Affectionate touch affects individuals’ well-being and endogenous oxytocin in times of prolonged stress

Ekaterina Schneider∗1,2, Dora Hopf1,2, Monika Eckstein1,2, Dirk Scheele3, Corina Aguilar-Raab1,2, and Beate Ditzen1,2

1Heidelberg University Hospital – Germany
2Heidelberg University – Germany
3Ruhr-University Bochum – Germany

Abstract

Background: Affectionate touch is vital for mental and physical health but was restricted during the Covid-19 pandemic. This study investigated the association between momentary affectionate touch and subjective well-being as well as salivary oxytocin and cortisol in everyday life during the pandemic.

Methods: In a cross-sectional (N=254) and a longitudinal (N=196) assessment during lockdowns in Germany, participants completed a 2-day ecological momentary assessment (EMA) protocol (collecting six saliva samples on two consecutive days each and simultaneously reporting on affectionate touch, stress, and burden levels) in 2020, as well as one year later, in 2021.

Results: Hierarchical linear modeling revealed that affectionate touch was associated with higher salivary oxytocin concentrations, and lower cortisol and stress levels in their everyday life during the pandemic. Preliminary results of longitudinal data showed that affectionate touch and oxytocin levels measured in 2020 significantly predicted subjectively reported lower stress levels in 2021.

Discussion: These results suggest that in times of pandemic affectionate touch is linked to higher endogenous oxytocin in times of pandemic and might buffer stress on a subjective and hormonal level. These findings might have implications for preventing mental burden during social contact restrictions.

Keywords: affectionate touch, Covid, 19, oxytocin, well, being, stress

∗Speaker