

QUALITY OF MATERNAL BEHAVIOR DURING INFANCY PREDICTS FUNCTIONAL CONNECTIVITY BETWEEN NEUROCOGNITIVE BRAIN NETWORKS 9 YEARS LATER

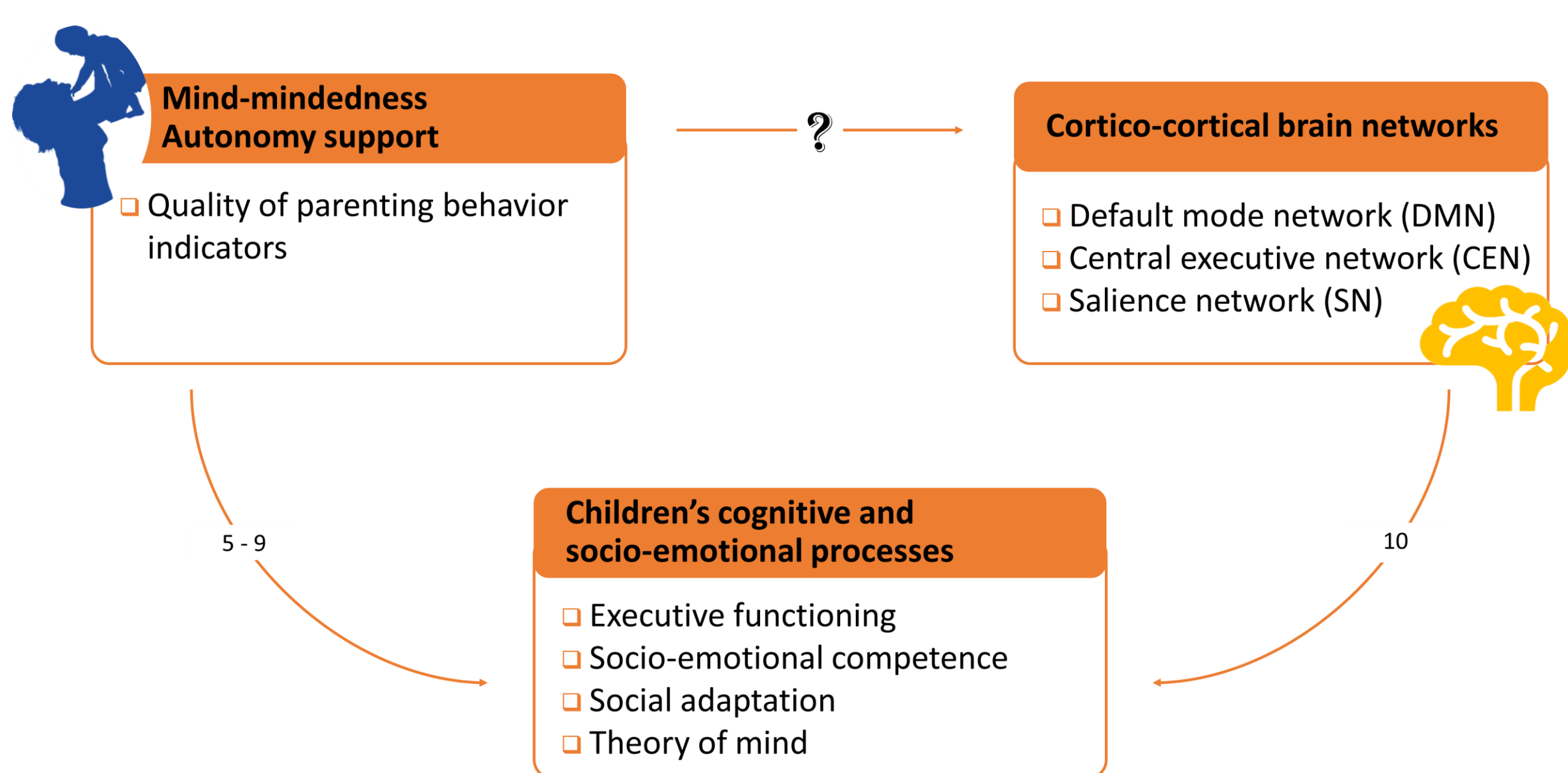
