

Supplementary Data for the Paper: “The Dissimilarity-Consensus Approach to Agreement Analysis in Gesture Elicitation Studies”

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ABOUT

This document illustrates growth curves for the fifteen gesture types of the children whole-body gesture dataset of Vatavu [1], computed using the Euclidean, Hausdorff, and Modified-Hausdorff dissimilarity functions (Δ) and the Min, Max, and Avg aggregators (ζ); please see the paper [1] for definitions and details. Since the CHI 2019 paper was limited to 10 pages of content, only the DTW \times Avg growth curves were included. This document presents the rest of the $\Delta \times \zeta$ experimental conditions; see Figures 1 to 9. For example, Figure 1 illustrates growth curves (in black) and logistic models (in orange) corresponding to the Euclidean dissimilarity function Δ and the Min aggregator ζ .

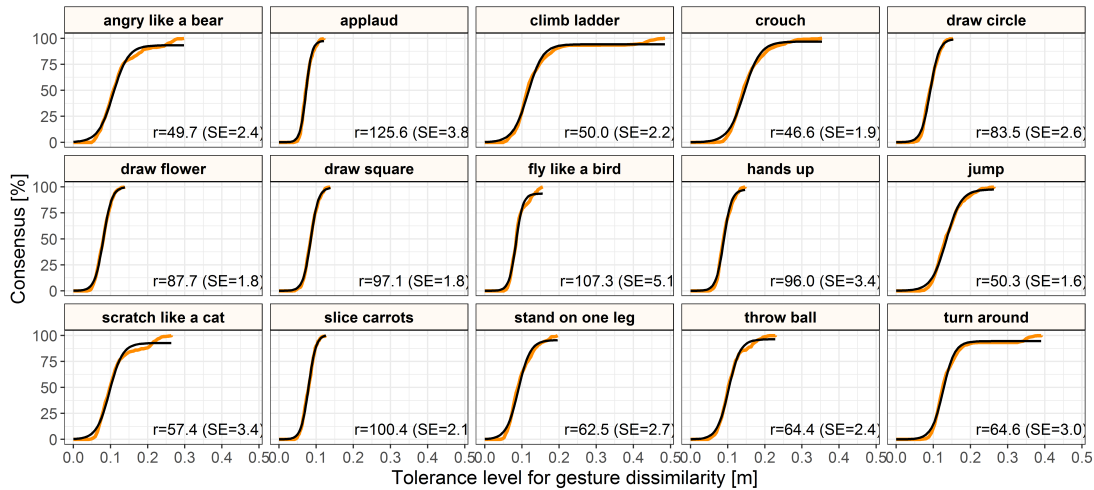


Figure 1. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Euclidean dissimilarity function (Δ) and the Min aggregator (ζ) for each gesture type.

REFERENCES

1. Radu-Daniel Vatavu. 2019. The Dissimilarity-Consensus Approach to Agreement Analysis in Gesture Elicitation Studies. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*. ACM, New York, NY, USA, Paper 224. DOI : <http://dx.doi.org/10.1145/3290605.3300454>

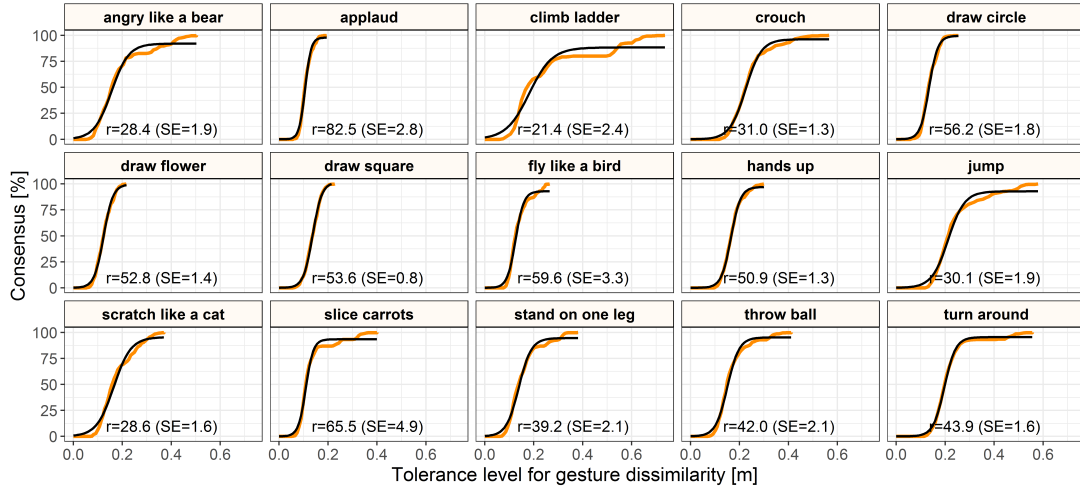


Figure 2. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Euclidean dissimilarity function (Δ) and the Max aggregator (ζ) for each gesture type.

