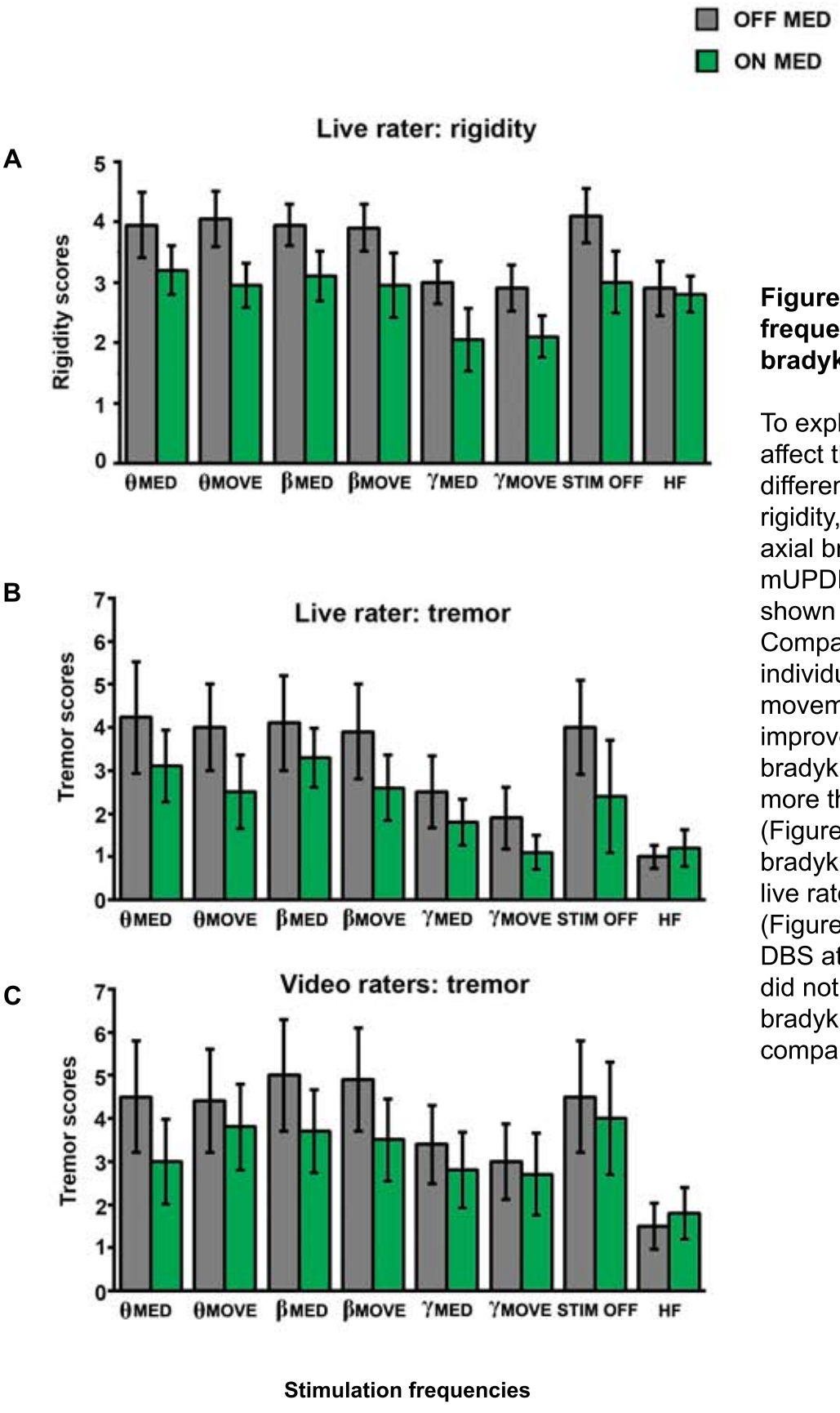

Figure e-2 The effects of DBS frequencies on rigidity, tremor and bradykinesia

To explore whether DBS frequencies affect the various PD motor signs differently, we analyzed the results for rigidity, tremor, limb bradykinesia and axial bradykinesia components of the mUPDRS separately and the results are shown in the supplementary figures. Compared to no stimulation, DBS at individualized dopamine-dependent or movement-related γ frequencies and HF improved rigidity, tremor, and limb bradykinesia scores (Figure e-2A to E) more than axial bradykinesia (Figure e-2F, G). Changes in limb bradykinesia was more prominent for the live rater than the video raters (Figure e-2D, E). On the other hand, DBS at individualized θ or β frequencies did not change tremor, axial and limb bradykinesia, or rigidity subscores compared to no stimulation.

