Author's response to reviews

Title: Changes in sex difference in swimming speed in finalists at FINA World Championships and the Olympic Games from 1992 to 2013

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Author's response to reviews:

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BMC Sports Science, Medicine and Rehabilitation
Editor-in-Chief
Prof. Fernando Marques

Dear Prof. Marques

MS: 1463828093128150 Revision 1
Changes in sex difference in swimming speed in finalists at World Championships and Olympic Games from 1992 to 2013

We thank you for your e-mail from May 27, 2014.

Find below the answers to the questions raised by the reviewers.

All changes are marked in red in the revised manuscript.

We hope the revised manuscript will be suitable for publication in ‘BMC Sports Science, Medicine and Rehabilitation’.
Yours sincerely,
Beat Knechtle

Enclosure: Manuscript via central website

EDITOR’S COMMENTS:
"This is an informative retrospective study. The authors may consider reducing the number of tables and figures."

Answer: We agree with the editor and have reduced the number of tables by combing existing tables. For the figures, we are not able to delete, this would result in a loss of information. To combine figures would lead to a loss in quality for the print. We therefore have to leave the actual number of figures.

EDITORIAL REQUIREMENTS:
*Please include the email address of all authors in the title page.
Answer: We agree with the editor and have added the authors email addresses in the title page.

*Acknowledgements: We strongly encourage you to include an Acknowledgements section between the Authors? contributions section and Reference list. Please acknowledge anyone who contributed towards the study by making substantial contributions to conception, design, acquisition of data, or analysis and interpretation of data, or who was involved in drafting the manuscript or revising it critically for important intellectual content, but who does not meet the criteria for authorship. Please also include their source(s) of funding. Please also acknowledge anyone who contributed materials essential for the study. Authors should obtain permission to acknowledge from all those mentioned in the Acknowledgements. Please list the source(s) of funding for the study, for each author, and for the manuscript preparation in the acknowledgements section. Authors must describe the role of the funding body, if any, in study design; in the collection, analysis, and interpretation of data; in the writing of the manuscript; and in the decision to submit the manuscript for publication.
Answer: We agree with the editor and have included an acknowledgement section. Funding was not required as the manuscript was written as part of a doctor thesis and all data used were publicly accessible.

*Please remove the figures in the main text and upload them correctly in the Figures section.
Answer: Figures will be uploaded separately during the registration process.
Reviewer’s report

Title: Changes in sex difference in swimming speed in finalists at World Championships and Olympic Games from 1992 to 2013

Version: 1

Date: 13 May 2014

Reviewer: Chi Ching Gary C.C. Chow

Reviewer’s report:

Comments to the Author:

The topic is interesting and valuable to indicate the indoor swimming development in last two decades in terms of swimming speed in the Olympic Games and the FINA World Championship. It is important to swimming researchers or practitioners to know the changes.

Minor Essential Revisions

# In the whole article, World Championships should be written as “the FINA World Championships” (I wonder if I am not the fans of swimming, what kind of World Championships is) Olympic Games should be written as “the Olympic Games”

Answer: We agree with the expert reviewer and have replaced in the whole article “World Championships” with “FINA World Championships” as well as “Olympic Games” with “the Olympic Games”.

# Page 6, line 15: …the ,,Zurich 12h Swim “ between… should be the “Zurich 12h Swim” between…(Typo error)

Answer: We agree with the expert reviewer and have replaced the ,,Zurich 12h Swim “ with the “Zurich 12h Swim”.

# Page 9, line 20: “AIG” should be “Akaike’s Information Criteria (AIC)” (Full name is preferred)

Answer: We agree with the expert reviewer and have added the full name for AIC.

# Page 12, line 7: “sex differenc” should be “sex difference” (Typo error)

Answer: We agree with the expert reviewer and have corrected the typo.

# Page13, line12: “…female and male world champions… should be “…female and male Olympic Champions” (Table 19 and 20 shows the data related to Olympic Champions.)
Answer: We agree with the expert reviewer and have corrected the relation to table 19 and 20. However, we reduced the number of tables.

# Page 19, 11: “Most of these these physical…” should be “Most of these physical…” (Typo Error)
Answer: We agree with the expert reviewer and have removed one “these” to correct the typo.

# Page 27, Table 3: Not quite sure why there is “(s = 0.02)” in the item of “200m individual medley”
Answer: We agree with the expert reviewer and have removed the term “(s = 0.02)” to correct the typo.

Discretionary Revisions
# Page 13, Suggest to give an additional table like table 13 to show the change in sex difference over time for the finalists, but just for the Olympic Games. It helps to understand the sentence from line 3 to line 6.
Answer: As one of the reviewers as well as the editors itself suggested to reduce the number of tables, we would like to avoid adding more tables and therefore we will discard this suggestion.

