Letter to the Editor

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We read with interest the research article titled “Assessment of hand-grip and key-pinch strength at three arm positions among healthy college students: Dominant versus non-dominant hand by Tarek M. El-gohary et al. We would like to congratulate the authors about this stimulating research article.1 The study measured key-pinch grip and hand-grip of sixty-one right-handed male college students” in three different positions. However, we would like to describe other factors that would affect the handgrip and key-pinch strength and guide future research on related topics.

First, we must realize that the results of the study apply to college students and strata of the population with similar habits. Therefore, the conclusion of the study must have been a bit specific to male college students. Second, the forearm was placed in a neutral position to measure hand-grip strength and key-pinch strength in all three positions. However, we would like to describe other factors that would affect the handgrip and key-pinch strength and guide future research on related topics.

In conclusion, clinicians must choose a common position during patient management to improve the inter-rater reliability. Future research must consider the above-stated factors to increase the internal validity of the study.

Conflict of interest

There is no conflict of interest.

References

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Response by the author

Thanks for the valuable comments that were purported for perfection of any future research work in that area of interest. I totally agree that the findings of the study are specific to subgroup of participants who are male college healthy students. Unfortunately, authors did not have access to adequate female college students for the research time period. The authors have tried their best to control variables to ensure adequate internal validity. Measurements were recorded by testers with the same experience in the field and all measurements were recorded at the same time of the day and while assuming the same body alignments from sitting posture. Authors have reported the correlation values but multiple-regression should be considered in any future research work. The nutritional status of participants was reported in many literatures but the present study is classified as same subject design which means that every participant was subjected to all levels of measurements; therefore nutritional status would not confound the outcome measurements. Regarding the study of nutritional status, another research design should be used to address the differences between or among groups and larger sample size will be needed. I also agree with the comments regarding collection of some anthropometric measurements especially for those who have to engage in return-to-work program. Choosing a common testing position will increase internal validity of the study and improve the inter-rater reliability which enhances the evidence-based high quality rehabilitation outcomes.

References

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