

Supplemental Material:

Outlier Exclusion Procedures for Reaction Time Analysis:

The Cures Are Generally Worse Than the Disease

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This document includes the supplemental material referred to in the main text.

Figures S1–S10 show the probability that an RT at each percentile of a participant's within-condition RT distribution is excluded for each of the outlier exclusion procedures separately. Note that there is variation in the percentile ranges plotted along the horizontal axes.

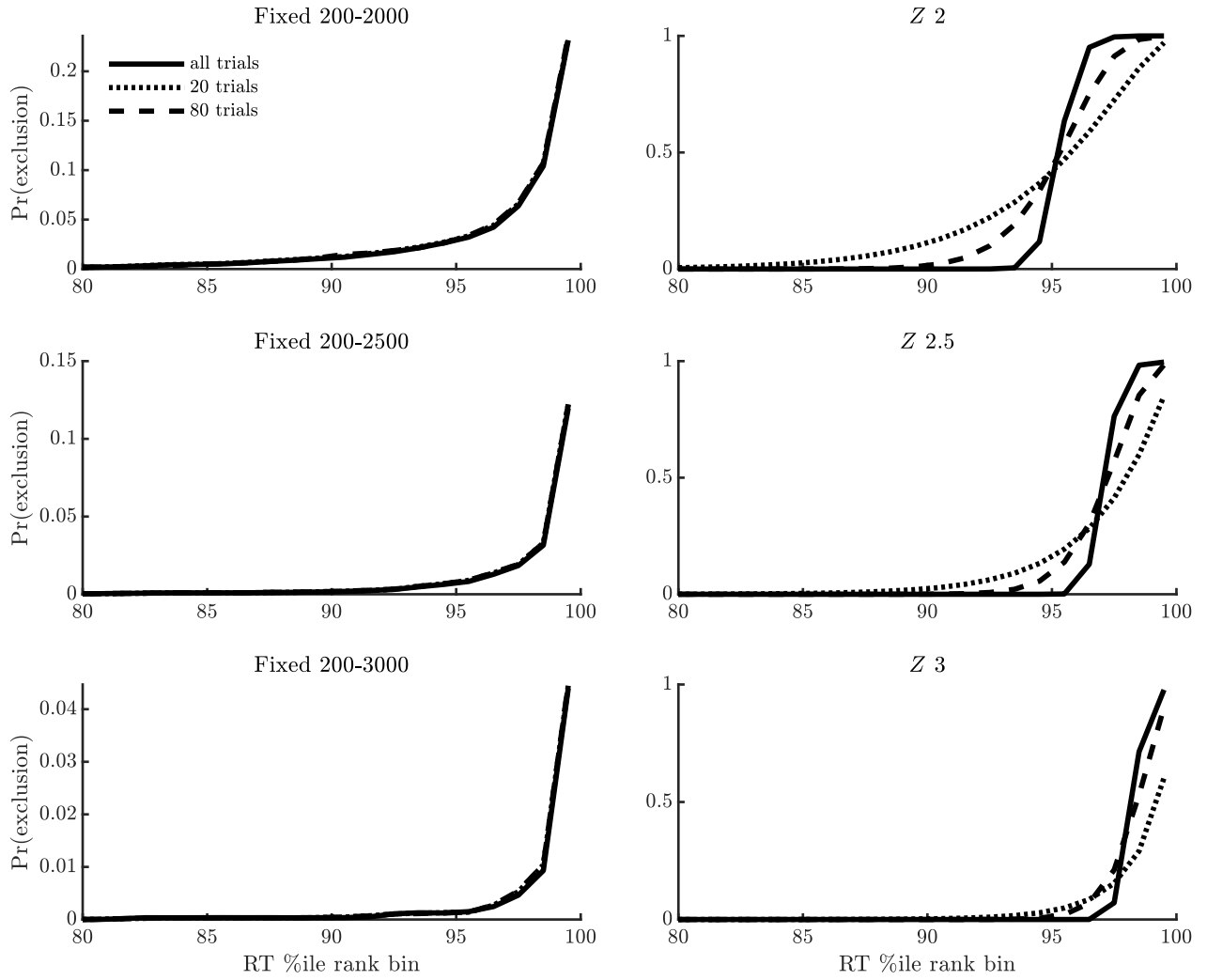


Figure S1: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the condition-specific fixed and $Z(RT)$ -based procedures.

