

SUPPLEMENTAL RESULTS

Figure S1. Percentage of item **intercepts** without Differential Item Functioning (DIF) for which DIF was (a) retained and significant following regularization (light gray); (b) retained following regularization, regardless of significance (medium gray); (c) significant by the item response theory likelihood ratio test followed by univariate Wald test (black). The tuning parameter for regularized DIF evaluation was determined by minimizing Bayes' Information Criterion.

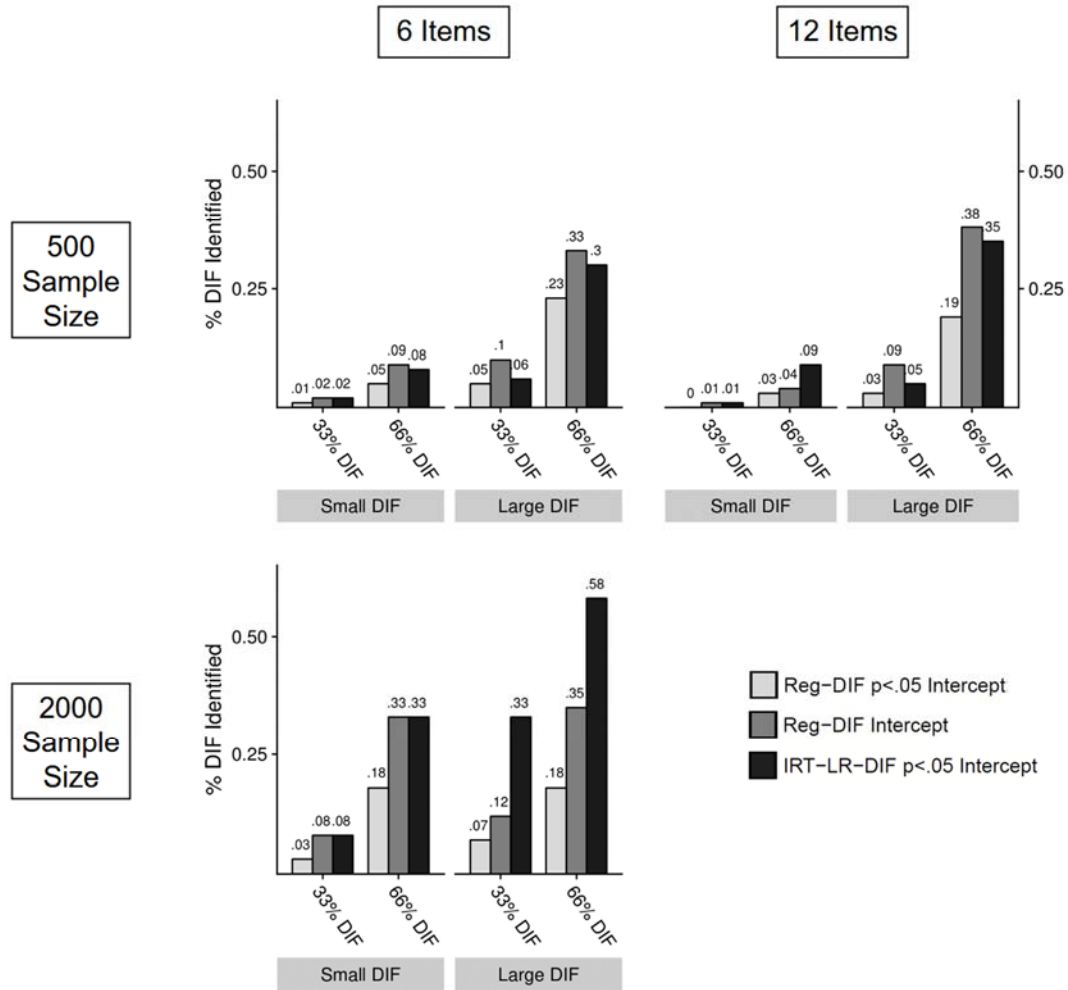


Figure S2. Percentage of item **loadings** without Differential Item Functioning (DIF) for which DIF was (a) retained and significant following regularization (light gray); (b) retained following regularization, regardless of significance (medium gray); (c) significant by the item response theory likelihood ratio test followed by univariate Wald test (black). The tuning parameter for regularized DIF evaluation was determined by minimizing Bayes' Information Criterion.

