(Not) Expressing Emotions and Links With Anxiety and Depression: A Laboratory-Based Study of Adolescent-Caregiver Conversations

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Background

- Adolescence can be a time of emotional turmoil, elevated rates of anxiety and depression, and conflict with parents[1-2]
- Alterations in facial expressions of emotion: A way to understand affective psychopathologies, including anxiety and depression[3-5]
- Few studies on links between facial expressions and anxiety/depressive symptoms within adolescent-caregiver interactions[6]
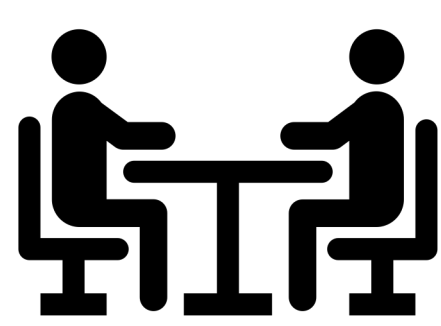
Research Question

How are adolescents' and caregivers' facial expressions of emotion during dyadic interactions related to their symptoms of anxiety and depression?

Method
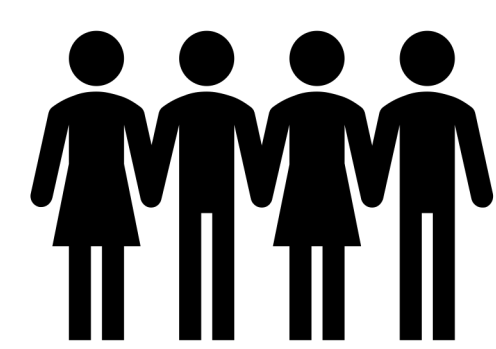
Participants. 28 adolescents (71% female; M_{age} = 14.82, SD = 2.33) and 28 parents/legal guardians (82% female; M_{age} = 50.46, SD = 6.35).

Dyadic Conversations. Adolescent-parent dyads engaged in 10-min videotaped conversations about conflictual and pleasant relationship topics.

✓ Manipulation check: a t-test revealed that participants reported experiencing significantly more negative emotions in the conflict conversation, as intended.
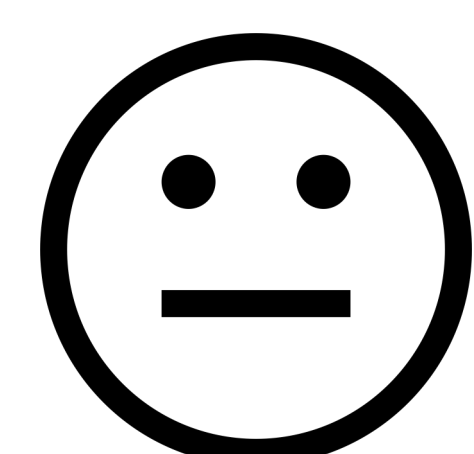
Facial expressions of emotion were examined using Noldus FaceReader 8 software (a FACS-based software) to determine the frequency and intensity of neutral, happy, sad, angry, surprised, scared, disgusted, and contempt expressions.[7]

Anxiety and depressive symptoms were measured using the Beck Anxiety Inventory[8] (21 items, α = .93 for adolescents and .79 for parents) and Beck Depression Inventory[9] (21 items, α = .86 and .82).

Results

Adolescents who showed more neutral facial expressions when interacting with their parent had higher levels of anxiety and depression themselves and had more anxious parents.

