



The neural basis of prosocial development in adolescence

Fact Sheet

Project Information

PROSOCIAL

Grant agreement ID: 681632

[Project website](#)

DOI

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Project closed

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29 July 2016

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30 September 2022

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EXCELLENT SCIENCE - European Research Council (ERC)

Total cost

€ 2 000 000,00

EU contribution

€ 2 000 000,00

Coordinated by

ERASMUS UNIVERSITEIT
ROTTERDAM



Netherlands

Objective

Adolescence is an important transition period in life, where individuals gain independence from their caregivers and develop into adults who pursue their own goals. Our understanding of this transition period has benefited from two decades of research on brain development, in which it was discovered that adolescence represents a period of risk for heightened emotional reactivity, and that the developing brain in adolescence is much more plastic than previously thought. The existing models, however, have often ignored how these aspects of normative development have adaptive functions. In this proposal, I will use the original approach of testing for the first time the hypothesis that the very same emotional

reactivity that was previously argued to create risks for potential negative developmental trajectories (including risk for substance abuse, delinquency) may under other circumstances create opportunities for prosocial developmental trajectories (voluntary behavior to benefit others) – such as by fostering cooperation, sharing and helping.

For this purpose, I will measure functional and structural brain development longitudinally across the age range 10-21 years. I will test linear versus non-linear developmental patterns of brain activity for three key aspects of prosocial development (cooperation, sharing, and helping). This focus on positive development will provide a turning point in our understanding of adolescent brain development. The program will make the additional step of testing an intervention for prosocial development. An experimental longitudinal intervention study is crucial for the question whether adolescence is a window of opportunity for prosocial development. A mechanistic understanding of the different phases of adolescent development will prove useful not only for theory development, but also for teachers and youth workers to shape educational and health programs around opportunities for prosocial development, affecting all adolescents.

Fields of science (EuroSciVoc)

[social sciences](#) > [educational sciences](#) > [didactics](#)

[medical and health sciences](#) > [health sciences](#) > [substance abuse](#)



Keywords

[development](#)

[adolescence](#)

Programme(s)

[H2020-EU.1.1. - EXCELLENT SCIENCE - European Research Council \(ERC\)](#)

MAIN PROGRAMME

Topic(s)

[ERC-CoG-2015 - ERC Consolidator Grant](#)

Call for proposal

[See other projects for this call](#)

Funding Scheme

[ERC-COG - Consolidator Grant](#)

Host institution



ERASMUS UNIVERSITEIT ROTTERDAM

Net EU contribution

€ 669 123,70

Total cost

€ 669 123,70

Address

**BURGEMEESTER OUDLAAN 50
3062 PA Rotterdam**

 **Netherlands** 

Activity type

Higher or Secondary Education Establishments

Links

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Beneficiaries (2)



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UNIVERSITEIT LEIDEN 

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Net EU contribution

€ 1 330 876,30

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RAPENBURG 70

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Activity type

Higher or Secondary Education Establishments

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