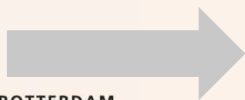


Middelengebruik & hersenontwikkeling

Volksbondlezing 2023, Rotterdam
Prof. dr. Hanan El Marroun

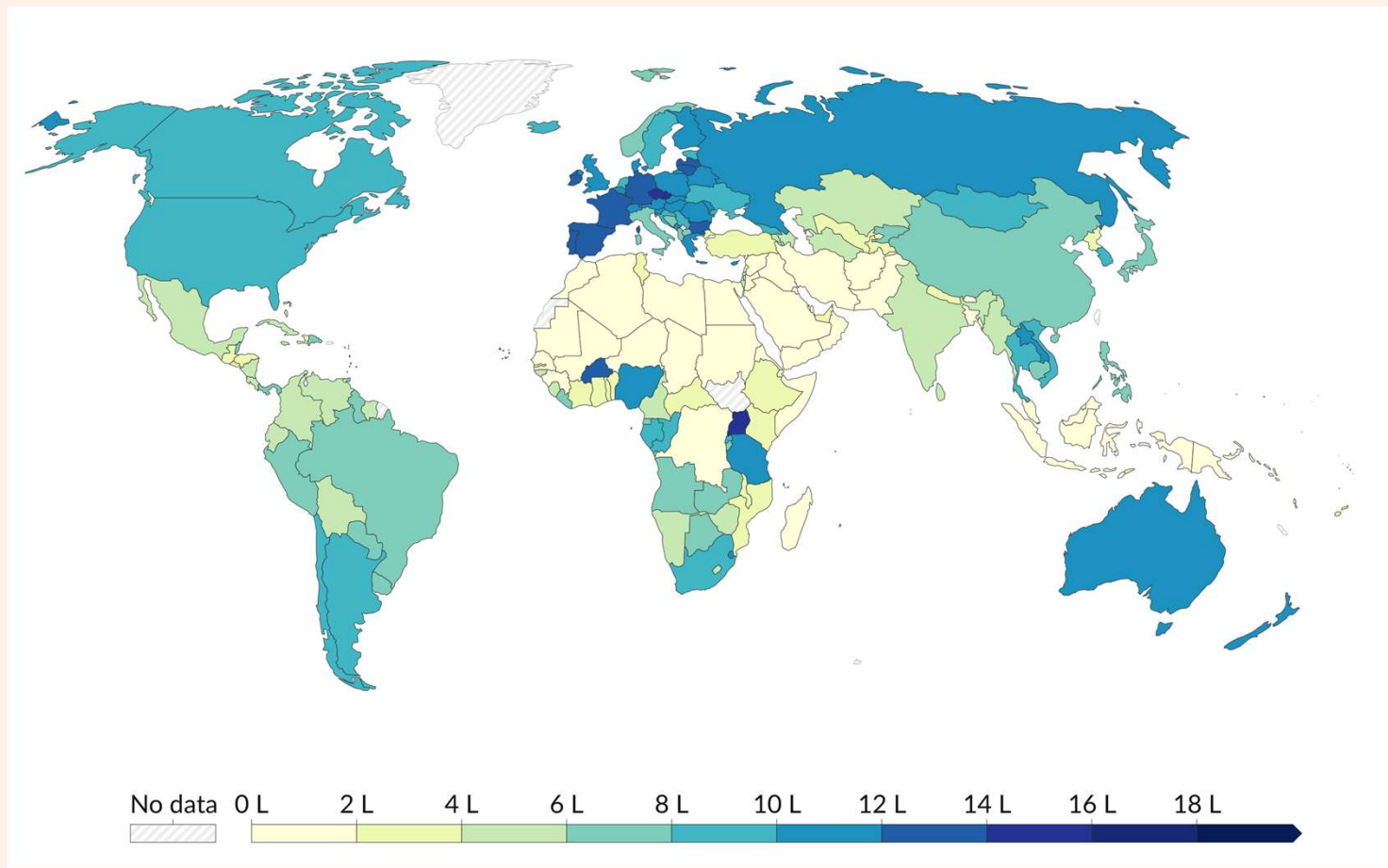
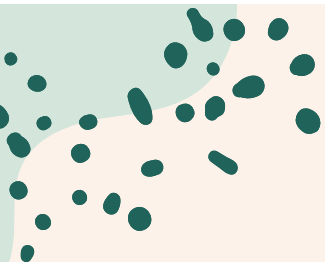