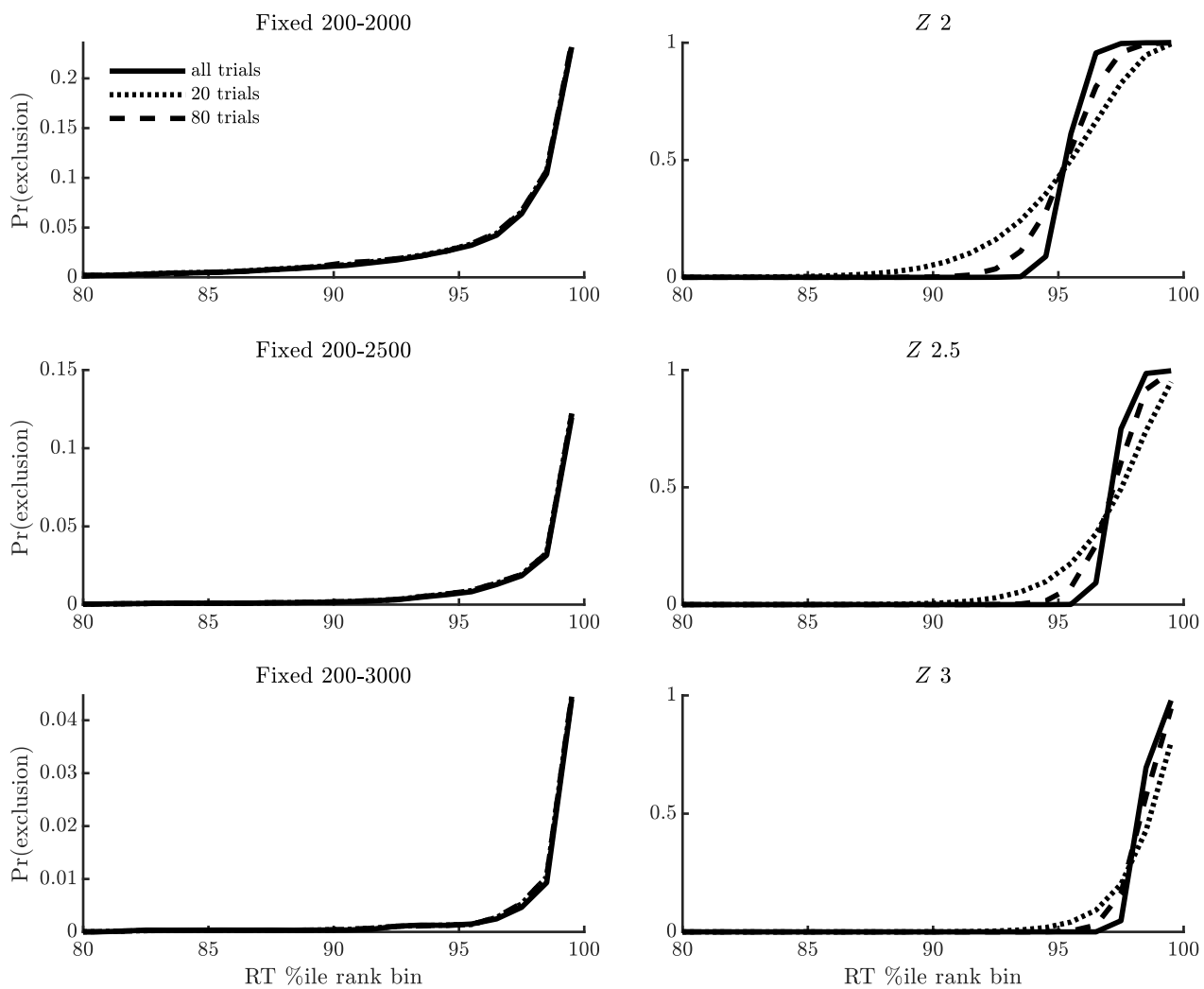


Figure S2: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the pooled fixed and $Z(RT)$ -based procedures.

