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Bilingual Experience and Resting-State Brain Connectivity: Impacts of L2 Age of Acquisition and Social Diversity of Language Use on Control Networks

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Abstract

We investigated the independent contributions of second language (L2) age of acquisition (AoA) and social diversity of language use on intrinsic brain organization using seed-based resting-state functional connectivity among highly proficient French-English bilinguals. There were two key findings. First, earlier L2 AoA related to greater interhemispheric functional connectivity between homologous frontal brain regions, and to decreased reliance on proactive vs. reactive executive control in an AX-Continuous Performance Task completed outside the

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