sense about science

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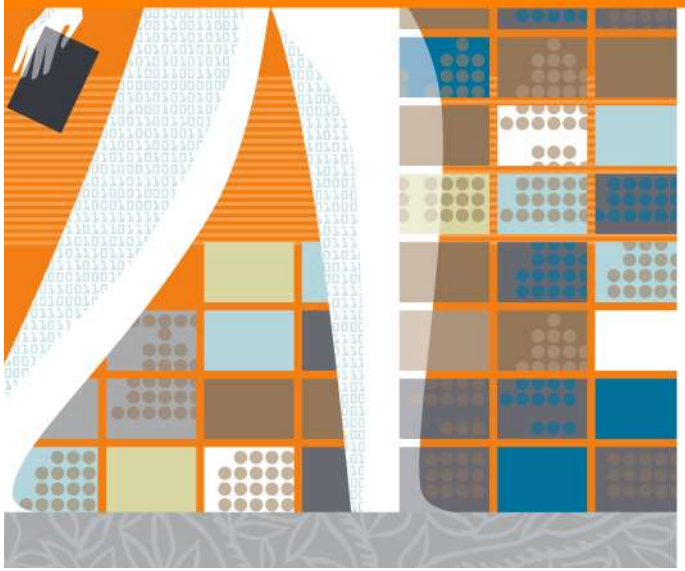
How to review a manuscript



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INTERNATIONAL SOCIETY OF POSTURE & GAIT RESEARCH

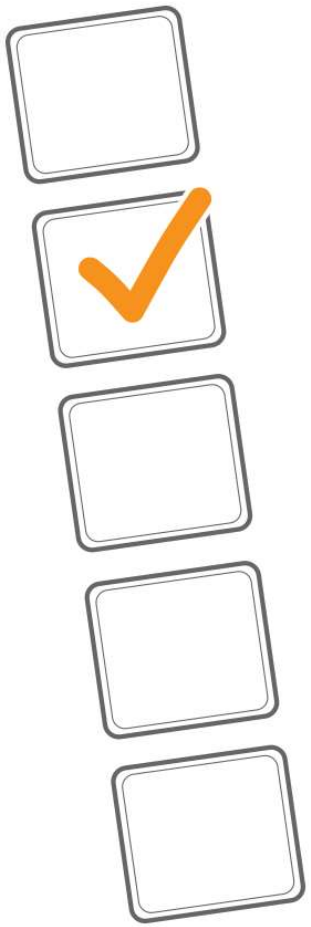
Publishing Connect

What is peer review?

- Peer review places the reviewer, with the author, at the heart of scientific publishing
- Reviewers make the editorial process work by examining and commenting on manuscripts
- Without peer review there is no control in scientific communication
- Reviewers are the backbone of the whole process

Why do reviewers review?

- Value from mentoring young researchers
- Enjoyment in reviewing
- General interest in the area
- Awareness of new research and developments before their peers
- Career development
- Help with own research or new ideas
- Association with journals and Editors
- Keep updated with latest developments