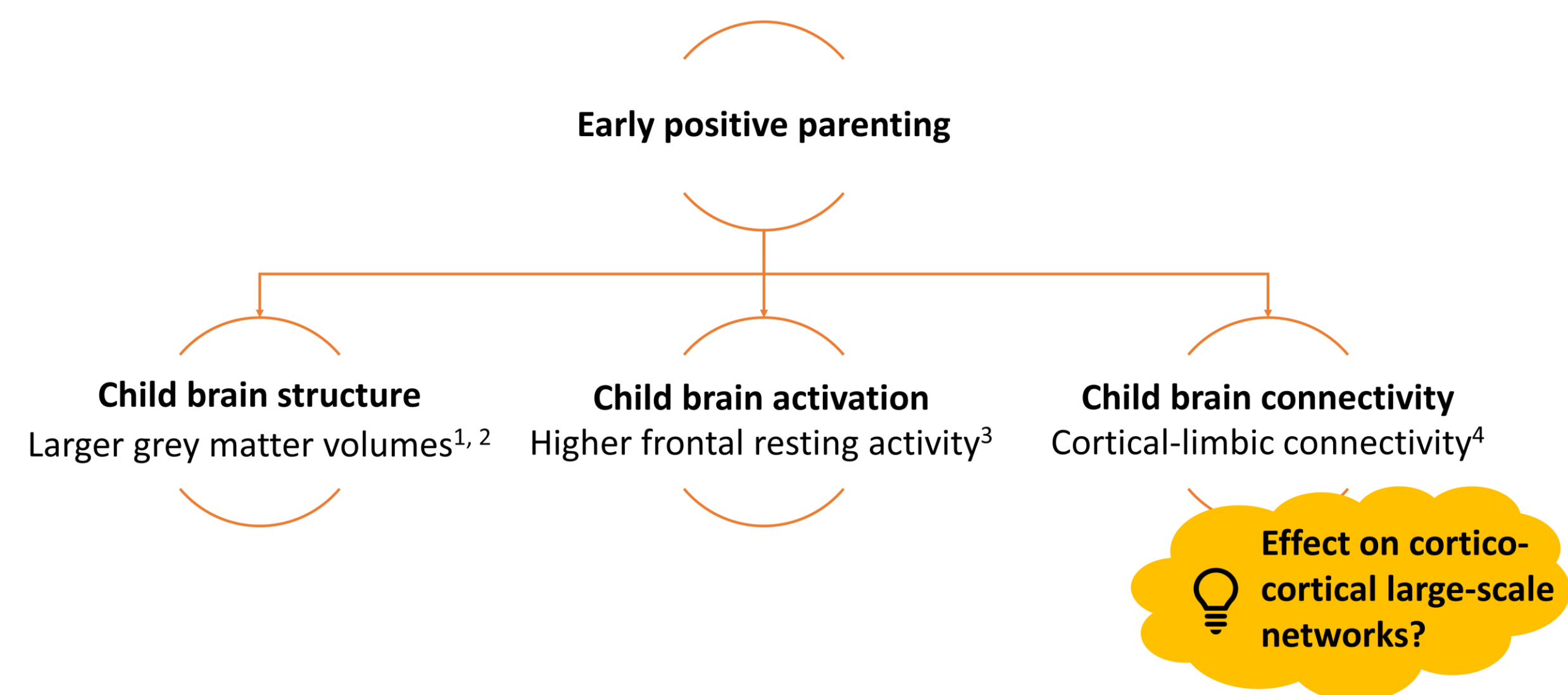
Dégeilh, Fanny^{1,2}; Bernier, Annie¹; Leblanc, Élizabel¹; Daneault, Véronique^{1,3,4}; Beauchamp, Miriam H.^{1,2}