CENTRE FOR
SUBSTANCE USE &
ADDICTION
RESEARCH





Middelengebruik



Alcoholgebruik wereldwijd
per jaar, per person, 2018, ourworldindata.org



Recreatief

Regelmatig

Automatische

Problematisch

Verslaving



Vroeg beginnen vergroot de kans problematisch gebruik



Hersenenontwikkeling



20wk



29wk

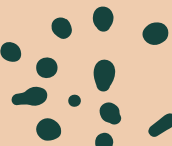


35 wk



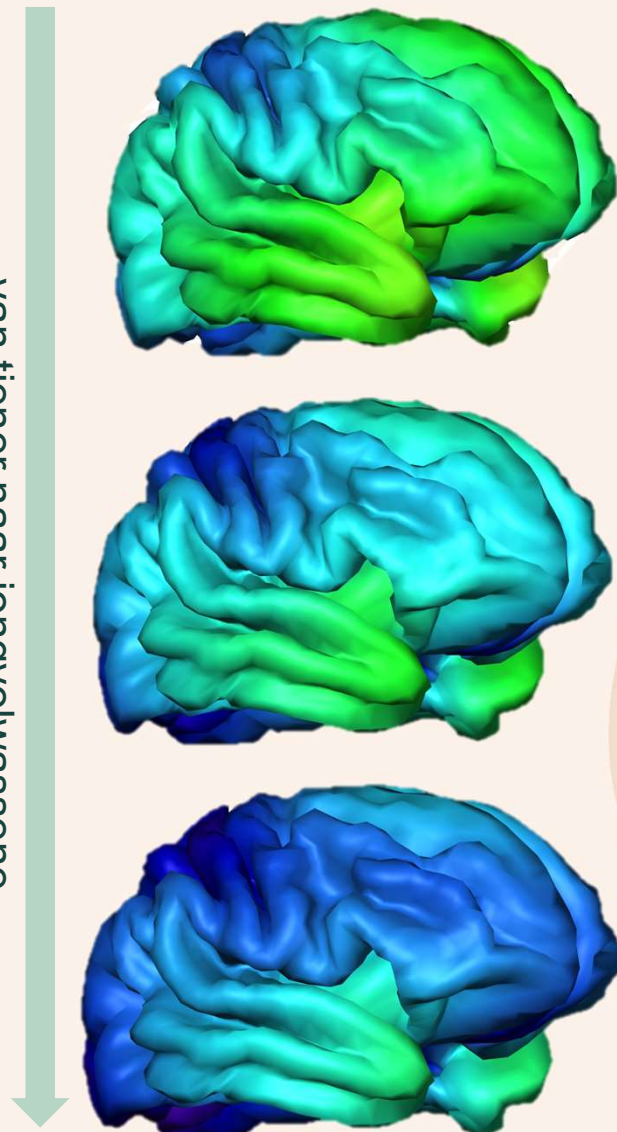