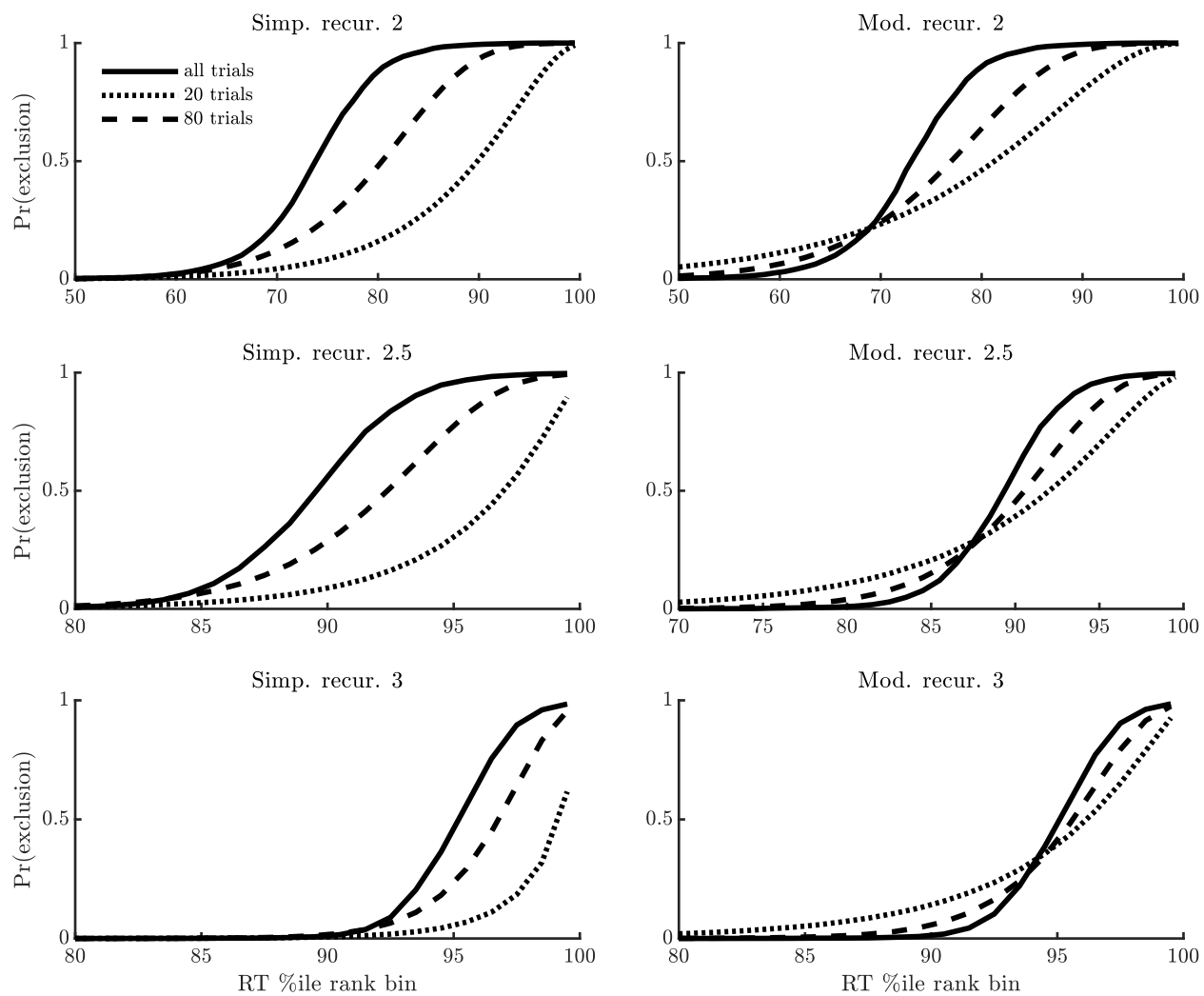


Figure S3: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the condition-specific simple and modified recursive procedures.

