Author’s response to reviews

Title: "Principal Component Analysis of the Relationship Between Pelvic Inclination and Lumbar Lordosis"

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Author’s response to reviews:

We would like to again thank the reviewers for their time. We believe the insightful comments provided by the reviewers have strengthened our paper to where it can now serve as part of the important conversation, exploring the relationship between Pelvic Inclination/Tilt and Lumbar Lordosis. Moreover, it now constitutes a piece of a much more solid foundation that can be built upon via future research in this field. We intend to be part of that process and are very grateful for your contribution. All amendments in the revised manuscript have been highlighted in one file. New text is in yellow highlight. The items changed are indicated and discussed below. Our manuscript originally entitled “Pelvic Inclination Does Not Correlate with Lordotic Angle”, is now titled "Principal Component Analysis of the Relationship Between Pelvic Inclination and Lumbar Lordosis". Following the suggestions of the reviewers we have made revisions to the paper and believe we have successfully addressed their remaining concerns.

Comments from the reviewers:

Reviewer 1

The authors have revised the manuscript and presented an extensive response to the comments in the first review cycle. The responses are in general adequate and supported by amendments to the manuscript.
Comment #1: The title has been changed, however, the current version does not reflect the contents, as a different one would be expected under the term "biomechanical study". I would again advise the authors to use "surface topography" and/or "principal component analysis" in their title.

Response: We thank Reviewer One for these insights. The title has been changed to "Principal Component Analysis of the Relationship Between Pelvic Inclination and Lumbar Lordosis".

Comment #4: I agree that previous authors have come to the conclusion that surface topography is reliable. However, since the results provided by the authors are quite contradictory from the perspective that, as they report in the Conclusion, "exists research evidence both supporting and refuting this relationship", it would be expected that they would test the repeatability, reproducibility and accuracy of the specific surface topography experiments they chose to perform on the specific group of subjects they chose to observe. Only by doing so they these factors can be eliminated, giving more weight to the presented conclusions.

Response: This sounds like a great idea for a next experiment. We agree that this subject deserves further examination and requires more scrutiny if we are ever to attain a deeper understanding of it. But it was not in our current methods and not approved by the IRB to run a second reliability study as part of this protocol. At this point, we trust the literature that has been published by a group of well-respected authors already and should not have to repeat it in order to publish this study.

To the Editor: You and your reviewers have helped us reopen this subject and we are thankful for that. There is more work to be done in the future to build on this beginning but we hope you are satisfied with this rendition of our paper and look forward to seeing this work published.