Credit: Studholme Lab/UWMC

Belangrijke periode



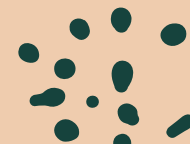


van tiener naar jongvolwassene



Credit: HAUKE BARTSCH/CENTER FOR TRANSLATIONAL
IMAGING AND PRECISION MEDICINE UC SAN DIEGO

**Belangrijke
periode**





De Generation R Studie

Gegevens verzameling



Cannabidgebruik in de zwangerschap



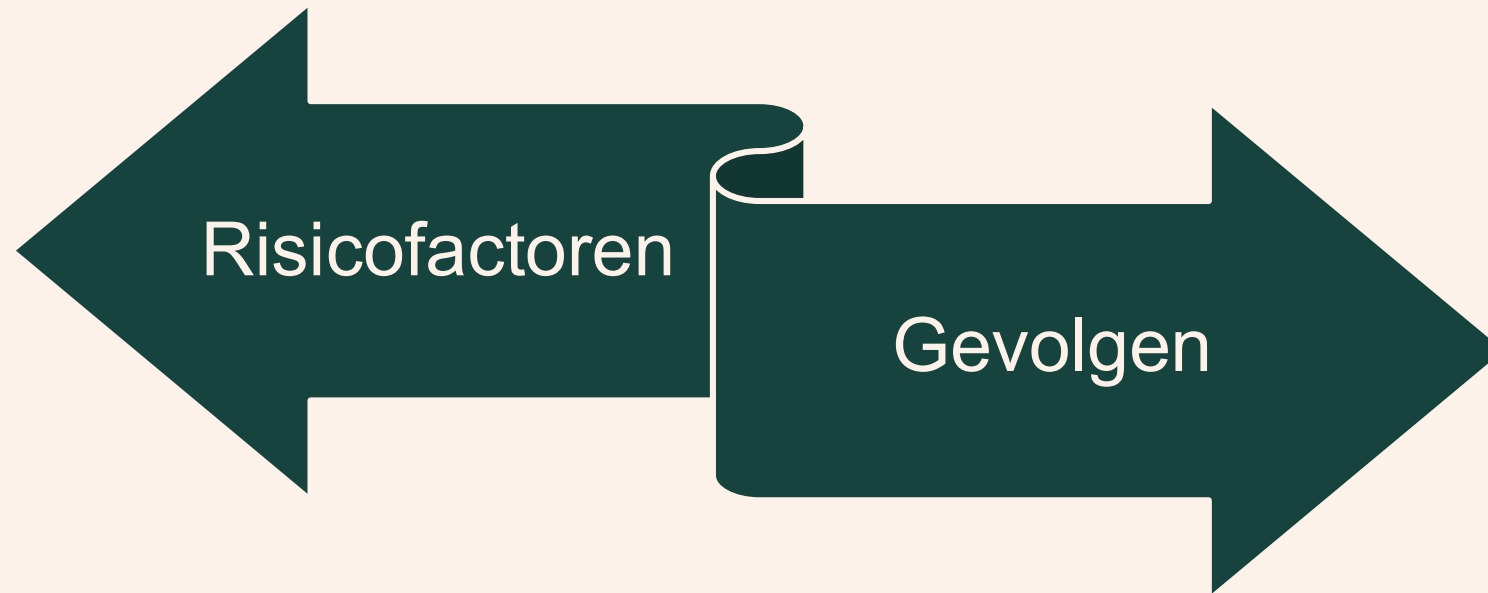


