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Maternal Depression and Infant Bias Towards Faces

Annie Ray and Hannah White

Introduction

Depressed mothers can have difficulties responding appropriately to their infants (Arteche et. al.,2011). This can affect the infant's processing of faces and other stimuli (Arteche et. al.,2011). This study was conducted to determine whether maternal depression predicts infants' bias towards faces. Such a finding would suggest that early exposure to maternal depression could shape how infants develop socially relevant preferences.

Methods

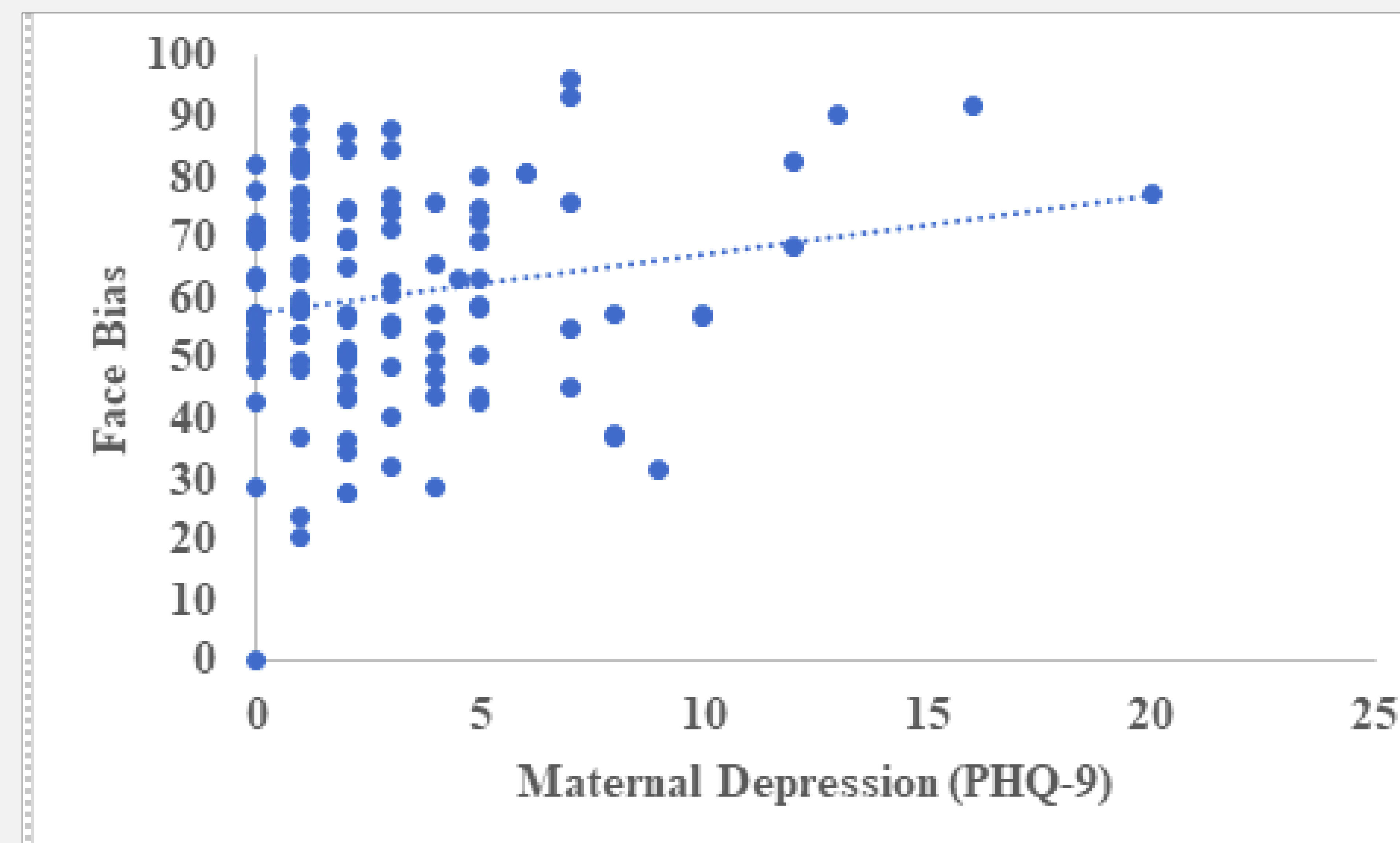
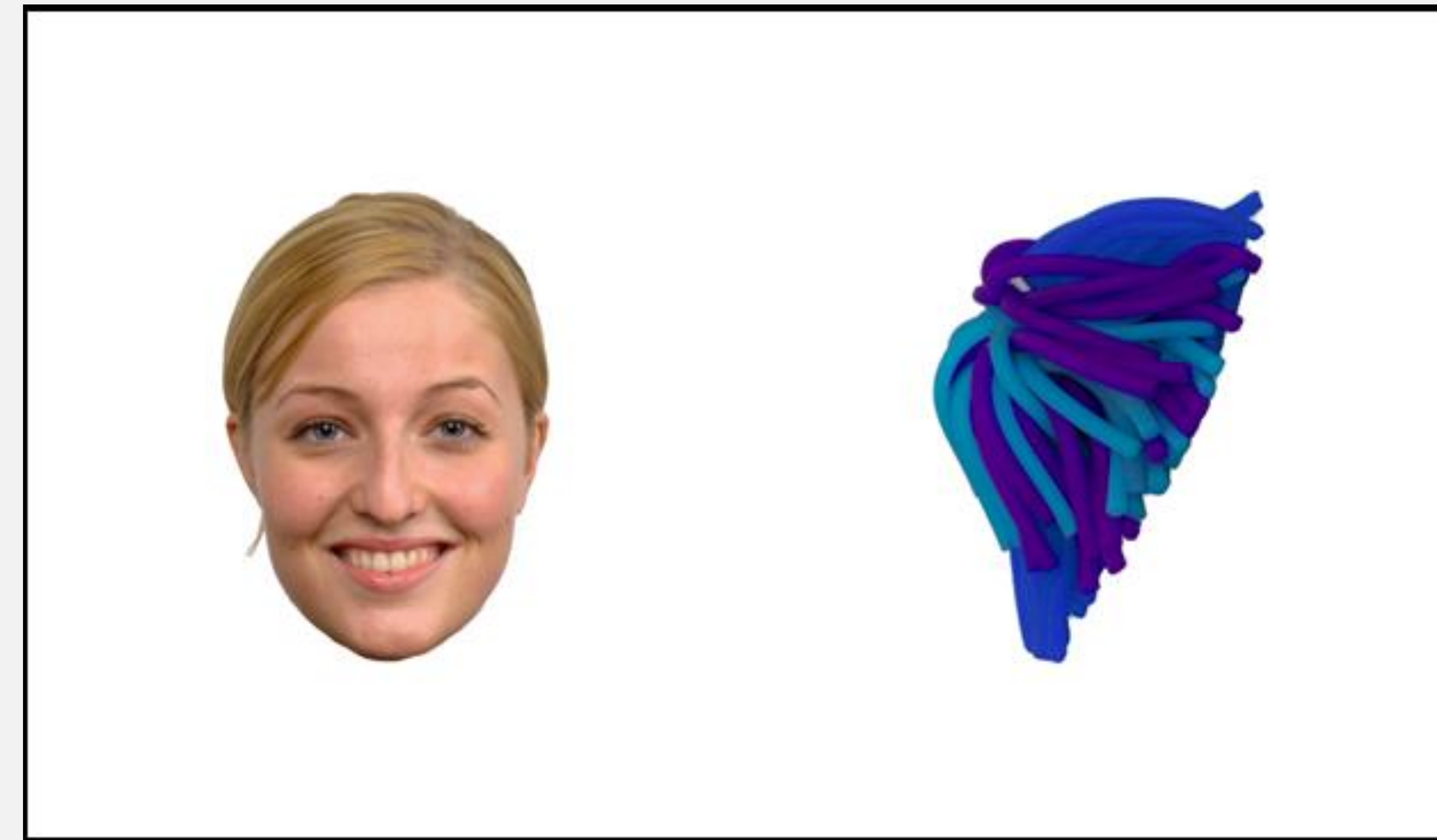
Participants

