Early severe institutional deprivation is associated with a persistent variant of adult attention-deficit/hyperactivity disorder: clinical presentation, developmental continuities and life circumstances in the English and Romanian Adoptees study.

Kennedy, M., Kreppner, J., Knights, N., Kumsta, R., Maughan, B., Golm, D., Rutter, M., Schlotz, W. and Sonuga-Barke, E. J.S.

do: 10.1111/jcpp.12576

Background
Early-life institutional deprivation is associated with attention-deficit/hyperactivity disorder (ADHD) later in childhood and adolescence. In this article, we examine, for the first time, the persistence of deprivation-related ADHD into young adulthood in a sample of individuals adopted as young children by UK families after periods in extremely depriving Romanian orphanages.

Methods
We estimated rates of ADHD at age 15 years and in young adulthood (ages 22–25 years) in individuals at low (LoDep; nondeprived UK adoptees and Romanian adoptees with less than 6-month institutional exposure) and high deprivation-related risk (HiDep; Romanian adoptees with more than 6-month exposure). Estimates were based on parent report using DSM-5 childhood symptom and impairment criteria. At age 15, data were available for 108 LoDep and 86 HiDep cases, while in young adulthood, the numbers were 83 and 60, respectively. Data on education and employment status, IQ, co-occurring symptoms of young adult disinhibited social engagement (DSE), autism spectrum disorder (ASD), cognitive impairment, conduct disorder (CD), callous-unemotional (CU) traits, anxiety, depression and quality of life (QoL) were also collected.

Results
ADHD rates in the LoDep group were similar to the general population in adolescence (5.6%) and adulthood (3.8%). HiDep individuals were, respectively, nearly four (19%) and over seven (29.3%) times more likely to meet criteria, than LoDep. Nine ‘onset’ young adult cases emerged, but these had a prior childhood history of elevated ADHD behaviours at ages 6, 11 and 15 years. Young adult ADHD was equally common in males and females, was predominantly inattentive in presentation and co-occurred with high levels of ASD, DSE and CU features. ADHD was associated with high unemployment and low educational attainment.

Conclusion
We provide the first evidence of a strong persistence into adulthood of a distinctively complex and impairing deprivation-related variant of ADHD. Our results confirm the powerful association of early experience with later development in a way that suggests a role for deep-seated alterations to brain structure and function.