Zero-Order Correlations: Adolescents' neutral facial expressions were significantly correlated with their anxiety symptoms in the conflict conversation (other significant correlations not shown here for ease of presentation).
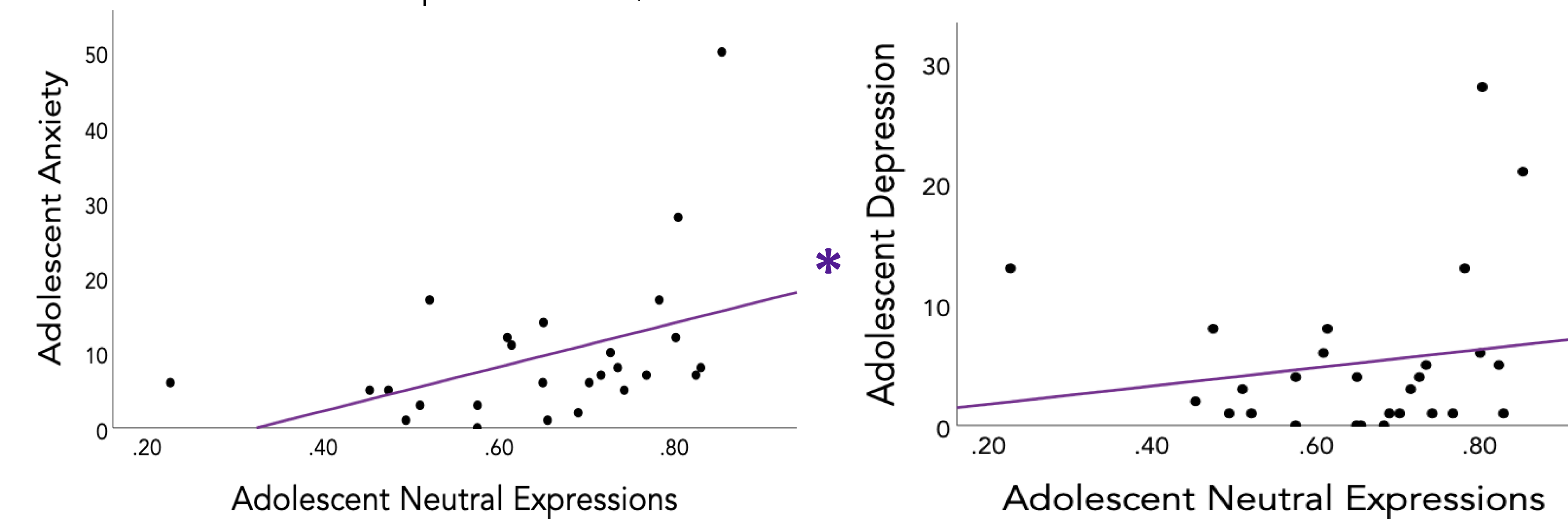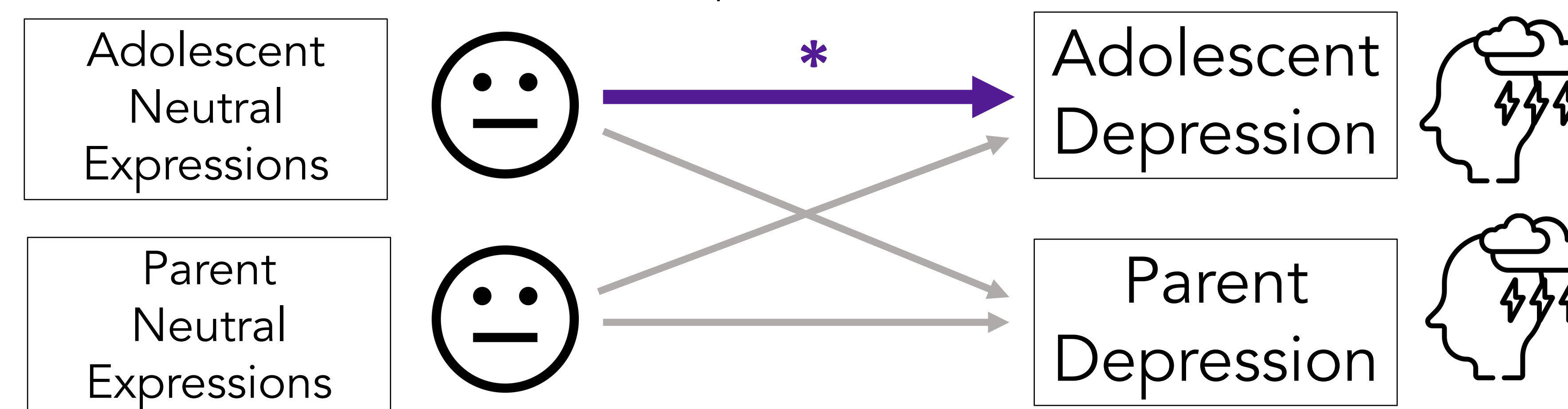

