

change  $>|1.2|$ , ranging from  $n=393$  to  $n=1107$ ) in all comparisons, both in the CRP-based and treatment-based groupings.

Subsequent analyses with Ingenuity Pathway Analysis ( $p<.05$ ,  $z$ -scores  $>|2|$ ) reveal various immune-related pathways primarily involved in group differences. This involvement reflects the gradient of serum CRP levels within different MDD groups (progressive activation in CRP  $<1$ ,  $1-3$ ,  $>3$ ) and is associated with non-responders and unmedicated MDD (both activated vs. responders). Interestingly, immune-related pathways are differentially activated also in all the three MDD treatment-based subgroups, in the MDD CRP 1-3 and  $>3$ , and in the whole-MDD (all cases together) vs. controls; while the main pathways involved in the MDD CRP  $<1$  vs. controls are cell cycle-related. Our findings demonstrate different transcriptomic pathways associated with MDD and different MDD phenotypes, which could ultimately inform more tailored approaches to clinical management.

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- Internalizing Symptoms Moderate Associations Between Adolescent Hormones and Stress Coping

Julia Chafkin <sup>a</sup>, Robert A. Josephs <sup>a</sup>, Hae Yeon Lee <sup>b</sup>,  
David S. Yeager <sup>a</sup>

<sup>a</sup> University of Texas at Austin

<sup>b</sup> Yale-NUS College

**Background:** Do associations between daily hormone levels and adolescent experiences of daily stress coping reflect emerging internalizing symptoms? This study sought to address this question examining how relationships between daily pubertal hormones and adolescent experiences of stress coping differ depending on concurrent reports of internalizing symptoms.

**Methods:** We used a factor model of 7 hormones HPA and HPG hormones ( $n = 994$  participants, 8084 samples) using field study data collected over ten consecutive weekdays in a representative sample of teens starting high school. Using Bayesian modeling, we tested whether hormone activity was related to outcomes that have been demonstrated to be linked to mental health and wellbeing (stress coping) and explored how and whether internalizing symptoms impact these daily hormone-experience relationships.

**Results:** Internalizing symptoms were negatively correlated with stress coping. Looking more closely, we observed that, in females, internalizing symptoms suppressed otherwise protective effects of HPG activity. In males, low hormone activity was associated with poorer stress coping within low and high internalizing groups, however, in males reporting high internalizing symptoms, high HPG activity was associated with relatively improved stress coping.

**Conclusions:** Findings from this study suggest an expected detrimental effect of internalizing symptoms on daily stress coping and a protective effect of HPG system activity that was moderated differentially in males and females. These findings suggest that field research, when it is combined with powerful statistical techniques, may help to improve our understanding of how internalizing symptoms might impact the relationship between adolescent hormones and daily measures of well-being.

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- Facing baby cuteness: how nurturing care and oxytocin system gene methylation are associated with responses to baby schema

Hannah Spencer <sup>1</sup>, Franca H. Parianen Lesemann <sup>2</sup>,  
Renate S.M. Buisman <sup>1</sup>, Eline J. Kraaijenvanger <sup>3</sup>,  
Susan Branje <sup>2</sup>, Marco P. Boks <sup>4</sup>, Peter A. Bos <sup>1</sup>

<sup>1</sup> Leiden University

<sup>2</sup> Utrecht University

<sup>3</sup> Medical Faculty Mannheim/Heidelberg University

<sup>4</sup> University Medical Center Utrecht

**Background:** Baby schema refers to a set of anatomical features in infants, such as a large head, big eyes, and round cheeks, which are generally perceived as cute and automatically trigger caregiving behaviours. This innate response is supposedly evolutionary adaptive for promoting infant well-being and may be a component fundamental to nurturing care.

Importantly, oxytocin system functioning affects sensitivity to infant cues and nurturing responses. This study aimed to examine associations between responses to baby schema and nurturing care and explored the role of the oxytocin system through methylation of oxytocin system genes.

**Methods:** 81 nulliparous females ( $M_{age} = 23.60$ ,  $SD = 0.44$ ) were presented with images of infant faces that were manipulated to vary in baby schema. Responses to baby schema were assessed with facial electromyography and electroencephalography. Nurturing care was assessed with the Parental Care and Tenderness questionnaire. Methylation across targeted sequences of the *OXT* and *OXTR* genes was quantified from saliva samples with methylation-sensitive high-resolution melting.

**Results:** Preliminary analyses demonstrated that increased baby schema was associated with more pronounced facial muscle responses related to positive affect and event-related potentials related to early attentional processes and cognitive engagement. Furthermore, differentiations in these responses were associated with nurturing care and *OXTR* methylation.

**Conclusion:** Results provide initial evidence that responses to baby schema are associated with nurturing care and oxytocin system gene methylation. Findings provide further insights into how infant features may trigger nurturing responses and highlight individual differences that may affect such responses.

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- Positive childhood experiences and adult cardiovascular health

Deborah Han, Lillybelle K. Deer, Kenia M. Rivera,  
Jenalee R. Doom

**Background:** As cardiovascular disease (CVD) is the leading cause of death worldwide, more research is needed on the psychosocial factors that can reduce CVD risk across development. One cross-sectional study demonstrated that retrospectively-reported positive childhood experiences (PCEs) are associated with lower CVD risk in adulthood (Slopen et al., 2017). The current study extends this research by examining prospective associations between PCEs assessed during adolescence and CVD risk in young adulthood.

**Method:** The current analyses used data from the National Longitudinal Study of Adolescent to Adult Health, a nationally representative sample of adolescents followed into adulthood. The analytic sample ( $N = 13,567$ ; 53% female) included participants who completed in-home interviews at Wave 1 ( $M_{age} = 16.07$ ,  $SD =$