Purpose of peer review

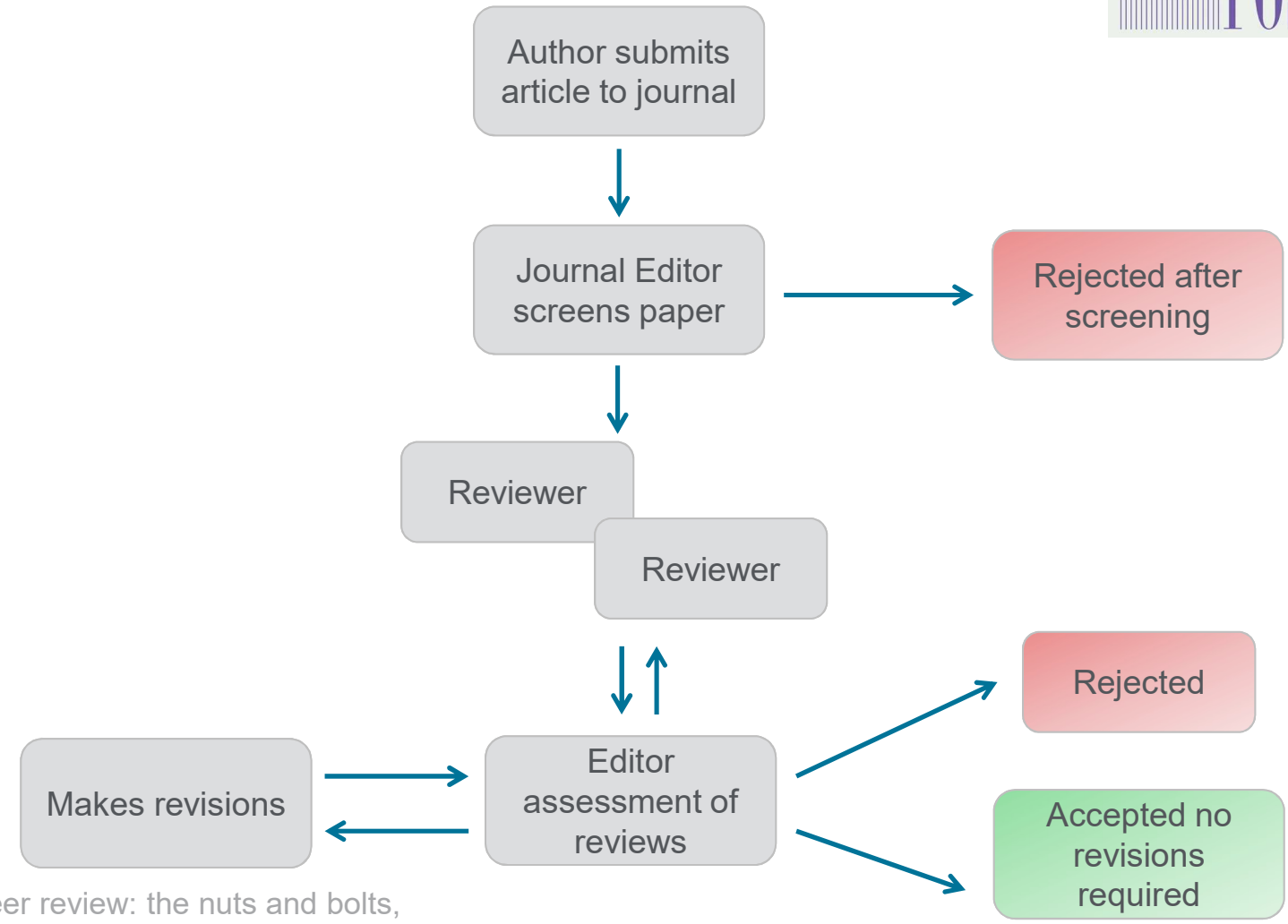
- Improves quality of the published paper
- Ensures previous work is acknowledged
- Determines the importance of findings
- Assesses the originality and significance of the work
- Highlights any omissions in the reference list and any ethics concerns

GAIT & POSTURE

Role and tasks of reviewer

- The peer review process is based on trust
- The scientific publishing enterprise depends largely on the quality and integrity of the reviewers
- Reviewers should write reports in a collegial and constructive manner
- Reviewers should treat all manuscripts in the same manner

Typical peer-review process



Source: Peer review: the nuts and bolts, Sense About Science, 2012

General impression

- Look at the manuscript as a whole
  - General comprehension of the manuscript
  - Language/style/grammar
  - Structure
  - Reviewer's general level of enthusiasm

Comments to the authors

- Provide specific comments on the design
- Comment on the presentation of data, results and discussion
- Ensure comments to the author(s) are consistent with your recommendation to the Editors

> "When reviewing, try to remember that you are an author too and be professional and constructive in your approach. That can be hard but don't let your inner nitpicker get the upper hand. Leave 24 hours between reading the manuscript and writing your review, to allow time for your reasonable self to rise to the fore."
> Stephen Curry, Professor of Structural Biology, Imperial College London