¹ Department of Psychology, University of Montreal, Quebec, Canada; ² Sainte-Justine Research Center, Montreal, Quebec, Canada; ³ Functional Neuroimaging Unit, Montreal Geriatric University Institute, Quebec, Canada; ⁴ Sacré-Cœur Hospital, Montreal, Quebec, Canada

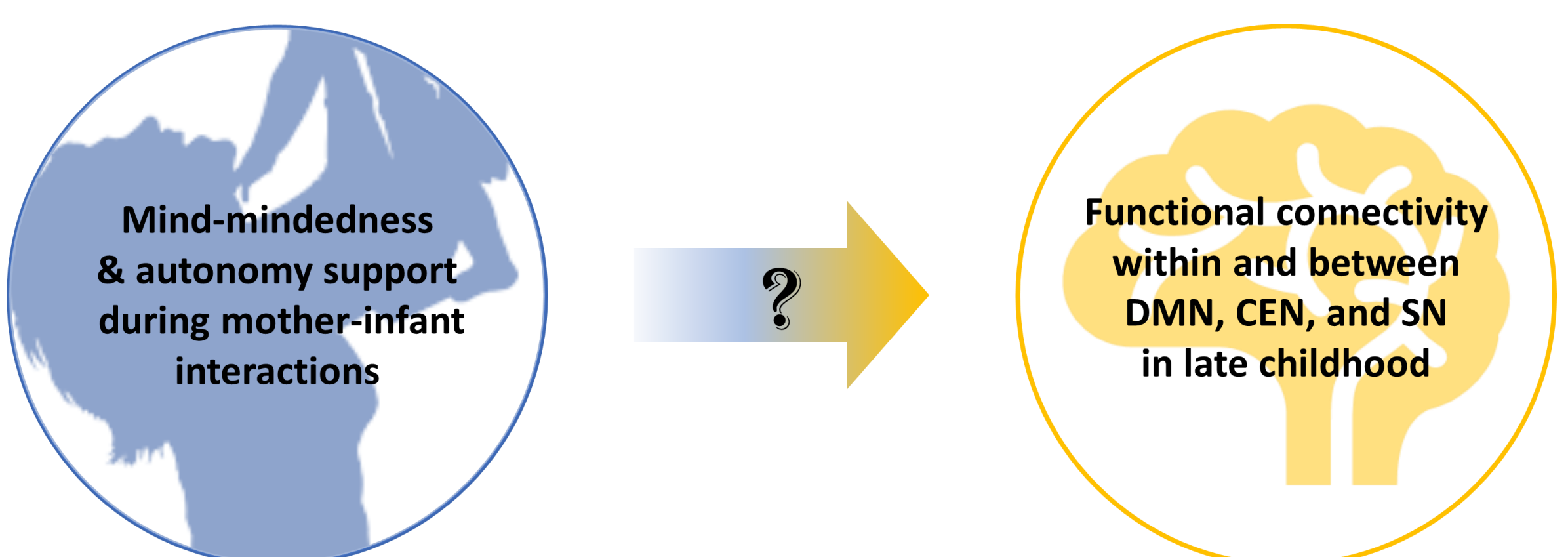


