

Is Emotion recognition processing across menstrual cycle a risk predictor of postpartum depression?

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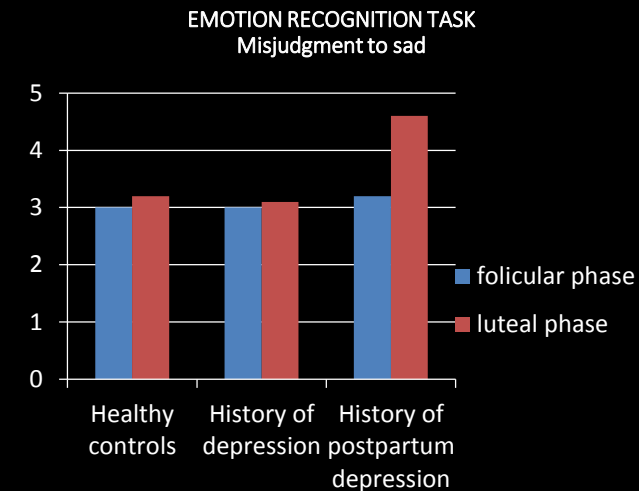
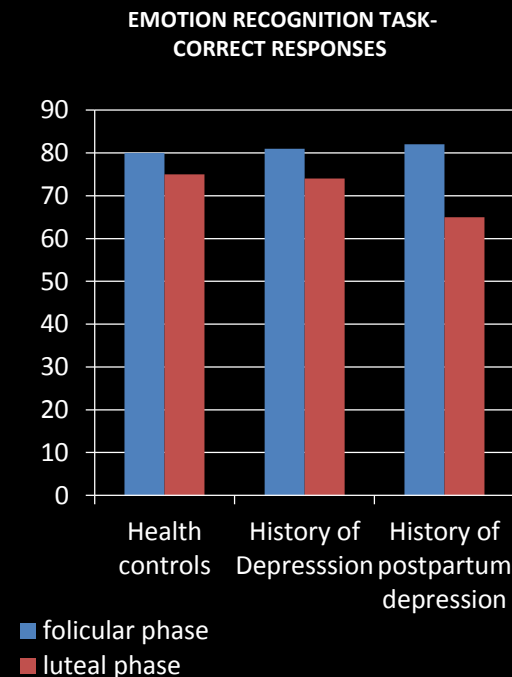
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Objective: Emotion recognition is a core feature of social interaction; emotional changes have been documented in different phases of the menstrual cycle. The purpose of this study was to examine if differences exist in emotional recognition processing across menstrual cycle among women with a history of depression versus women with a history of postpartum depression (PD), and more specifically, if PD represents a specific subtype of depression.



Methods: A total of 39 women, who have visited the Mental Health Center (aged 30-40 y.o., right-handed, educational level > 9 y.o., regular cycle duration), volunteered to participate. Participants were clinical interviewed, completed the Hamilton Depression Rating Scale, the Montgomery-Asberg Depression Scale and were divided into three groups. 1st Group: History of Mild-moderate unipolar depression (14), 2nd Group: History of PD (10) and 3rd Group: Healthy controls (15). All women during the research process, were free of symptoms. The Emotion Recognition Task (ERT) was administered on the cycle day 1 and on the ovulation (14th day). ERT is a computer-generated paradigm for measuring the recognition of six facial emotional expressions: anger, disgust, fear, happiness, sadness, surprise.

Results: Only women with a history of postpartum depression presented significant differences in emotional recognition depending on the estradiol and progesterone levels, compared to the other groups.



Conclusion: It seems that PD may represent a specific subtype of depression. Therefore, the performance at the perception of facial expressions, at different menstrual cycle phases, could act as a risk prediction tool to identify women at risk for PD.