A systematic approach for reviewing

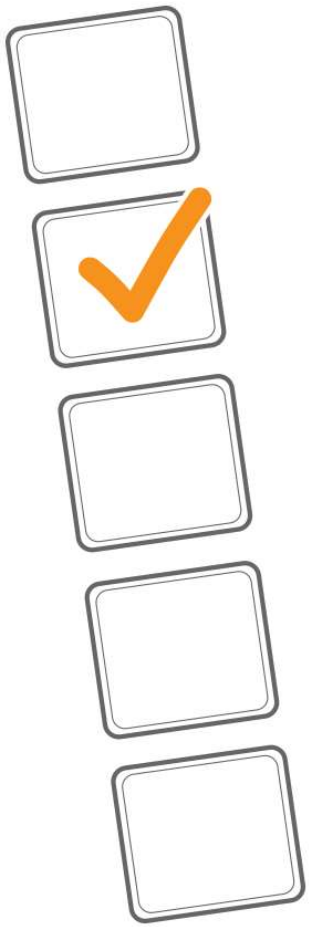
Article section	Description
Writing	Clear and concise English
Title	Specific and reflecting the content of the manuscript
Abstract	Brief and describing the purpose of the work
Methodology	Full explained and relevant to the study
Figures	Justified and clear with fonts proportionate to the size of the figure
Tables	Can they be simplified or condensed? Should any be omitted?
Discussion	Discussion of the findings relating back to the study aims
Conclusion	Implications of the results obtained, and their place in a broader research context; not a summary of findings.
Trade Names/ Abbreviations/Symbols	Properly used where indicated
References	Are all previously published sources properly referenced?

Abstract

- Is the Abstract included?
  - Is it a real summary of the paper?
  - Does it include the key results
  - Does it contain unnecessary information?
  - Is it too long? Journals set a limit for the number of words

Introduction

- Is it effective, clear, and well organized?
- Does it really introduce and put into perspective what follows?
- Suggest changes in organization and point authors to appropriate citations if necessary
- Be as specific as possible when giving feedback
  - Don’t just write “the authors have done a poor job”



Assessing the methodology

- Can a colleague reproduce the experiments and get the same outcomes?
- Is the description of new methodology complete and accurate?
- Did the authors include proper references to previously published methodology?
- Is the sample size large enough and was it selected in an appropriate way?
- Was the data collected in accordance with accepted practice?
- Could or should the authors have included supplementary material?
- *Specific recommendations for publications in Gait and Posture can be found in:*
  - *Stebbins et al. (2014). Recommendations for reporting gait studies. G&P, 41(2), 339-340*

Results and discussion (I)

- Suggest improvements in the way data is shown
- Comment on general logic and on justification of interpretations and conclusions
- Comment on the number of figures, tables, and schemes
- Write concisely and precisely which changes you recommend

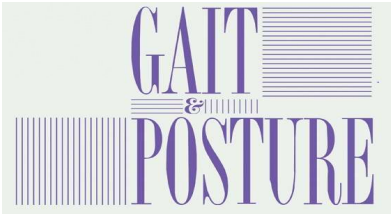
Results and discussion (II)

- List suggested style/grammar changes and other small changes separately
- Suggest additional experiments or analyses
- Make clear the need for changes/updates
- Ask yourself whether the manuscript is worth being published

Assessing the conclusions

- Comment on importance, validity, and generality of conclusions
- Request toning down of unjustified claims and generalizations
- Request removal of redundancies and summaries
- The Abstract, not the Conclusion, summarizes the study

References, tables, and figures



- Check accuracy, number (30 max), and appropriateness of citations
- Comment on tables and figures, and their quality and readability
- Comment on any footnotes
- Assess completeness of legends, headers, and axis labels
- Comment on need for color in figures
- Check presentation consistency

Comments to the editors

Comment on novelty and significance

Recommend whether the manuscript is suitable for publication

Remember that confidential comments will not be disclosed to the author(s)

Reviewer questionnaire – Gait and Posture

Reviewer's recommendation

Accept with or without changes / Invite resubmission after revision / Reject and not Invite Resubmission / Straight Reject

Rate on a scale 1-3 whether the highlights are a meaningful and accurate representation of the article.

Rate on a scale of 1-3 whether the graphical abstract is a meaningful and accurate representation of the article.

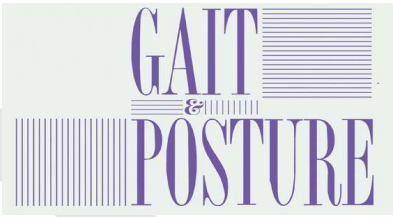
"1" = meaningful, "2" = not meaningful "3" = Not provided

To what extent doe the article meet this criterion?

"0" = fails by a large amount, "1" = Fails by a small amount, "2" = Succeeds by a small amount, "3" = succeeds by a large amount, "4" = not applicable

1. **The subject addressed in this article is worthy of investigation**
2. **The information presented was new**
3. **The conclusions were supported by the data**

Is there a financial or conflict of interest between your work and that of the authors?