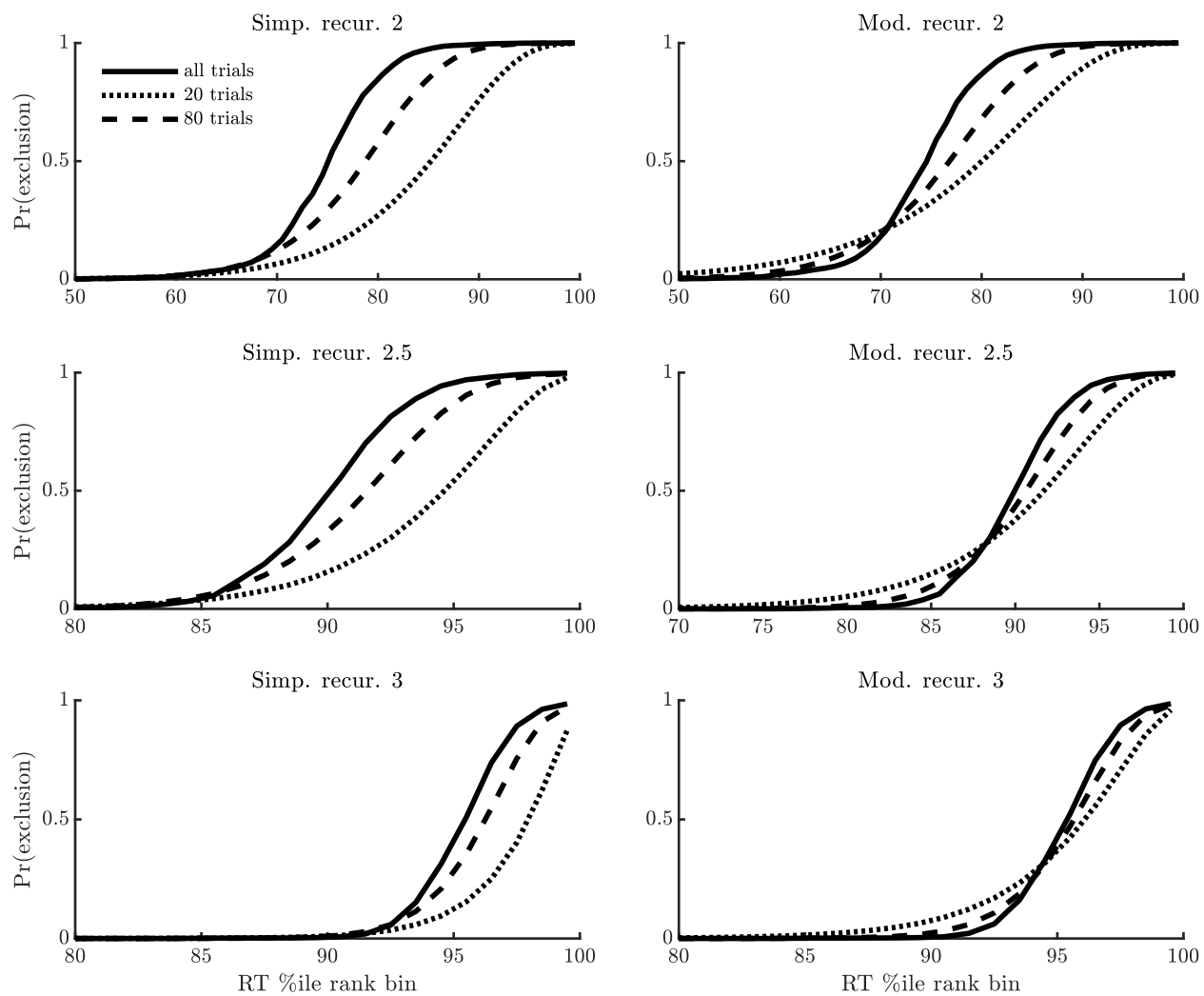


Figure S4: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the pooled simple and modified recursive procedures.

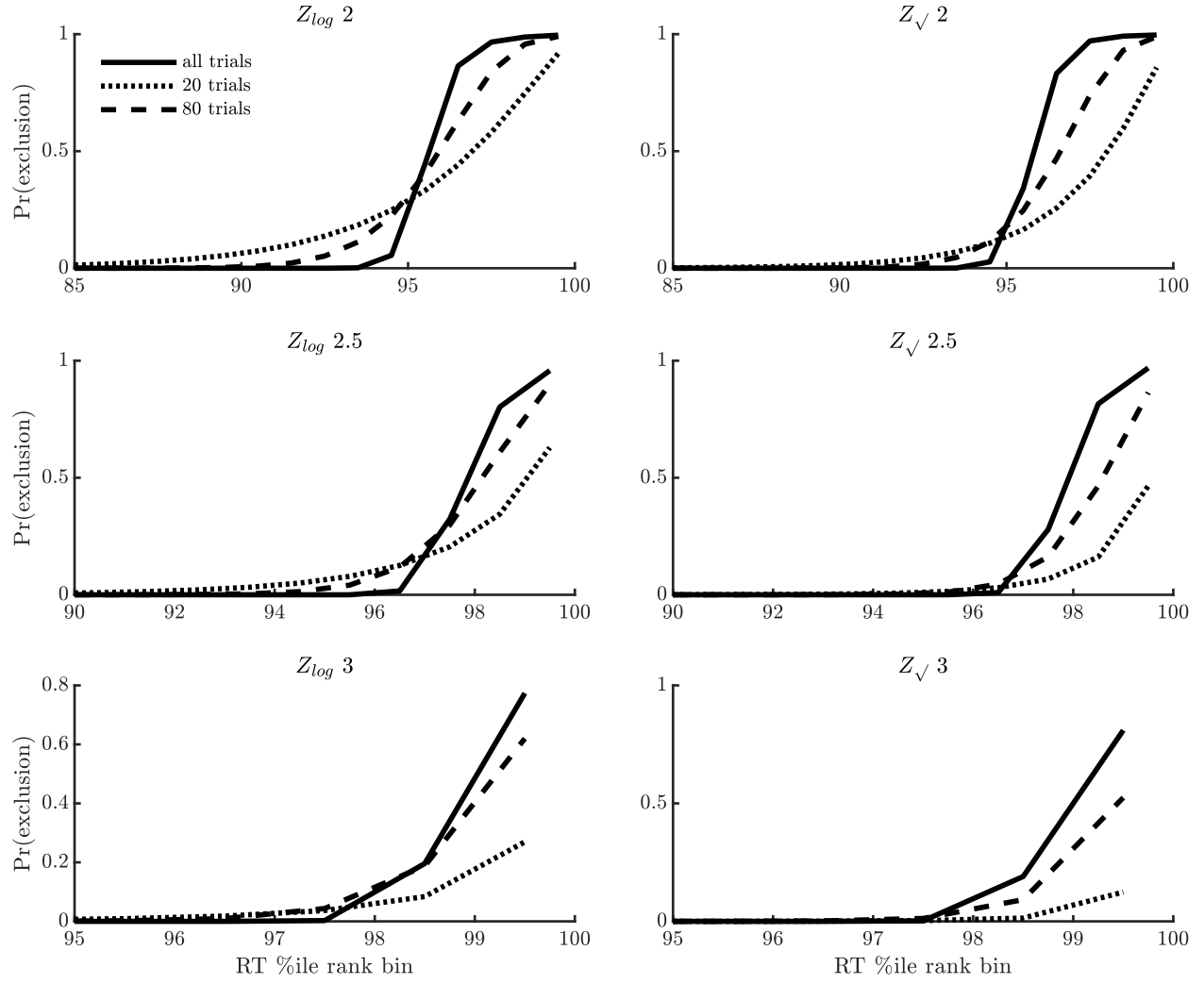


Figure S5: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the condition-specific $Z(\log RT)$ and $Z(\sqrt{RT})$ procedures.