Figure e-2

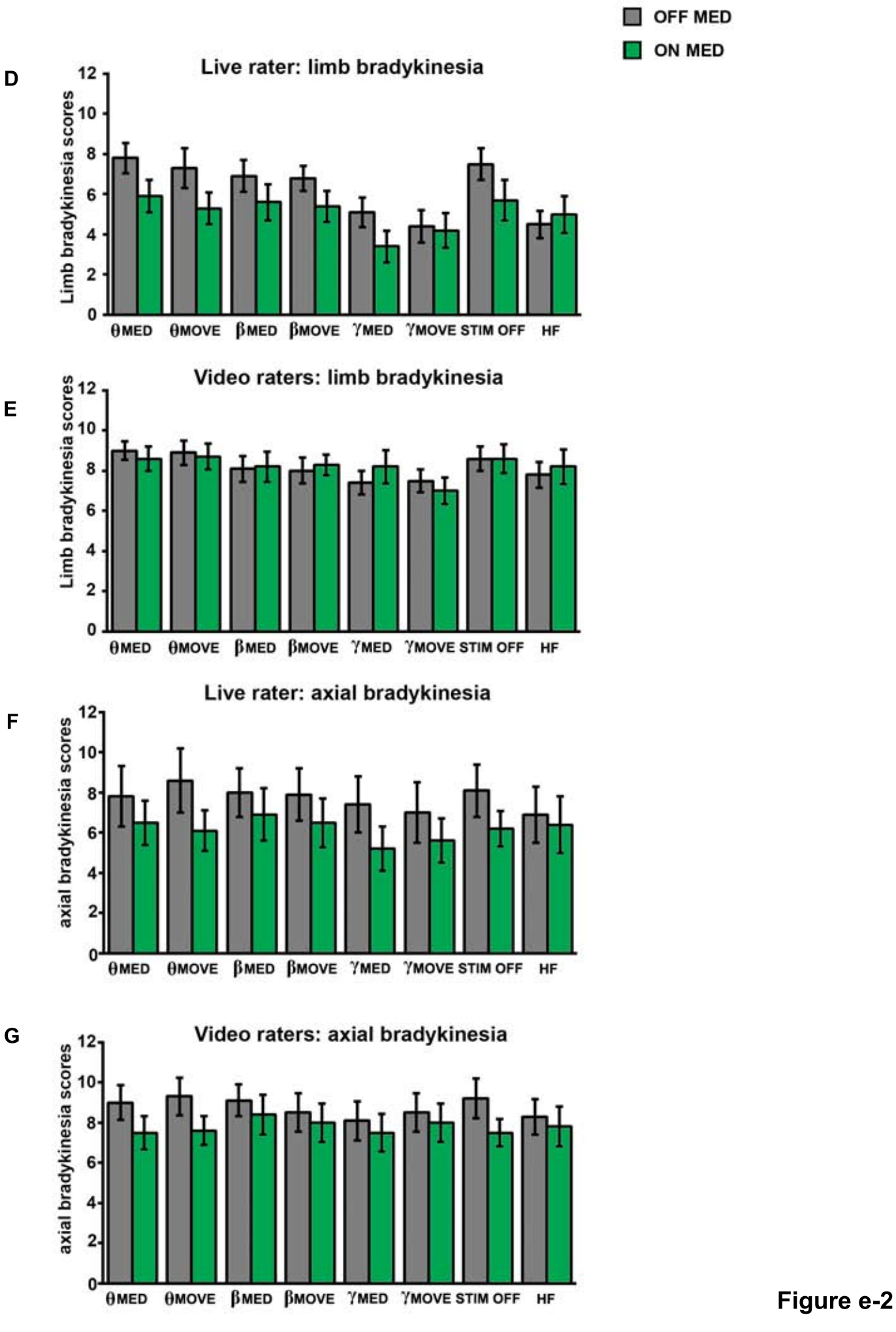
OFF MED
ON MED
D
Live rater: limb bradykinesia
Limb bradykinesia scores
E
Video raters: limb bradykinesia
Limb bradykinesia scores
F
Live rater: axial bradykinesia
axial bradykinesia scores
G
Video raters: axial bradykinesia
axial bradykinesia scores
θMED θMOVE βMED βMOVE γMED γMOVE STIM OFF HF
Stimulation frequencies

Figure e-2