Editors' view: what makes a good reviewer?

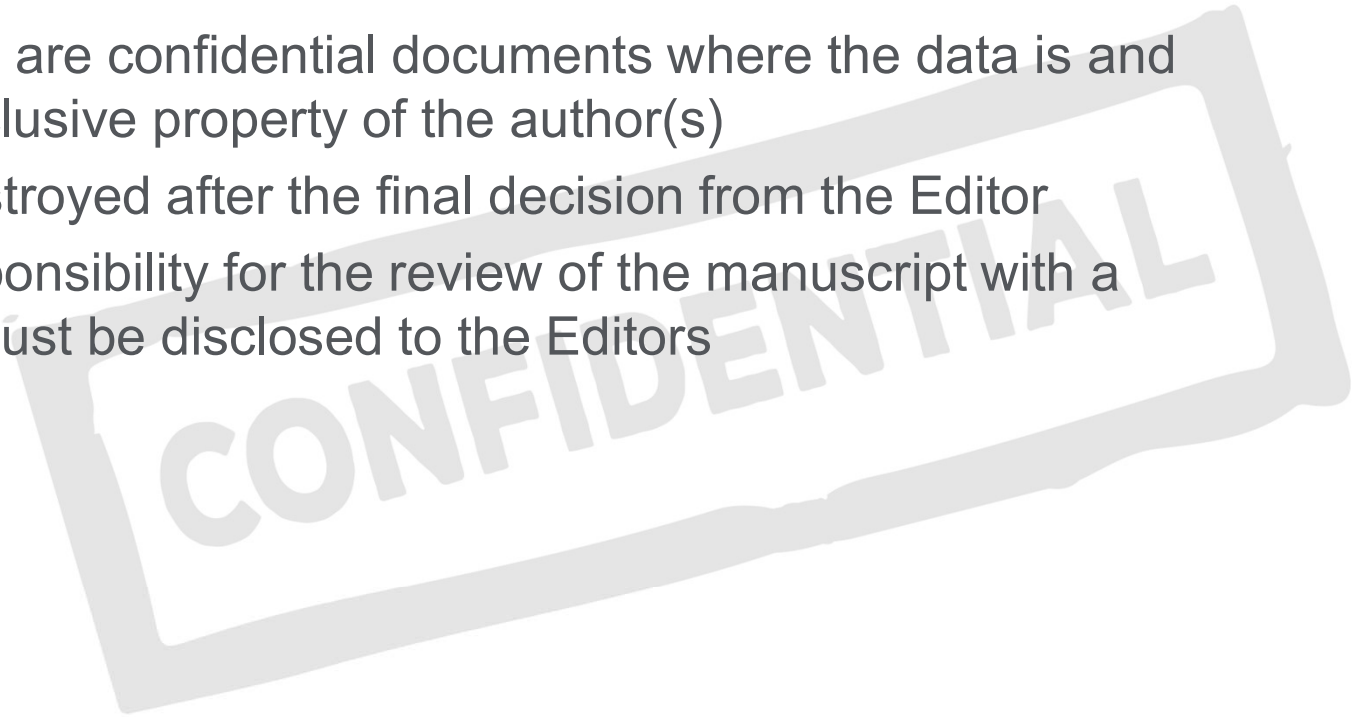
- Provides an objective, thorough, and comprehensive report
- Provides well-founded comments for authors
- Gives constructive criticism
- Provides a clear recommendation to the Editor
- Submits the report on time

Reviewers

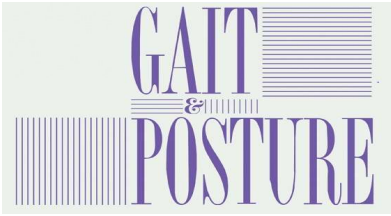
- Ensure that you review manuscripts in area of expertise only
- Can complete the review on time
- Avoid any conflicts of interest
- Do not use the data
- Provide an honest and critical assessment
- Analyze the strengths and weaknesses

Confidential document

- Manuscripts are confidential documents where the data is and remains exclusive property of the author(s)
- Must be destroyed after the final decision from the Editor
- Shared responsibility for the review of the manuscript with a colleague must be disclosed to the Editors

