-type answers. Reviewers put a significant amount of time and effort to read the manuscript to provide the comments and authors should honor their efforts by responding in an elaborated manner. Provide details of your revision within the response so that the reviewer does not have to read the manuscript again to find out exactly what changes were made. Copy and paste the relevant revised section into your response.
5. When you decided not to accept/follow the criticism/suggestions, clearly state the reason with supporting evidences. Even if you do not accept the criticism, try to revise the section of interest proactively to make your point clearer.
6. Asking the reviewers to understand your position or explaining your points to the reviewers alone is not sufficient. In most cases, it is the way the manuscript is written which raises an issue or causes a misunderstanding. Pay attention to where the question is coming from and revise the manuscript to clarify your points. Authors should ultimately answer to the reviewers' comments by revising the manuscript.
7. Do not omit any points raised by the reviewers. It will only guarantee one more round of revision at best.
8. If a point raised by a reviewer is not clear or not just in your perspective, check with the editor for clarification before you respond.

SUMMARY:

A set of general and section-specific writing principles for the manuscripts to be submitted to SB are presented in this paper. Complying with these principles will increase the manuscript's chance to survive the first round of the peer-review process. Understanding how to respond to the reviewers' comments is important as the manuscript's chance to be accepted for publication after the second round of the peer-review depends directly on how the authors respond to the reviewers' comments and revise the manuscript accordingly. The peer-review process is the ultimate testing ground for a research study and a manuscript is judged by how it is written and what it contains. A research study that fails to generate a publication is of no use as the study findings cannot be disseminated.

REFERENCES:

Knudson, D. V. (2009). Significant and meaningful effects in sports biomechanics research. *Sports Biomechanics, 8*, 96-104.