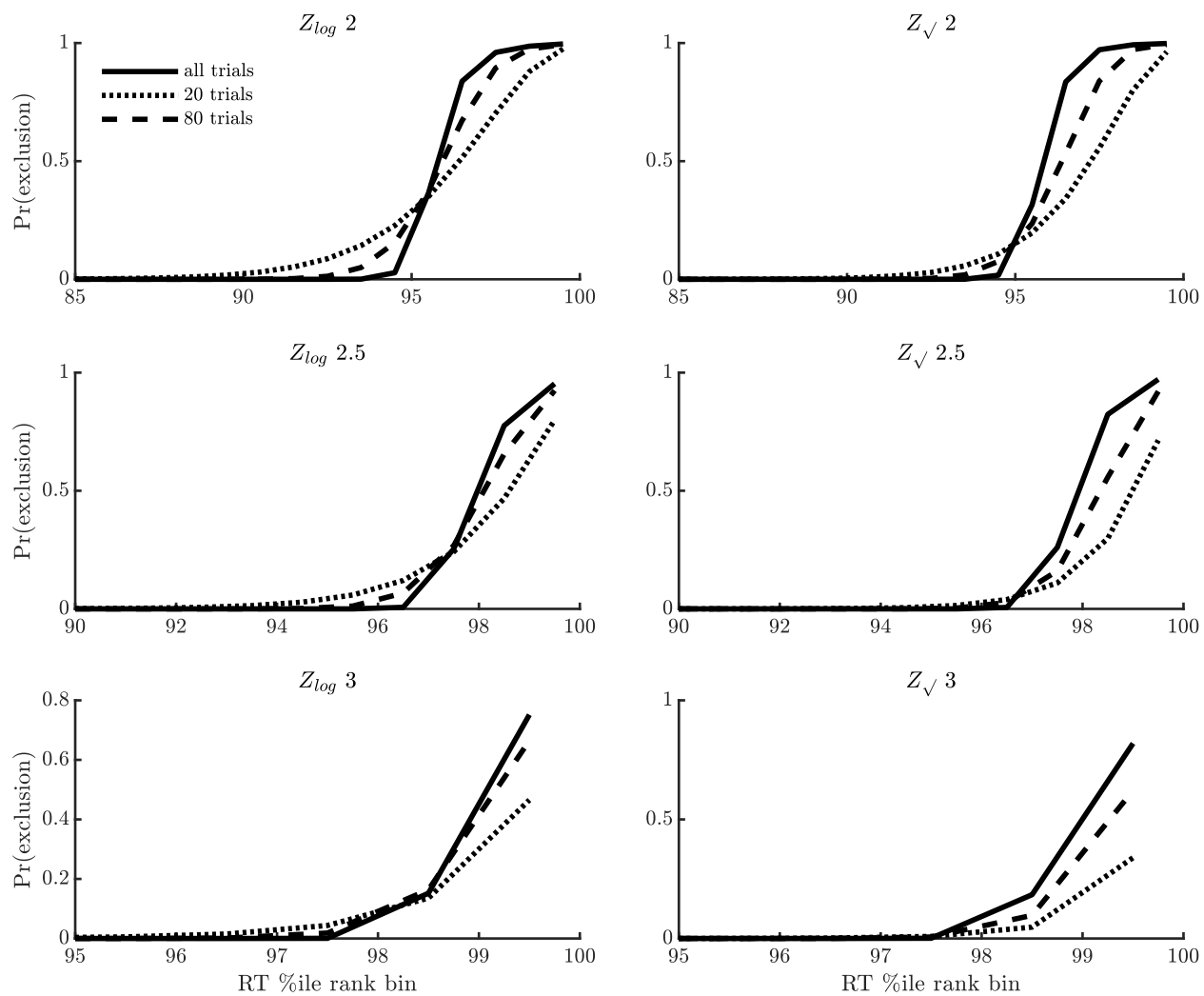


Figure S6: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the pooled $Z(\log RT)$ and $Z(\sqrt{RT})$ procedures.

