

a composite score for maternal early life adversities, and prenatal depressive symptoms into account.

**Results** Genetic risk for MDD associated with trajectories of maternal well being in the postpartum, conditional on the experience of early life adversities and prenatal symptoms of depression. We will explore whether these trajectories are also linked to DNA methylation patterns in mothers and their offspring. Preliminary analyses suggest that maternal early life adversities associate with offspring DNA methylation age estimates, which is mediated through maternal mental well being and maternal DNA methylation age estimates.

**Conclusion** We found relevant gene-environment interactions associated with trajectories of maternal well being. Our findings inform research on mechanisms underlying familial transmission of vulnerability for psychopathology and might thus be relevant to prevention and early intervention programs.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.146>

### S073

#### Once and again: Intergenerational transmission of parenting

K. Tombeau Cost<sup>1,\*</sup>, E. Unternaehrer<sup>2</sup>, W. Jonas<sup>3</sup>, H. Gaudreau<sup>2</sup>, A.A. Bouvette-Tourcot<sup>2</sup>, M. Steiner<sup>4</sup>, J. Lydon<sup>2</sup>, P. Szatmari<sup>5</sup>, M. Meaney<sup>2</sup>, A. Fleming<sup>6</sup>

<sup>1</sup> Psychology, Canada

<sup>2</sup> McGill University, Psychology, Montreal, Canada

<sup>3</sup> Karolinska Institute, Department of Women's and Children's Health, Stockholm, Sweden

<sup>4</sup> McMaster University, Psychiatry and Behavioural Neurosciences, Hamilton, Canada

<sup>5</sup> The Hospital for Sick Children, Psychiatry, Toronto, Canada

<sup>6</sup> University of Toronto Mississauga, Psychology, Mississauga, Canada

\* Corresponding author.

**Introduction** Animal and human studies suggest that individual differences in maternal parenting behaviour are transmitted from one generation to the next.

**Objective** This study aimed to examine potential psychosocial mechanisms underlying an intergenerational transmission of conceptualization of parenting, including affect, cognition, and parental support.

**Methods** In a subsample of 201 first-time mothers participating in the Maternal Adversity, Vulnerability and Neurodevelopment (MAVAN) project, we assessed maternal childhood rearing experiences, using the Parental Bonding Instrument and the Childhood Trauma Questionnaire. At 6 months postpartum, mothers completed questionnaires on parenting stress, symptoms of depression, internalization of maternal care regulation and current relationship with mother and father.

**Results** We found significant direct associations of maltreatment and rearing by the grandmother with parenting stress at 6 months. These associations were mediated through distinct psychosocial pathways: the association of maltreatment on higher parenting stress was fully mediated through more maternal symptoms of depression ( $z = 2.297$ ;  $P = 0.022$ ). The association between sub-optimal rearing provided by the mother and higher parenting stress was mediated through lower internalization of maternal care regulation ( $z = -2.155$ ;  $P = 0.031$ ) and to a lesser degree through more symptoms of depression ( $z = -1.842$ ;  $P = 0.065$ ). Finally, higher quality rearing by the grandfather was indirectly related to lower parenting stress through positive current relationship with the father ( $z = -2.617$ ;  $P = 0.009$ ).

**Conclusions** There are distinct pathways by which early experiences manifest in parenting stress. By understanding the structure of dysregulated parenting, clinicians will have practical information to specifically target maternal motivation, social supports, and

depressed mood to disrupt maladaptive parenting cognitions and practices.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.147>

### S074

#### Early adversity, symptoms of depression and breastfeeding

W. Jonas<sup>1,\*</sup>, A. Fleming<sup>2</sup>, M. Steiner<sup>3</sup>, M.J. Meaney<sup>4</sup>, L. Atkinson<sup>5</sup>, V. Mileva<sup>2</sup>, M. Sokolowski<sup>6</sup>, J. Kennedy<sup>7</sup>

<sup>1</sup> Karolinska Institute, Department of Women's and Children's Health, Stockholm, Sweden

<sup>2</sup> University of Toronto, Department of Psychology, Toronto, Canada

<sup>3</sup> McMaster University, Departments of Psychiatry & Behavioural Neurosciences and Obstetrics & Gynecology, Hamilton-ON-CA, Canada

<sup>4</sup> McGill University, Departments of Psychiatry and Neurology and Neurosurgery, Montreal, Canada

<sup>5</sup> Ryerson University, Department of Psychology, Toronto, Canada

<sup>6</sup> University of Toronto, Department of biological Genetics, Toronto, Canada

<sup>7</sup> Centre for Addiction and Mental Health, Psychiatric Neurogenetics Section, Toronto, Canada

\* Corresponding author.

**Background** There is considerable variation in the prevalence of breastfeeding, which allows for investigation of factors that influence the initiation and duration of breastfeeding and its association with well being of the mother infant dyad.

**Aims** To better understand factors that influence (1) maternal breastfeeding status and (2) the "effects" of breastfeeding on mothers and infants.

**Methods** Participants ( $n = 170$ ) derive from a longitudinal Canadian study "Maternal Adversity, Vulnerability and Neurodevelopment (MAVAN)", a project designed to understand the pre- and postnatal influences on maternal health and child social-emotional development. Mothers provided data on breastfeeding status, early life adversity, oxytocin gene and oxytocin gene receptor polymorphisms, depression/anxiety, infant temperament and maternal sensitivity.

**Results** Early life adversity associated with a shorter breastfeeding duration and higher maternal depression levels. The relation between mothers' early adversity and the duration of breastfeeding was mediated by mothers' depression level, but only in women carrying one variant of the oxytocin rs2740210 gene marker (CC genotype). Mothers who breastfeed at 3 months acted more sensitively towards their infants when they were 6 months old and they in turn had infants who at 18 months showed reduced negative affectivity.

**Conclusion** Women who have been exposed to early adversity are "living with the past" and they are, to certain extent, protected or more vulnerable to depression, depending on their genotype. Breastfeeding associated with higher maternal sensitivity, which associated with decreased negative emotionality in the infant at 18 months. Our results help to clarify associations between early life experiences, breastfeeding, and the mother-infant relationship.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2017.01.148>

### S075

#### Perinatal stress, anxiety, and depression: Effects of a MBCP intervention on mother-infant interaction