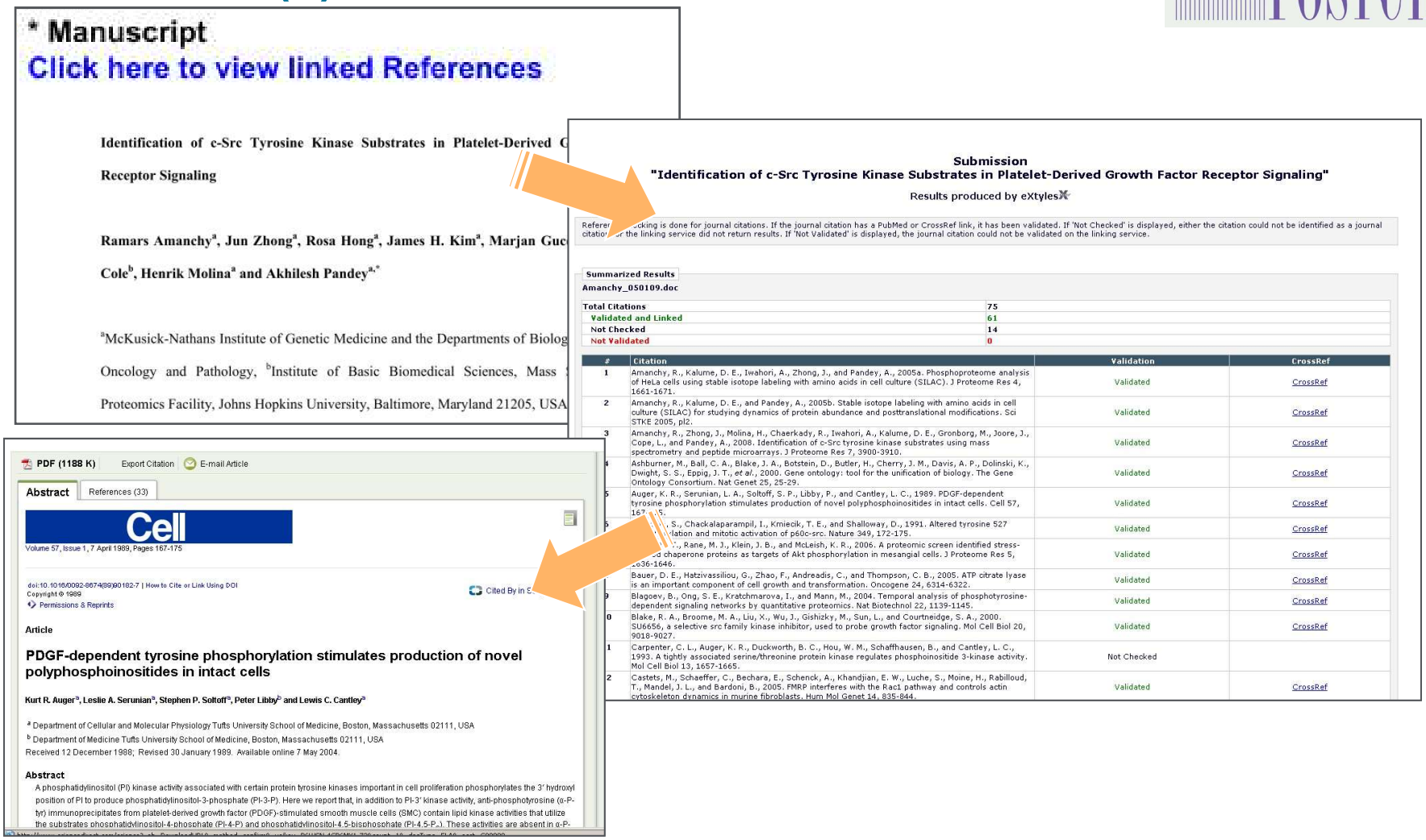


References: tools for reviewers (I)



For Editors	For Reviewers
▪ Plagiarism detection tool at time of submission ▪ Tool based on Scopus database to identify potential reviewers	ScienceDirect ▪ Free access to *All content published by Elsevier* Scopus ▪ Free access to *The world's largest abstract and citation database* ▪ Reference-linking and resolution in PDF of the manuscript

References: tools for reviewers (II)



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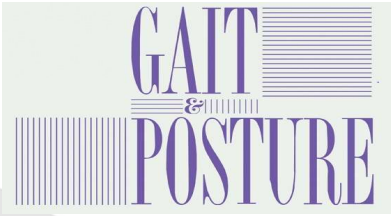
Rejection without external review