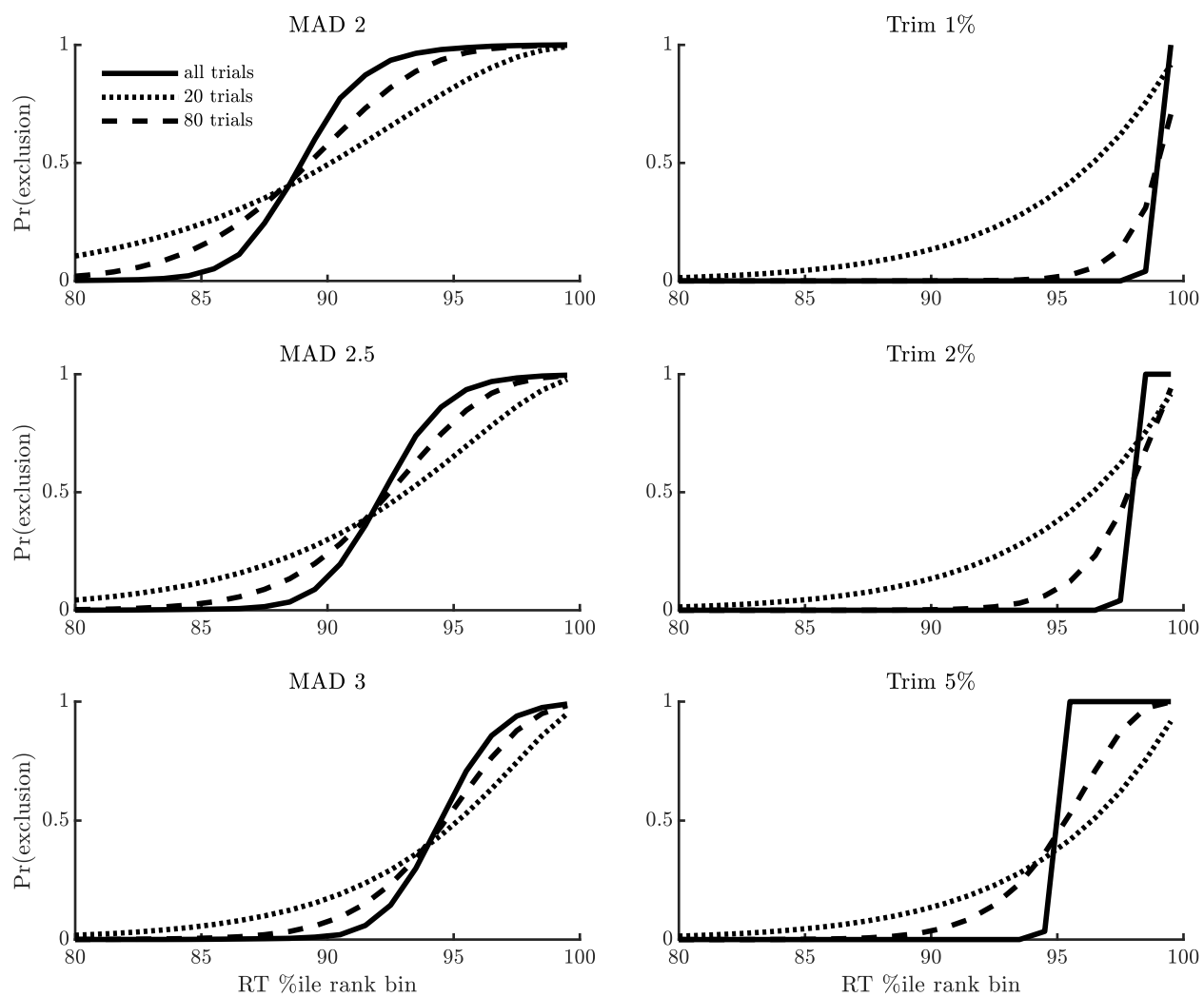


Figure S7: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the condition-specific MAD and Trim procedures.