- 116, 3.5-month-old infants (mean age in days 105.20, SD = 9.79)
- 73% White, Non-Hispanic
- 53% Female

Procedure

- Mother completed the PHQ-9 depression questionnaire
- The PHQ-9 is the depression module, which scores each of the nine DSM-IV criteria as "0" (not at all) to "3" (nearly every day)
- Infants saw 16, 10 second trials
- Each trial included a unique smiling face and object
- Infants' looks were recorded by a Tobii TX300 Eye-tracker
- DV = Proportion time spent viewing the face

Sample Stimuli



Acknowledgements

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Results

- The mean maternal depression score in the sample was 3.16 (SD = 3.45)
- Maternal depression accounted for a small to moderate of variability in infants' face bias (approximately 4%).
- Higher levels of maternal depression were significantly associated with a stronger bias toward faces, $R(114) = .19, p = .04$.

Discussion

The results showed that there was a significant correlation between maternal depression and infant face preference. Specifically, infants who had mothers with higher depression symptomology showed longer looking times to the faces versus the objects. This is possibly due to the fact that these infants may have had less exposure to smiling faces making them appear more novel. This finding suggests that maternal depression may shape the development of social information processing skills very early in life.

References

Arteche, Adriane, et al. "The Effects of Postnatal Maternal Depression and Anxiety on the Processing of Infant Faces." *Journal of Affective Disorders*, vol. 133, no. 1-2, 2011, pp. 197–203., doi:10.1016/j.jad.2011.04.015.