# Page 14 – 15, “Increase in swimming speeds over the years”: Authors designed to indicate the increase in swimming speeds over the years through the comparison between the studies related to open-water swimmers analysis (Vogt et al., 2013 and Zingg, et al., 2014) and the recent findings. Because of the difference between indoor swimming disciplines and open-water swimming, such as swimming environment, starting and turning techniques, the argument in this session is not easy to be accepted.
Answer: We agree with the expert reviewer that indoor swimming disciplines and open-water swimming are of different nature. Nevertheless, as studies for indoor swimming are limited and the effect of female athletes improving their performance rather in longer distance races whereas for male athletes performance increased rather at shorter distances, a comparison is worthwhile to be taken into account to show whether this effect is limited to either indoor or open-water disciplines or if it exists for both.

# Compared with the study of Wolfrum, et al. (2014), this article analyzed more swimming disciplines and included the Olympic Games into their analysis. It is expected to know if there are any additional findings, such as difference or similarity between the swimming speed in the Olympic Games and the FINA World Championship. Recently, the discussion is similar as the study of Wolfrum, et al. (2014), it is alright to have different data but have similar view on discussion. However, it may be good if further issues were discussed compared with previous studies.
Answer: We do not agree with the expert reviewer as our main goal was to create a comprehensive paper targeting swimming results at Olympic Games
and World Championships only. As such a paper is not yet available we would like to focus on this data to enable further papers to build up on our achievements.


Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests: I declare that I have no competing interests

Reviewer's report

Title: Changes in sex difference in swimming speed in finalists at World Championships and Olympic Games from 1992 to 2013

Version: 1

Date: 19 May 2014

Reviewer: Joyce CY C.Y. Leung

Reviewer's report:

Minor essential revisions as below:

1. Deduce the number of tables and figures

Answer: We agree with the expert and have reduced the number of tables by combining existing tables. For the figures, we are not able to delete, this would result in a loss of information. To combine figures would lead to a loss in quality for the print. We therefore have to leave the actual number of figures.

2. Format of tables are not commonly used
Answer: The clarity and comprehensibility is clearly given. Therefore we won’t change it.

3. Discussion of generalizability of the study is limited
Answer: We agree with the expert that the study is limited as our results are in general only applicable on elite swimming athletes and their developments. This was also intended, as we wanted to create a comprehensive paper targeting swimming results at Olympic Games and World Championships only. As such a paper is not yet available we would like to focus on this data to enable further papers to build up on our achievements.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: I declare that I have no competing interests.

Reviewer’s report

Title: Changes in sex difference in swimming speed in finalists at World Championships and Olympic Games from 1992 to 2013

Version: 1

Date: 22 May 2014

Reviewer: Kevin S.C. Kwong

Reviewer’s report:
Stefanie Wild et al

Changes in sex difference in swimming speed….
I read with pleasure this readable article which is written in a fluent language without unnecessary professional jargons. This paper outlines a highly relevant report of importance for those readers who are involved in the swimming competition for elite athletes at top level, and particularly professional personnel involved in the training of elite swimmers for World Championships and Olympic Games.

Answer: We thank the expert reviewer for the comment. No changes were applied.

This paper provides a complete swimming speed evaluation and an overall view
of the trends and sex difference in swimming speed for finalists participated in the World Championships and Olympic Games in the period between 1992 and 2013, which are prestigious and major international events in the field of swimming.

Answer: We thank the expert reviewer for the comment. No changes were applied.

The theme of this study is focused with its aims clearly defined and new ideas well-articulated. On the whole the study is well-structured and systematically organized. The authors should be congratulated for making an effort in analyzing the swimming speed, on the basis of official data obtained from credible sources, throughout this period of time.

Answer: We thank the expert reviewer for the comment. No changes were applied.

This report is informative with comprehensive relevant background information and data, and a clear and reasoned explanation of the findings of other research teams. This paper also addresses the factors which might affect the performance of swimmers, e.g psychological skills, emotional competencies, training processes, pool design and ‘antiwave lane’ ropes as well as drag-reducing swimsuits, though the authors did not attempt to establish a causal relation between swimming speed and these factors.

Answer: We thank the expert reviewer for the comment. No changes were applied.

The data collection process and the statistical procedure have been clearly described and suitably reported. The statistical tests used are appropriate. This report also provides readers a large volume of credible data and information (graphs and tables) which show the convincing trend and sex difference in all different events of swimming performance at top levels. The authors also provide a reasoned explanation and conclusion of the outcome of this study. It is expected that the outcome of this study would facilitate the development of ideas and strategies for training elite performers in swimming competitions at world class level.

Answer: We thank the expert reviewer for the comment. No changes were applied.

This paper is therefore recommended for publish.

Answer: We thank the expert reviewer for the comment.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests: I do not have any competing interests in relation to the paper