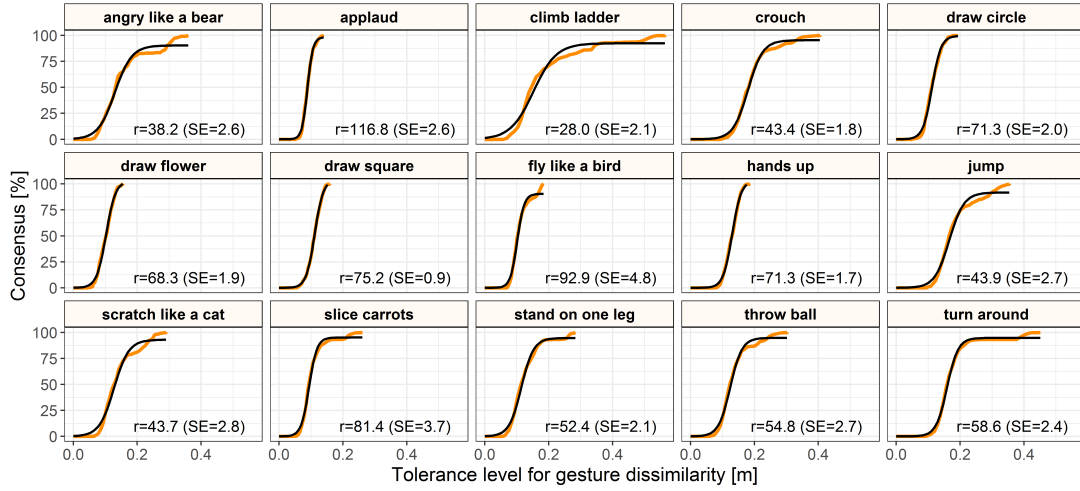


Figure 3. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Euclidean dissimilarity function (Δ) and the Average aggregator (ζ) for each gesture type.

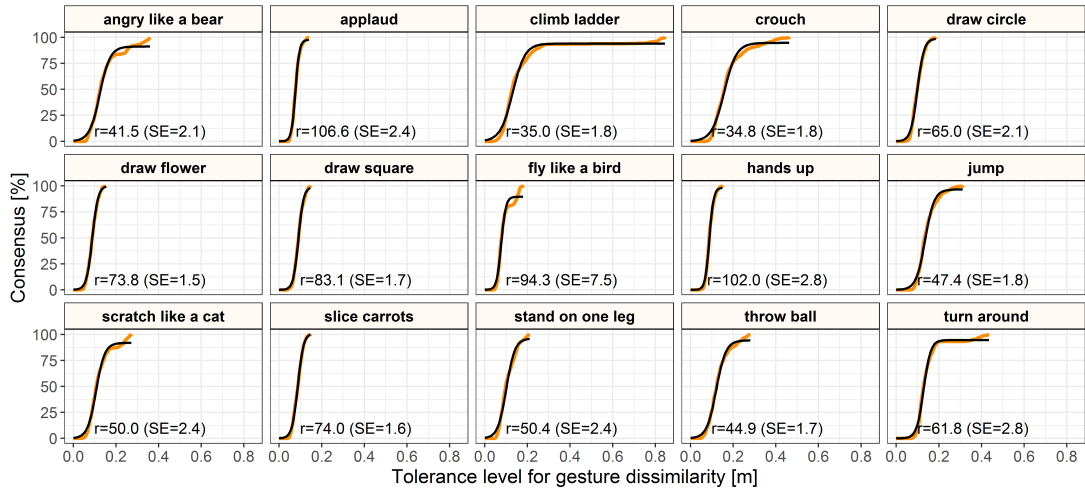


Figure 4. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Hausdorff dissimilarity function (Δ) and the Min aggregator (ζ) for each gesture type.