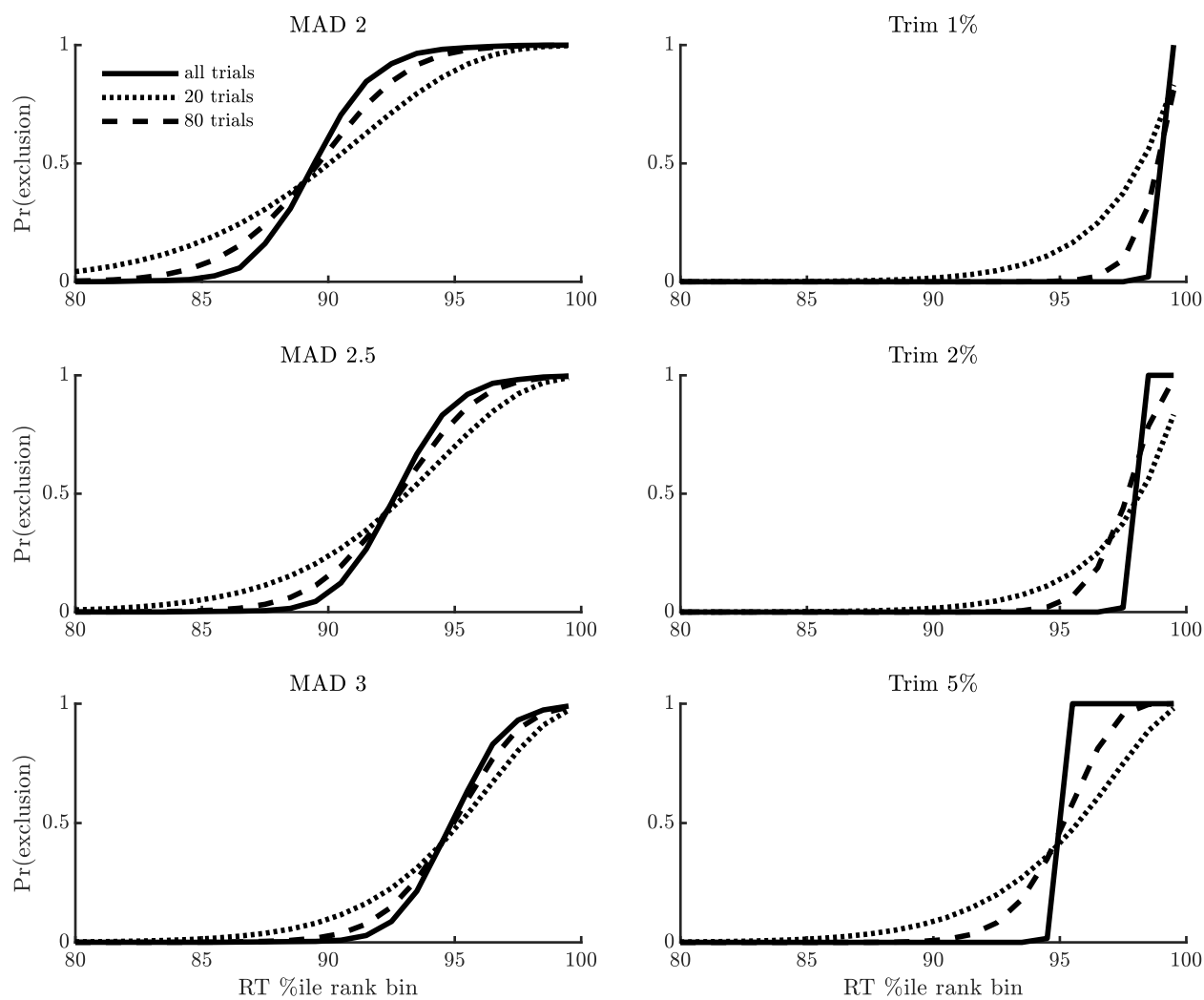


Figure S8: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the pooled MAD and Trim procedures.