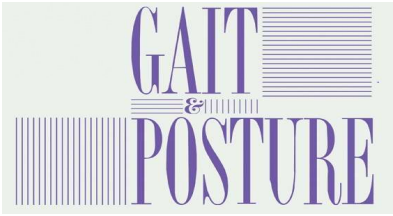
- The Editor-in-Chief evaluates submissions and determines whether they enter into the external review process or are rejected
- English language inadequate
- Prior publication of the data
- Multiple simultaneous submissions of the same data

> "When your paper is submitted, we first of all look through it briefly to check the format and length, the clarity of the discussion, research methods and overall fit with the journal. This is a fairly quick process – around two weeks or so. If it passes this 'desk review' procedure, we then send it out for full review to subject experts."
>
> Robert Blackburn, Editor-in-Chief of the International Small Business Journal (ISBJ)

Review process (I)

- Articles are initially reviewed by at least two reviewers
- When invited, the reviewer receives the abstract of the manuscript
- The Editor generally requests that the article be reviewed within 21 days
- Articles are revised until the reviewers agree, or until the Editor decides that the reviewer concerns have been adequately addressed
- The reviewers' reports help the Editors to reach a decision on a submitted paper

Review process (II)



- If report has not been received after 21 days, the editorial office contacts the reviewer (with automatic reminders that reviews are due)
- If there is a notable disagreement between the reports of the reviewers, a third reviewer may be consulted
- The anonymity of the reviewers is maintained

Review process (III)

- Reviewers must not communicate directly with authors
- All manuscripts and materials must be treated confidentially by Editors and reviewers
- The aim is to have a first decision to the authors by 4-6 weeks after submission
- Meeting the schedule objectives requires a significant effort by all involved
- Reviewers should treat authors as they themselves would like to be treated

Q&A

Examples

Comments to Author

The authors are complimented for providing a unique set of data, which should be valuable for future investigators in the field. Nevertheless I have several concerns, which should be adequately addressed before a final decision on acceptance can be made.

1. The underlying hypothesis is that aging-induced changes in knee mechanics during level gait in unperturbed conditions can initiate knee osteoarthritis (Knee OA). The authors should discuss whether this is indeed probable or whether a more demanding gait task should have been included instead (or in addition).

2. Power calculations should be described more in detail. Which knee extensor muscle power was used, how many participants per group were then needed. Which measure of knee mechanics during gait was used, how many participants per group were then needed. Were SD data taken from male or female groups (or from mixed groups with presumably a larger SD).

Examples

Comments to Author - Continued

3. It should be stated whether the subjects were bare-foot or used shoes during the test. If they were barefoot, the test would have been quite challenging, especially for the older subjects. This would then have carried a risk of influencing the results, e.g. the co-activation data. To clarify this a picture of the gait trials could be inserted.

4. Why was only quadriceps-hamstring co-activation determined during 10 consecutive strides during the 2nd and final minutes of the test? Was similar significance detected if data from the pre- and post test gait trials were used?

5. The authors should include a section were the reason for the increased femoral anterior displacement and quadriceps-hamstring coactivation with aging is discussed.

Examples

Comments to Editor

Major Revisions

The manuscript is based on a well-performed study with adequate methods. Although the results are not entirely novel and partly expected, it constitutes a unique set of data, which should be valuable for future investigators in the field. Therefore, I think that the manuscript, if adequately revised, can be recommended for publication.

Examples

Comments to Author

Authors are commended for presenting an interesting study on <title of paper>

How does this study contribute in gaining insights into fall prevention, which is largely prevalent in older adults?

Previous studies have reported some discrepancies with this work. Younger adults have been reported to have higher variability that do not predict number falls.

Authors are requested to report trip severity and number of falls in the experiment.

Comments to Editor

I vote to reject the paper. The paper is weak due to several factors;

1. Limited to younger healthy population
2. Authors have ignored biomechanics of trips for their conclusions
3. Authors found significant changes in muscles activity between groups. However no information is provided for their assessment of chosen metrics.

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Further reading at

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elsevier.com/authors
elsevier.com/reviewers
elsevier.com/editors

- Understanding the Publishing Process with Elsevier – complete guide
- Publishing Ethics brochure – top reasons to publish ethically
- Get Published – top tips on writing, reviewing and grant writing etc.
- Get Noticed – new ways to promote your article and research
- Open access – definitions and options
- Career Planning Guide – download in 12 languages

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