INTRODUCTION

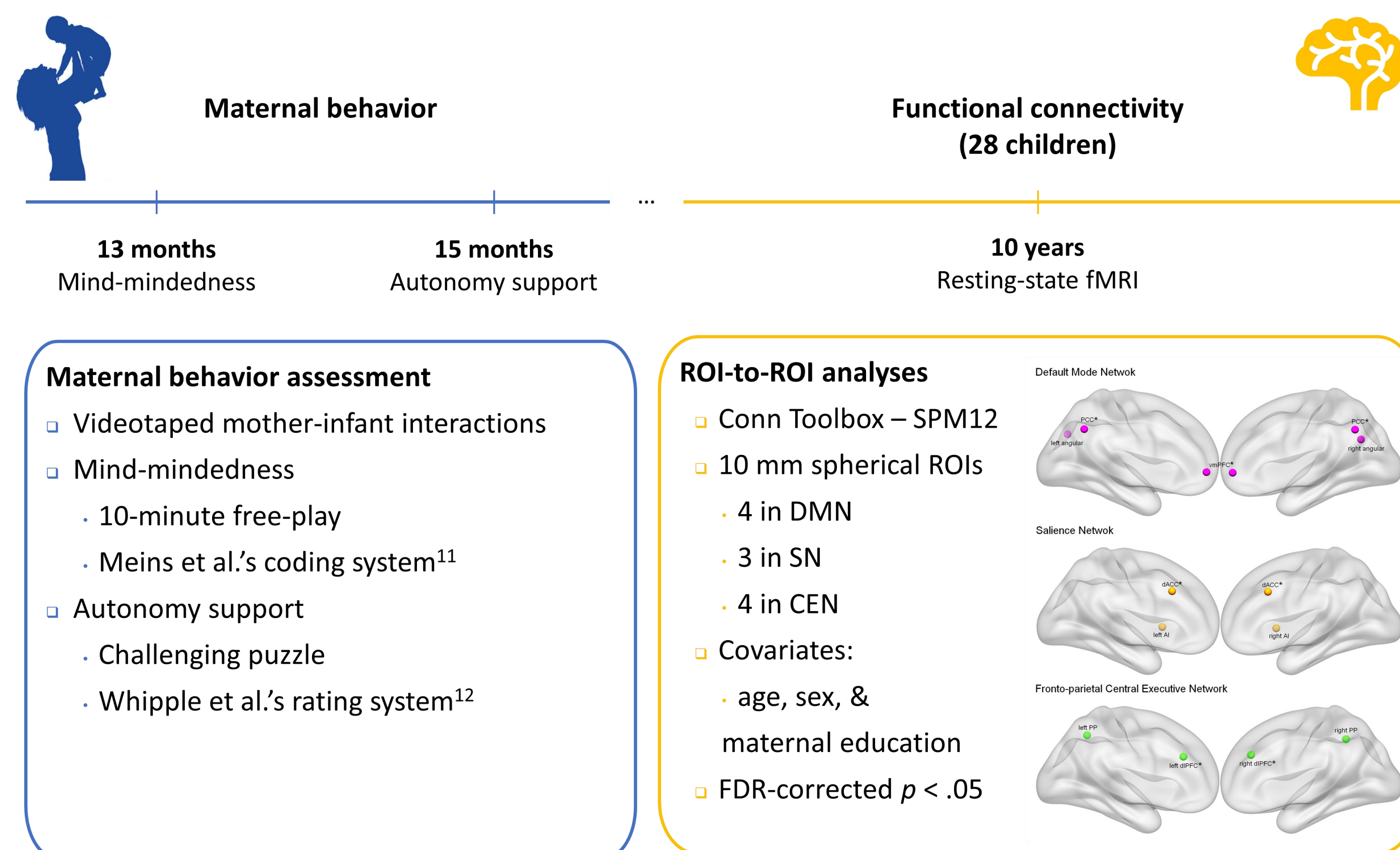
- Early childhood experiences
 - Strength and effectiveness of neural connections
 - Fine tune the development of brain networks
- Parent-infant interactions
 - The most pervasive and potent infancy experiences