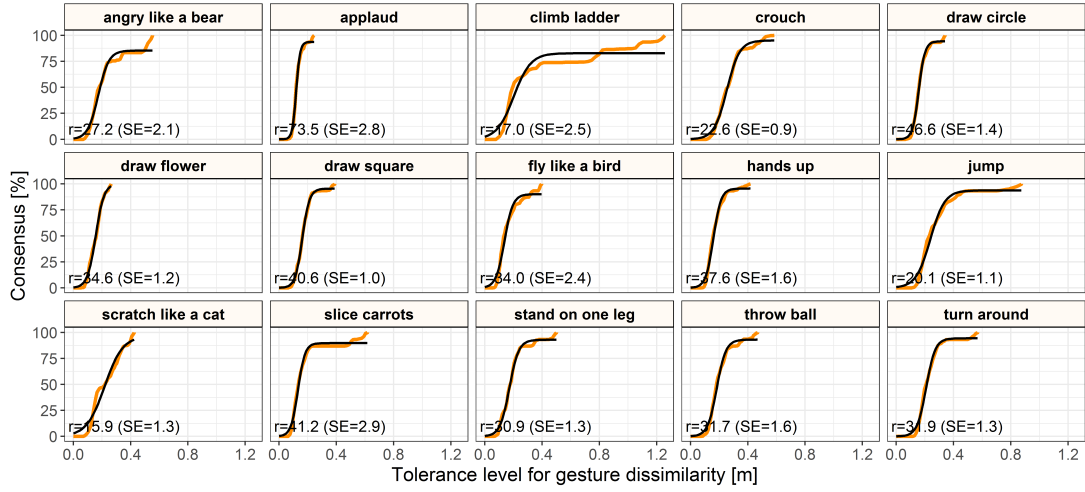


Figure 5. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Hausdorff dissimilarity function (Δ) and the Max aggregator (ζ) for each gesture type.

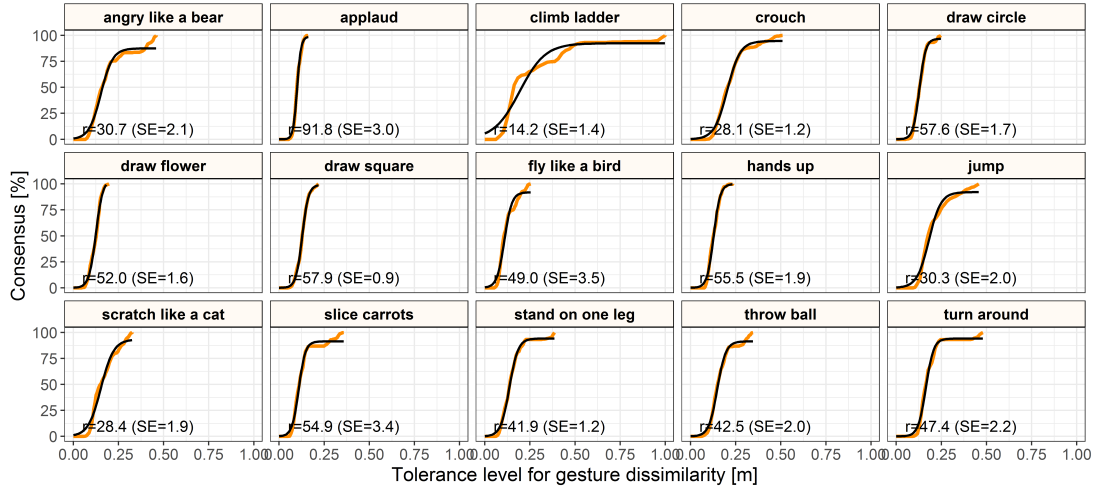


Figure 6. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Hausdorff dissimilarity function (Δ) and the Average aggregator (ζ) for each gesture type.