Actor-Partner Interdependence Modeling

Adolescent neutral expressions were associated with adolescent and parent anxiety symptoms. Findings generalized across the conflict and pleasant conversations.
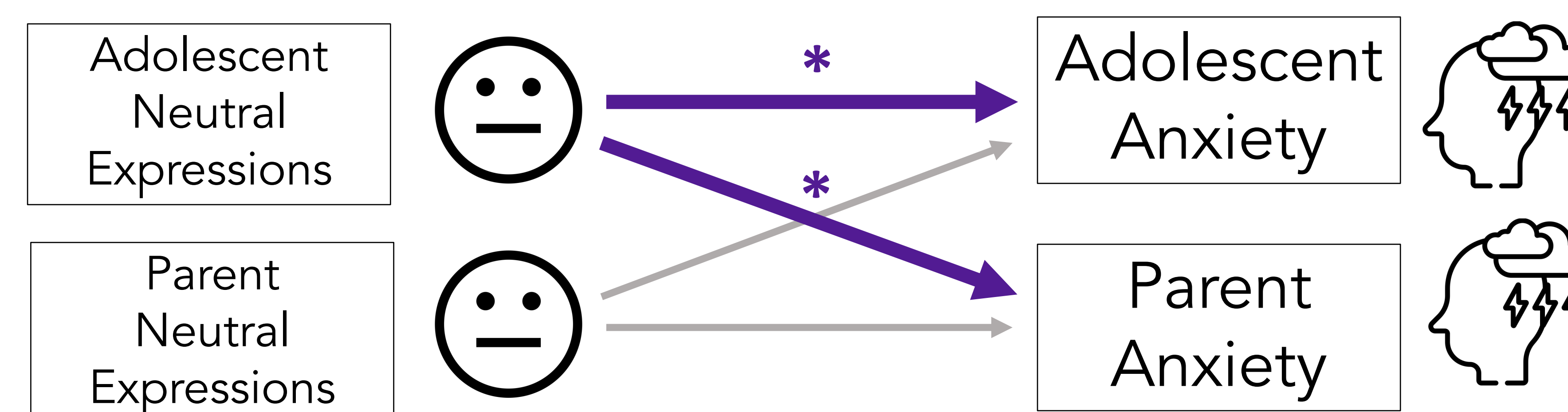
Adolescent neutral expressions were associated with adolescent depressive symptoms, but only in the pleasant conversation.

Follow-Up Analyses

- Follow-up analyses also showed that parents' (but not adolescents') negative facial expressions (specifically, anger and fear) were associated with higher levels of anxiety and depression for themselves and/or adolescents.
- Findings remained largely stable when controlling for age and gender, except for the association between parents' scared expressions in the pleasant conversation and adolescents' depressive symptoms.

Discussion

Facial expressions as behavioral markers of anxiety and depression

In line with prior research[5] on blunted expressions in depression

Actor and partner effects

In line with findings that emotions of one member of a dyad can predict other's mental health[10]

Limitations and Future Directions

- Predominantly white and female sample
- Further research may train FaceReader's algorithm on more diverse samples[11], classify a wider range of expressions (particularly positive expressions), and probe convergence with human coding[12]
- Future research could investigate directionality – neutral expressions may predict psychopathology and/or psychopathology may predict neutral expressions

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