OBJECTIVE

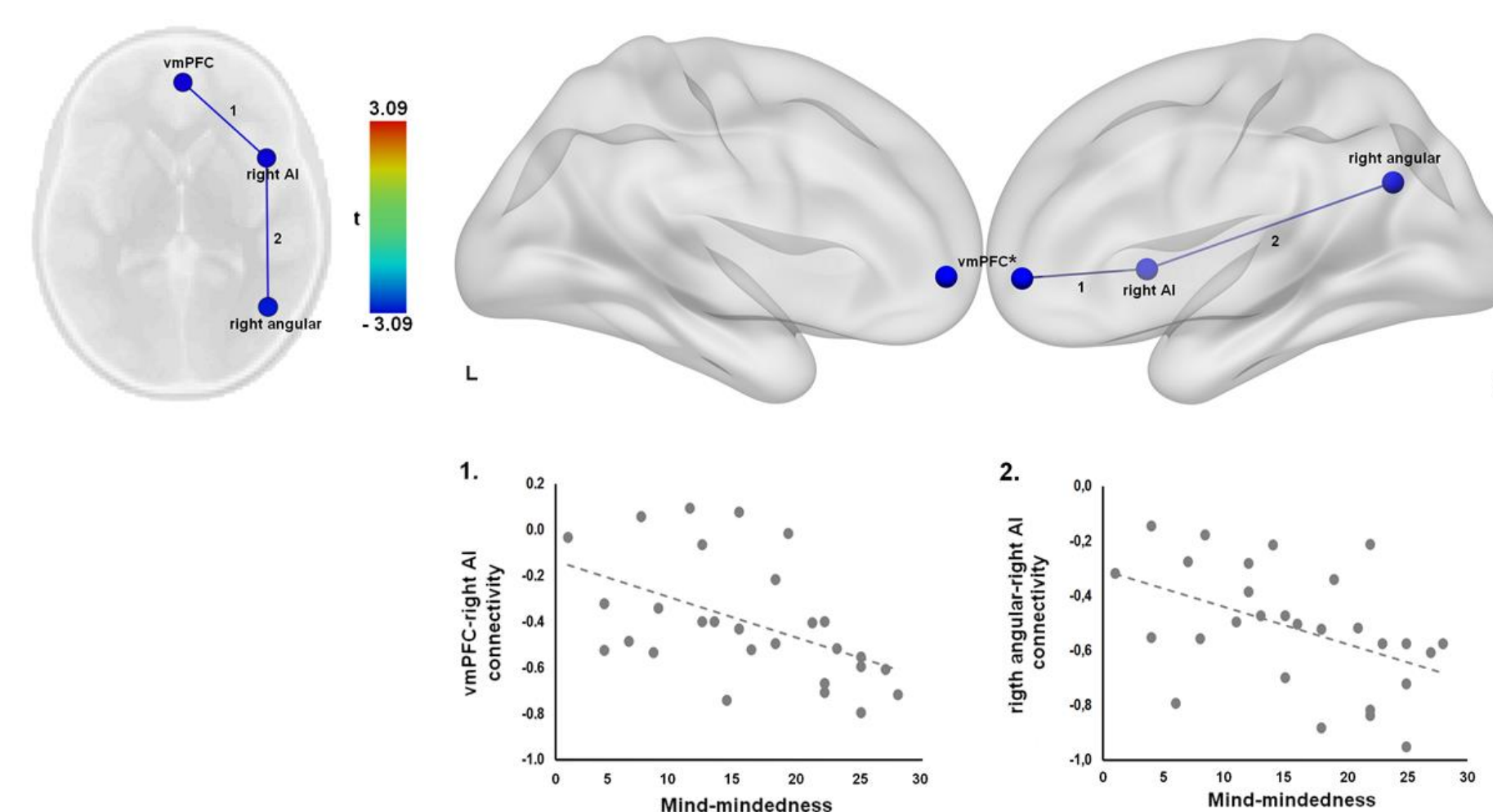


METHOD

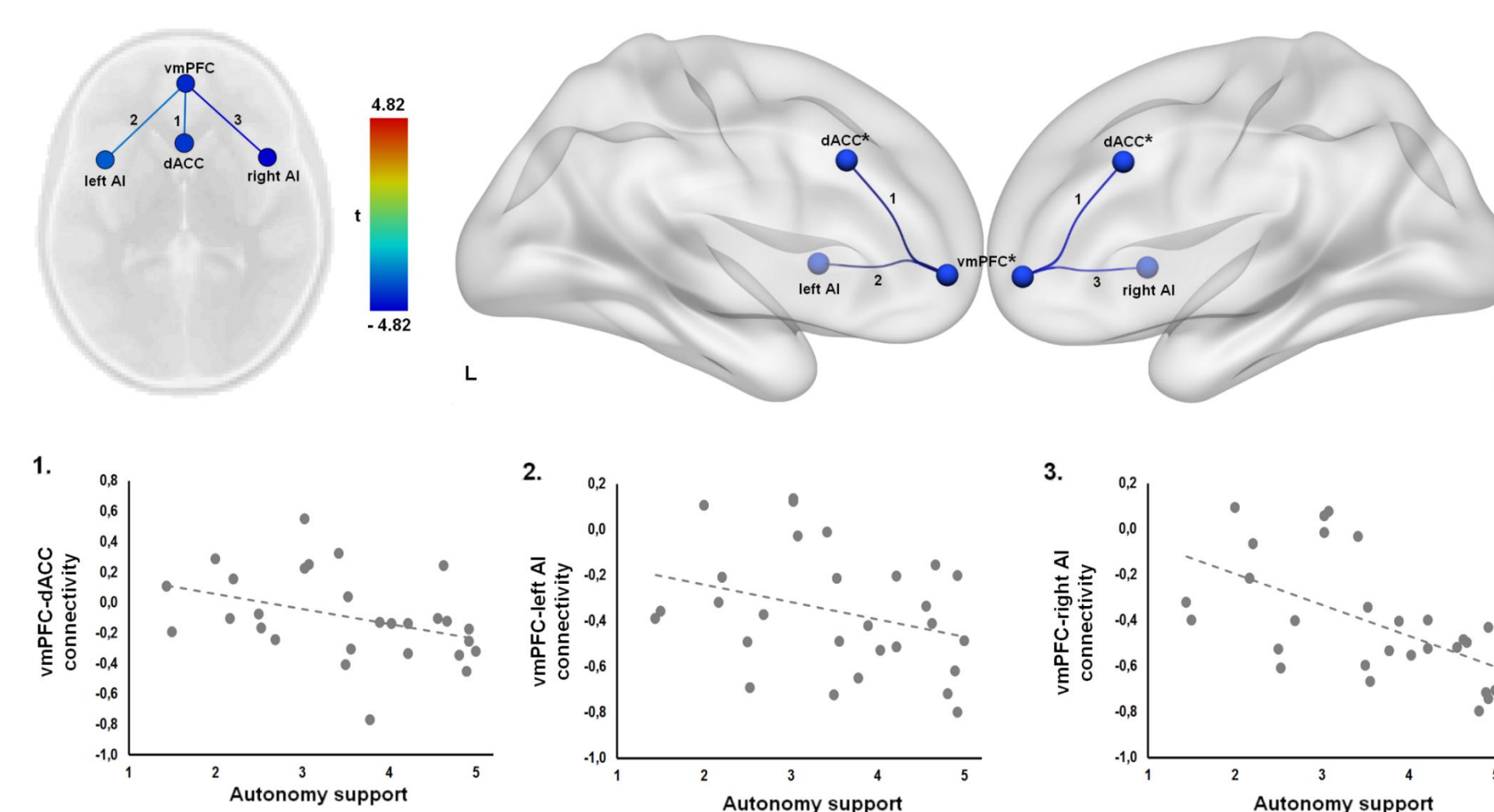


RESULTS

Mind-mindedness



Autonomy support



DISCUSSION



- ↑ DMN and SN negative connectivity through brain maturation¹³⁻¹⁵
 - Mind-minded and autonomy supportive mothers during infancy ↔ more mature brain connectivity in children
 - Positive early maternal behavior may promote DMN-SN connectivity development

CONCLUSION

The findings of this study provide rare evidence that normative variation in parenting quality during infancy may contribute to the development of functional connectivity in typically developing young children.

REFERENCES

- Kok et al., 2015; 2. Luby et al., 2012; 3. Bernier et al., 2016; 4. Rifkin-Graboi et al., 2015; 5. Bernier et al., 2010; 6. Centifanti et al., 2016; 7. Joussemet et al., 2005; 8. Kirk et al., 2015; 9. Matte-Gagné et al., 2015; 10. Menon, 2013; 11. Meins et al., 2001; 12. Whipple et al., 2011; 13. Barber et al., 2013; 14. Chai et al., 2014; 15. Sherman et al., 2014



Contact: fanny.degeilh@umontreal.ca