

HORIZON  
2020

# Childhood and Adolescence Psychopathology: unravelling the complex etiology by a large Interdisciplinary Collaboration in Europe

## Rapports

### Informations projet

**CAPICE**

N° de convention de subvention: 721567

[Site Web du projet](#)

**DOI**

[10.3030/721567](https://doi.org/10.3030/721567)

Projet clôturé

**Date de signature de la CE**

2 Decembre 2016

**Date de début**

1 Février 2017

**Date de fin**

31 Janvier 2021

**Financé au titre de**

EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

**Coût total**

€ 3 163 687,92

**Contribution de l'UE**

€ 3 163 687,92

**Coordonné par**

STICHTING VU



Netherlands

## Periodic Reporting for period 2 - CAPICE (Childhood and Adolescence Psychopathology: unravelling the complex etiology by a large Interdisciplinary Collaboration in Europe)

Période du rapport: 2019-02-01 au 2021-01-31

## Résumé du contexte et des objectifs généraux du projet



Mental health symptoms impose a great burden on individuals, their families and on society as a whole. They often start in childhood and in around 50% of the children with mental health problems still have psychiatric symptoms in adulthood which are associated with increased rates of school dropout, unemployment and other negative functional outcomes. Improving the outcomes of these problems in childhood will therefore have a major impact.

Both genetic and non-genetic factors play a role in mental health symptoms. Depending on age, gender and type of mental health symptoms, the heritability is between 40% and 80%, implying a larger contribution of environmental factors for some syndromes than for others.

CAPICE brings together eight European cohorts. These cohorts have followed children and their families, often from birth and collected data on on lifestyle, family environment, health, and emotional and behavioral problems. Phenotypic and genome-wide genotypic data are available for over 60,000 children, in addition to genome-wide genotypes for over 20,000 mothers and epigenome-wide data for over 6,000 children.

This wealth of data provides an excellent opportunity to elucidate the role of genetic and environmental factors, and their interplay in the occurrence of childhood psychopathology, its persistence, and its comorbidities. The focus will be on common mental health symptoms, such as anxiety, depression, and Attention Deficit Hyperactivity Disorder (ADHD).

The network will also build capacity of allround researchers in psychiatric genetics that, from the start of their training work in an international network, as is nowadays the rule in this type of research, ensuring the sustainability of the consortium.

At the end of this project, a stable international and interdisciplinary research network with a good data infrastructure will exist, enabling continuation of the high quality research. The results will provide targets for prevention and intervention, improving the health prospects for those young people with mental health symptoms

## Travail effectué depuis le début du projet jusqu'à la fin de la période considérée dans le rapport et principaux résultats atteints jusqu'à présent



Using several different designs, the project has focused on revealing how childhood symptoms are related to adult symptoms and how these symptoms are related to the environment provided by parents, either during pregnancy or later on. The results show that genetic factors largely underlie the association between adult and childhood symptoms. Furthermore, the association with the environment provided by parents is also partly explained by genetic factors. This indicates that the environmental factors may not or not only be causally associated to the psychiatric symptoms, but that the association is explained by gene-environment correlation, i.e. parents transmit genes influencing risk for mental health symptoms and these genes are also related to the environment they provide.

## Progrès au-delà de l'état des connaissances et impact potentiel prévu (y compris l'impact socio-économique et les conséquences



## sociétales plus larges du projet jusqu'à présent)

The progress in psychiatric genetic research has been achieved by large international collaborations. This consortium not only brings together data of many samples, but also longitudinal data on various measures. This enables investigating the role of risk factors across development. This is of essence as early recognition of children at risk for a chronic course may help in providing better, because targeted treatment. This project will provide insight in genetic and environmental factors influencing the development but also the persistence of symptoms. These results can yield new targets for intervention for children that are at higher risk for persistent symptoms.



Header



Logo

**Dernière mise à jour:** 11 Juin 2021

**Permalink:** <https://cordis.europa.eu/project/id/721567/reporting/fr>

European Union, 2025