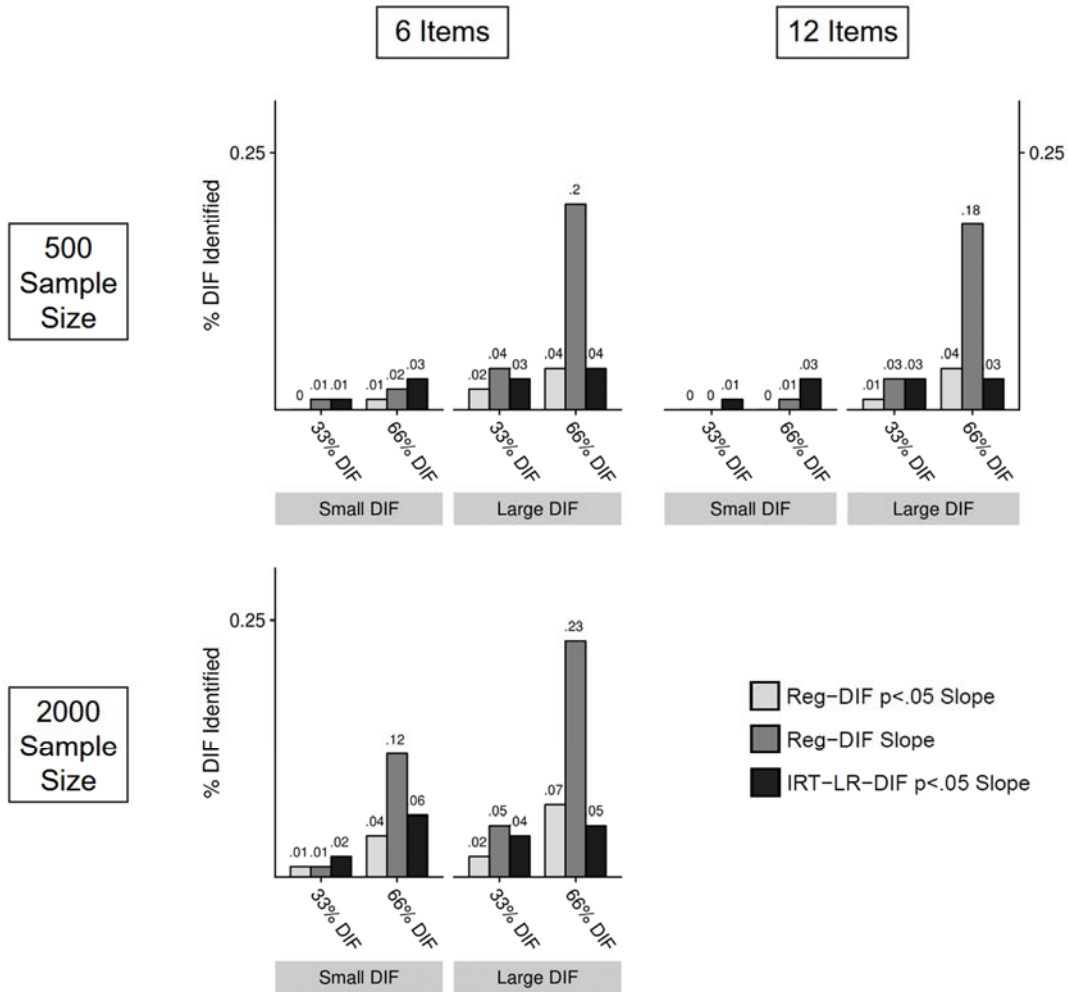


Figure S3. Percentage of item **intercepts** with Differential Item Functioning (DIF) for which DIF was (a) retained and significant following regularization (light gray); (b) retained following regularization, regardless of significance (medium gray); (c) significant by the item response theory likelihood ratio test followed by univariate Wald test (black). The tuning parameter for regularized DIF evaluation was determined by minimizing Bayes' Information Criterion.

