

Review of: "Is subject-specific musculoskeletal modelling worth the extra effort or is generic modelling worth the shortcut?"

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This is a very interesting paper to compare the generic and subject specific musculoskeletal modelling results.

Musculoskeletal models are created based on simplified musculoskeletal structures, so the question is how much we can simplify the structure. This paper looked into two activities to compare the model scaled from generic model and the model based on subject specific anatomical data. The subject specific model seems to provide more physiologically reasonable results in these two activities. This is a valuable study as it provides the data to help understanding quantitatively how much the difference it could be expected between using generic and subject specific models.

As a reader, I want to read more detailed discussion in why these two activities are selected. Are you expected to see larger difference in certain muscles between the GM and SMs due to more accurate anatomical geometry data were used in the musculoskeletal model?

The between-limb differences exhibited in the SM are very interesting! Do you think if sufficient data are collected, the musculoskeletal model can use a 'weight' approach to allow adjusting the joint centers and the maximum isometric muscle forces to differentiate the dominant and non-dominant side when scaling the generic models?