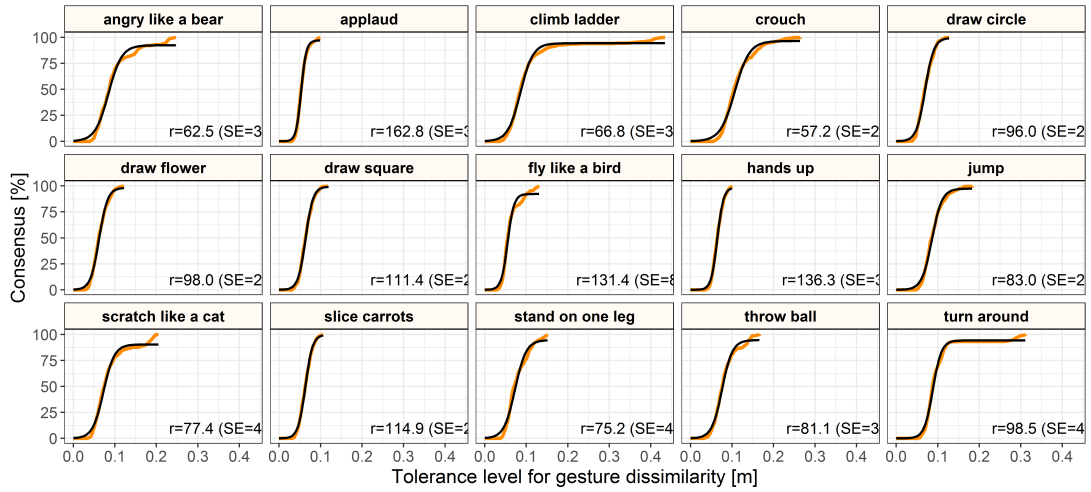


Figure 7. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Modified Hausdorff dissimilarity function (Δ) and the Min aggregator (ζ) for each gesture type.

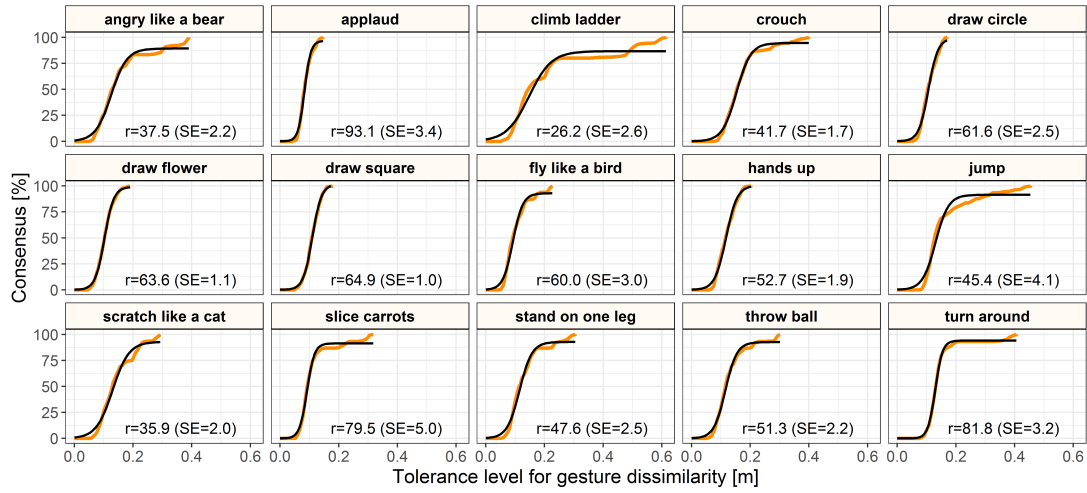


Figure 8. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Modified Hausdorff dissimilarity function (Δ) and the Max aggregator (ζ) for each gesture type.

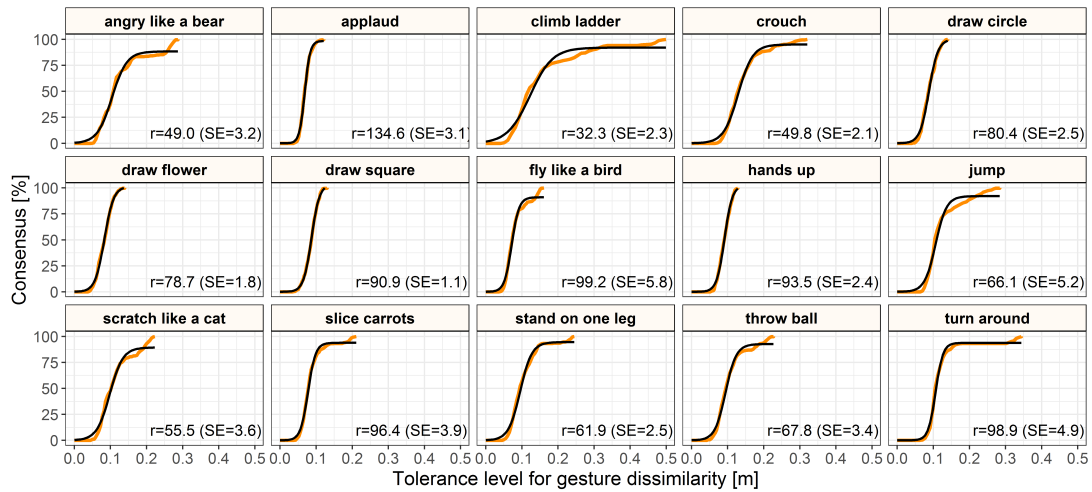


Figure 9. Growth curves (actual data in orange, logistic models in black) illustrating the dissimilarity-consensus relationship for the Modified Hausdorff dissimilarity function (Δ) and the Average aggregator (ζ) for each gesture type.