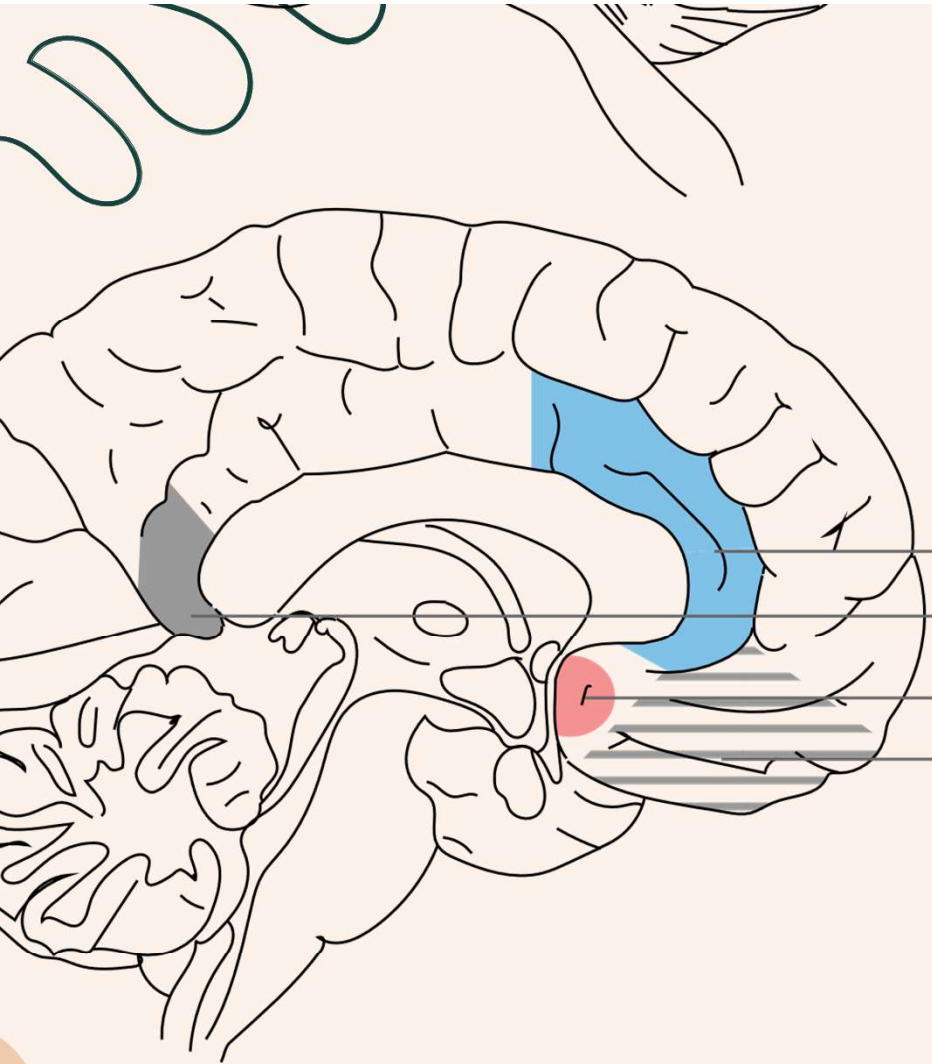
Aggressief gedrag

Aandachtsproblemen



Middelengebruik in de adolescentie

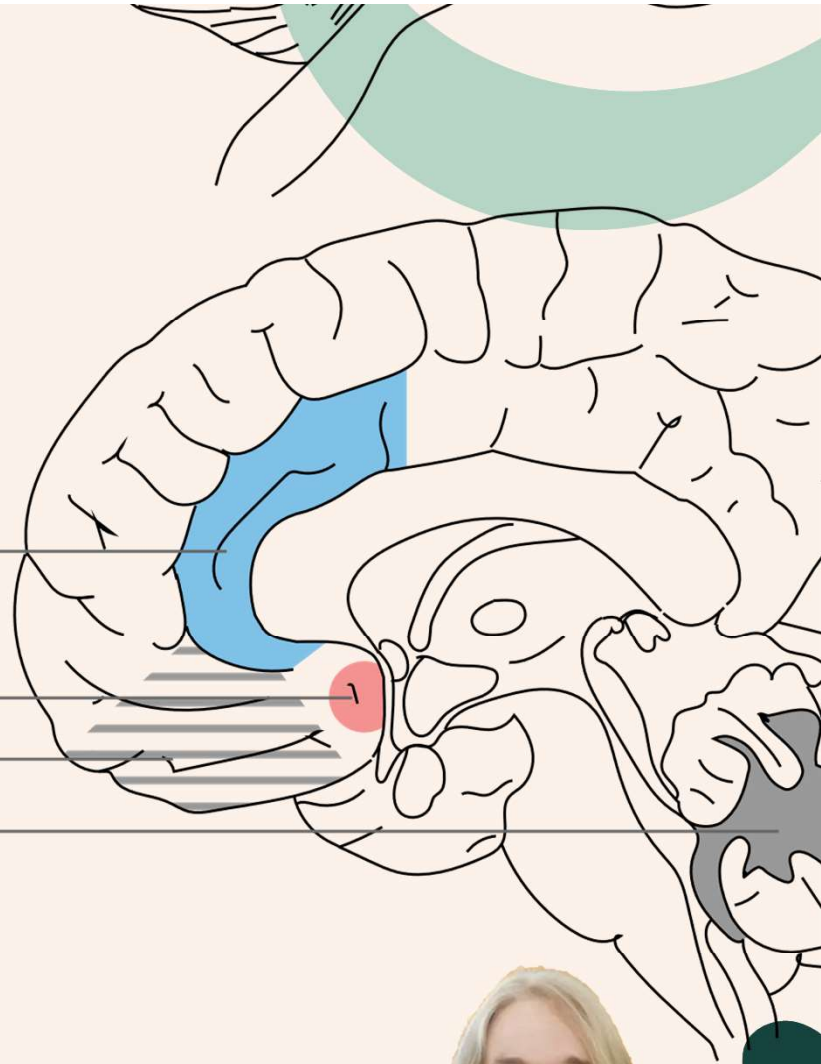




COGNITIVE CONTROL

- ACC
- isthmus cingulate
- NAcc
- mOFC
- cerebellum*

REWARD SYSTEM





Kennis voor verbetering van behandeling en preventie

Dank voor uw aandacht!

Volksbondlezing 2023, Rotterdam



**CENTRE FOR
SUBSTANCE USE &
ADDICTION
RESEARCH**

