

Dear Professor Brysbaert,

Hereby we submit our manuscript on partitioning growth curve models with GLMM trees, for consideration in Behavior Research Methods.

Growth curve models and longitudinal GLMMs are popular tools in behavioral research. This paper introduces and tests extensions of generalized linear mixed effects model (GLMM) trees, so they can be used to identify subgroups with different parameters in longitudinal GLMMs models. The extensions are of relevance for partitioning longitudinal GLMMs in general, with growth curves providing a common use case.

In Fokkema et al. (2018; published in Behavior Research Methods), we introduced GLMM trees for the analysis of clustered cross-sectional data. GLMM trees have since gained substantial interest, as shown by citations (167 according to Google scholar) and downloads of the accompanying R package (stable average of >300 downloads). We expect the extensions presented here to be of similar interest to the community.

Sincerely,

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Achim Zeileis, Professor of Statistics, University of Innsbruck

## References

Fokkema, M., Smits, N., Zeileis, A., Hothorn, T., & Kelderman, H. (2018). Detecting treatment-subgroup interactions in clustered data with generalized linear mixed-effects model trees. *Behavior Research Methods*, 50(5), 2016-2034. <https://doi.org/10.3758/s13428-017-0971-x>