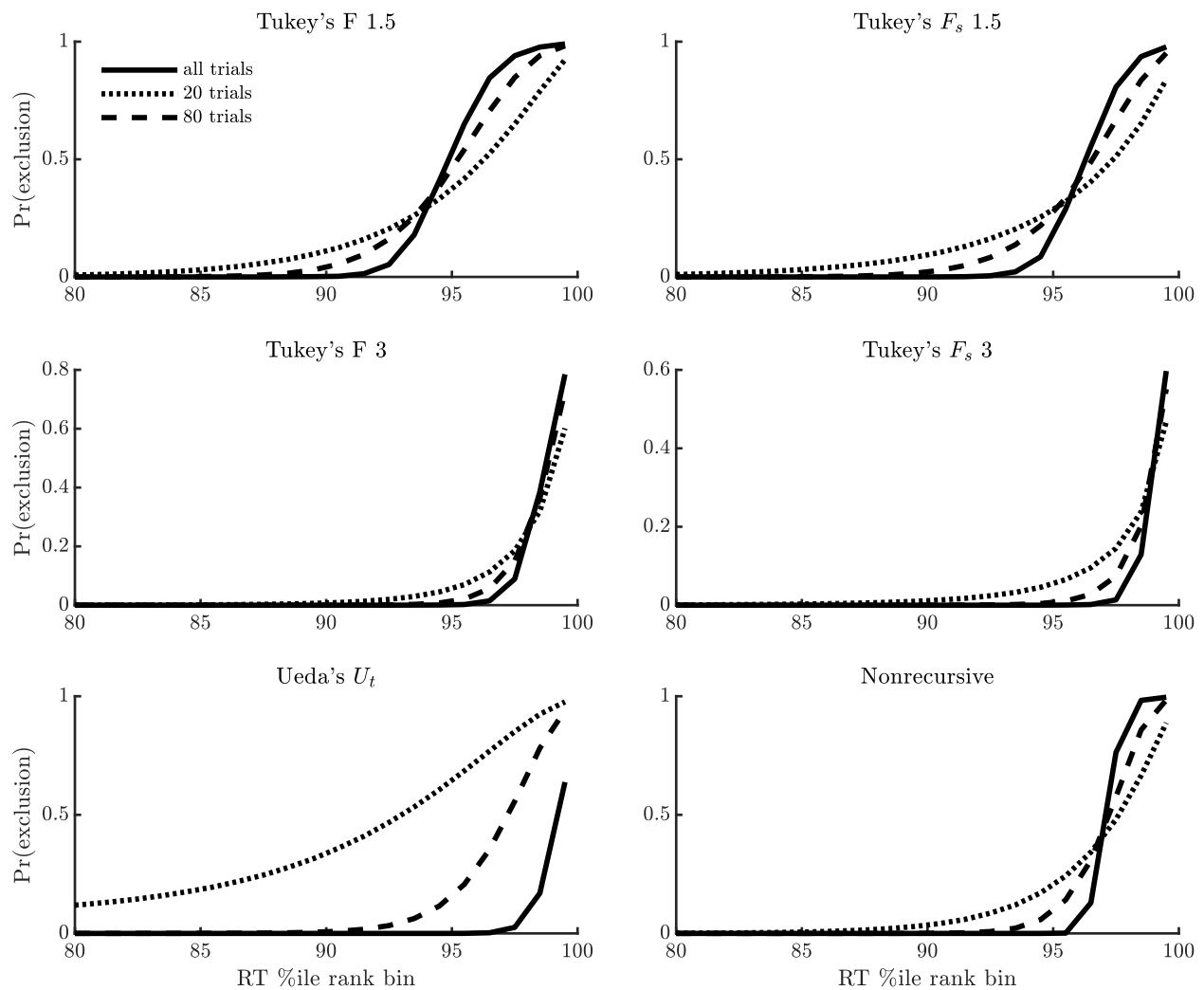


Figure S9: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the condition-specific Tukey's F , Tukey's F_s , Ueda's U_t , and nonrecursive procedures.

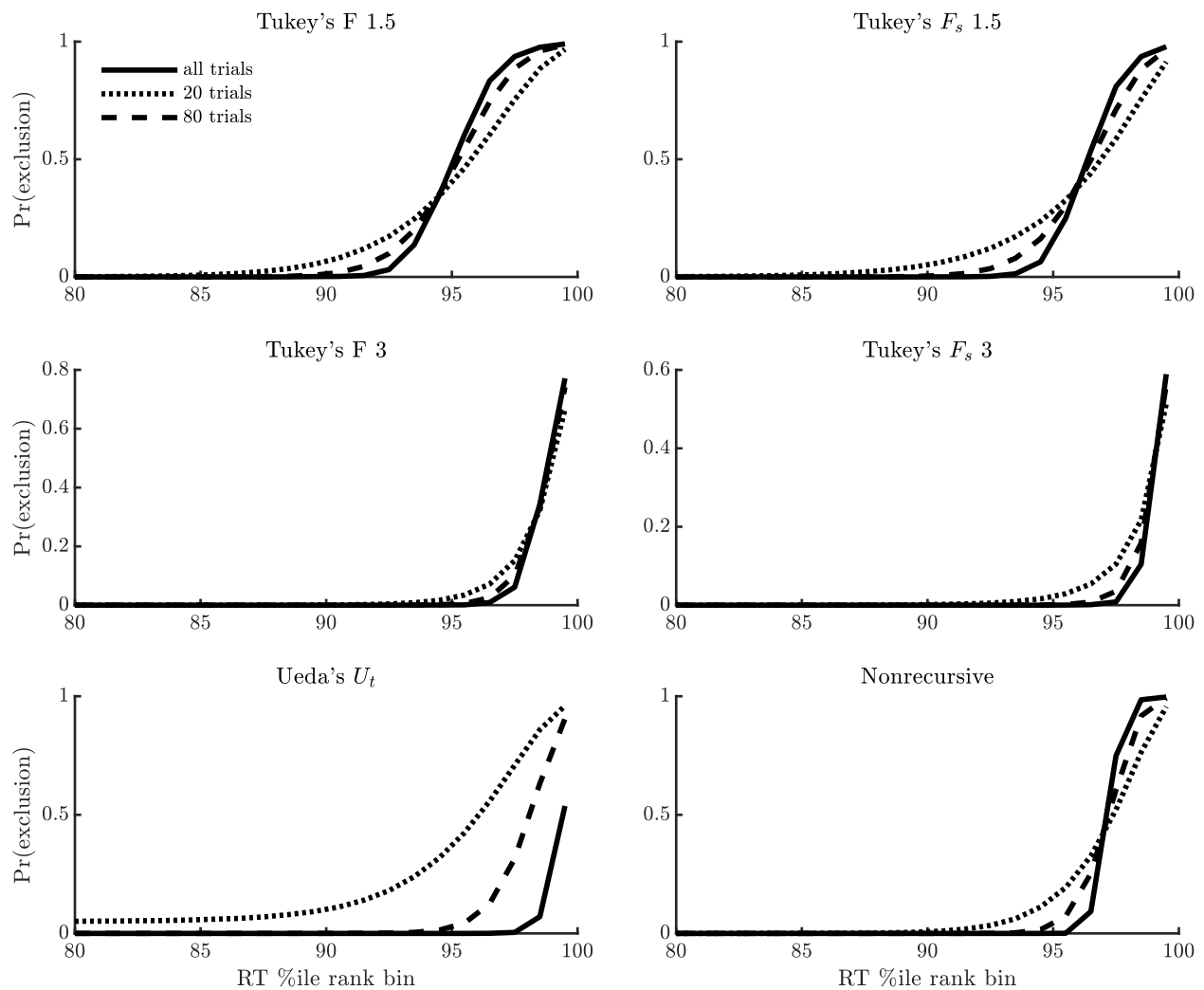


Figure S10: Probability of exclusion as a slow outlier as a function of reaction time (RT) percentile rank for the pooled Tukey's F , Tukey's F_s , Ueda's U_t , and nonrecursive procedures.