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Increased Envy and Schadenfreude in Parents of Newborns

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Abstract: Higher levels of oxytocin are associated with better performance on social cognition tasks. However, higher levels of oxytocin have also been associated with increased levels of envy and schadenfreude. Considering these antecedents, this study aims to explore social emotions (i.e., envy and schadenfreude) and other components of social cognition (i.e. ToM and empathy), in women in the puerperal period and their respective partners, compared to a control group of men and women without children or partners. Control women should be in the luteal phase of the menstrual cycle or taking oral contraceptives as they allow oxytocin levels to remain stable. We selected this population since increased levels of oxytocin are present in both mothers and fathers of newborn babies. Both groups were matched by age, sex, and education level. Twenty-two parents of newborns (11 women, 11 men) and 15 controls (8 women, 7 men) performed an experimental task designed to trigger schadenfreude and envy. In this task, each participant was shown a real-life photograph and a description of two target characters matched in age and gender with the participant. The task comprised two experimental blocks. In the first block, participants read 15 sentences describing fortunate events involving either character. After reading each sentence, participants rated the event in terms of how much envy they felt for the character (1=no envy, 9=extreme envy). In the second block, participants read and reported the intensity of their pleasure (schadenfreude, 1=no pleasure, 9=extreme pleasure) in response to 15 unfortunate events happening to the characters. Five neutral events were included in each block. Moreover, participants were assessed with ToM and empathy tests. Potential confounding variables such as general cognitive functioning, stress levels, hours of sleep and depression symptoms were also measured. Results showed that parents of newborns showed increased levels of envy and schadenfreude. These effects are not explained by any confounding factor. Moreover, no significant differences were found in ToM or empathy tests. Our results offer unprecedented evidence of specific differences in envy and schadenfreude levels in parents of newborns. Our findings support previous studies showing a negative relationship between oxytocin levels and negative social emotions. Further studies should assess the direct relationship between oxytocin levels in parents of newborns and the performance in social emotions tasks.

Keywords: envy, empathy, oxytocin, schadenfreude, social emotions, theory of mind

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