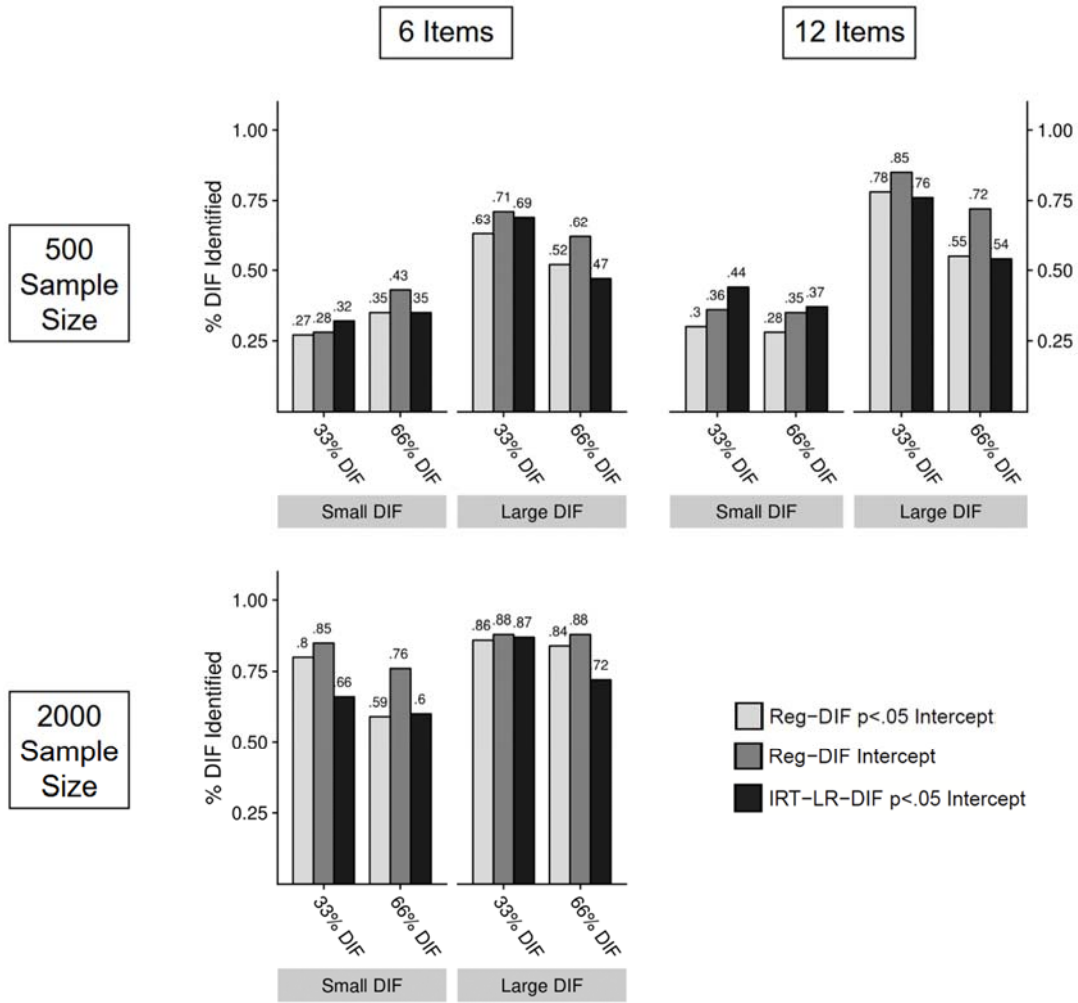


Figure S4. Percentage of item **loadings** with Differential Item Functioning (DIF) for which DIF was (a) retained and significant following regularization (light gray); (b) retained following regularization, regardless of significance (medium gray); (c) significant by the item response theory likelihood ratio test followed by univariate Wald test (black). The tuning parameter for regularized DIF evaluation was determined by minimizing Bayes' Information Criterion.

