

# The Role of Unpredictability in Daily Parent-Adolescent Conflict on Adolescent Internalizing and Externalizing Problems



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## Background

Parent-child relationship plays a critical role in child adjustment (Doom et al., 2024; Ellis et al., 2022). Recent research emphasizes not just the average level, but the **unpredictability** of parent-child conflict as a key form of environmental adversity (Walasek et al., 2024).

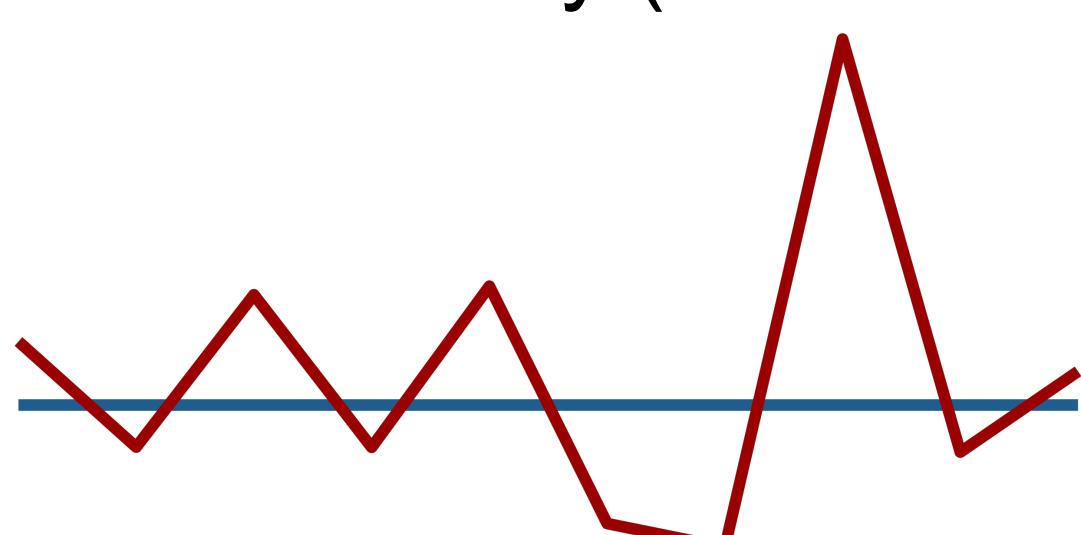


Fig1. Average level and the unpredictability

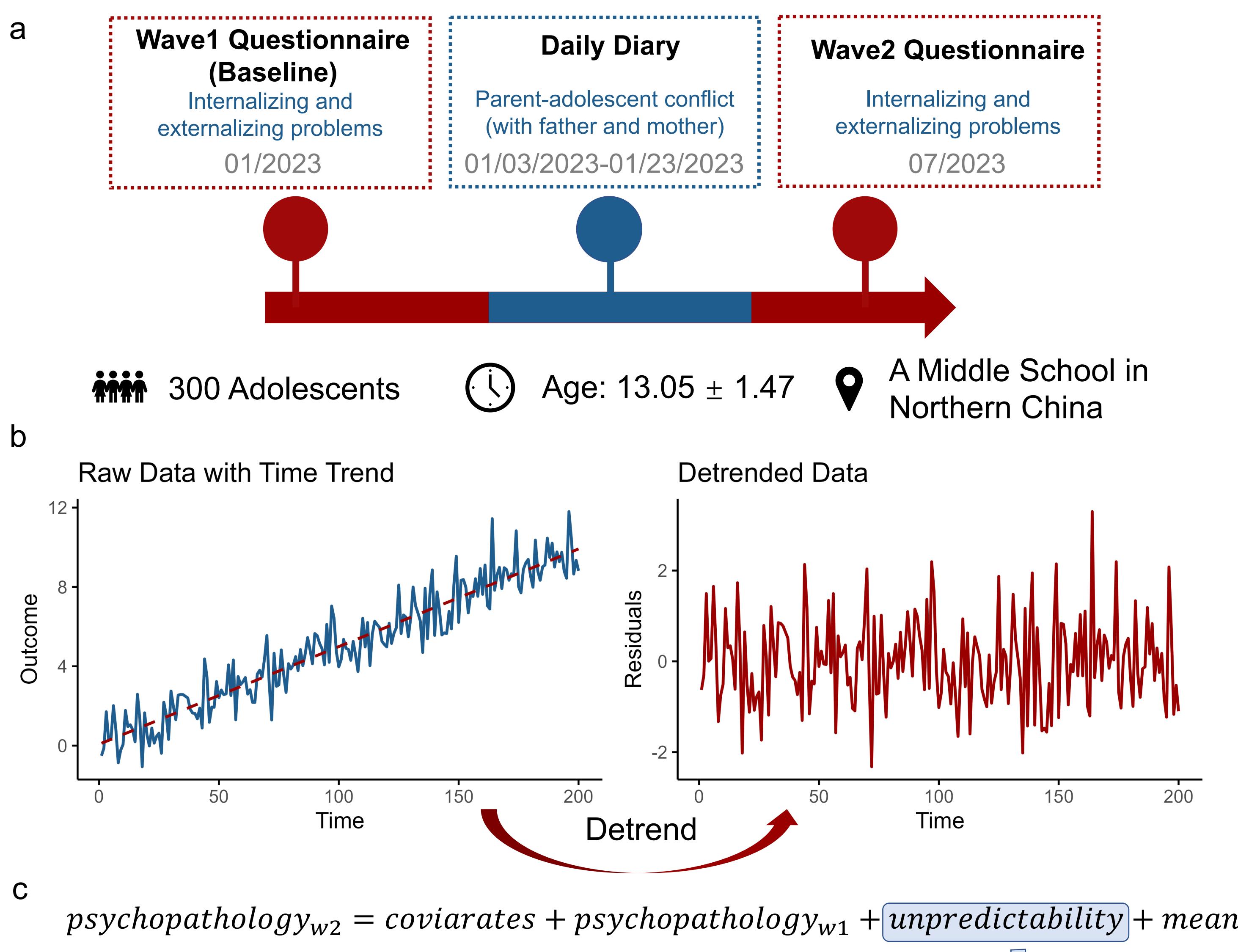
Limited research has examined:

- Daily-level unpredictability (Lippold et al., 2016);
- Its long-term implications for adolescent adjustment;
- Different aspects of unpredictability (Li et al., 2023; Walasek 2024; Young et al., 2020).

## Our Study

- Examined daily parent-adolescent conflict unpredictability with both parental figures.
- Investigated its impact on adolescent adjustment over six months.
- Compared multiple unpredictability metrics recently proposed (Walasek et al., 2024).

## Methods



<b>Standard Deviation (ISD)</b>	The average deviation from time trend
<b>Autocorrelation</b>	The degree to which conflict one day predicts conflict on the next
<b>Entropy</b>	The randomness in the conflict patterns
<b>Color of Noise</b>	The predictability of fluctuations in the noise

Fig2. a, Overview of the longitudinal study design. b, A schematic illustration showing how we detrended the time effect from daily diary data. c, Internalizing and externalizing problems were predicted by age, gender, baseline symptoms, unpredictability, and the average level of parent-adolescent conflict and parental support. d, Four metrics used to quantify unpredictability.

## Results:

Unpredictability → Change in Psychopathology

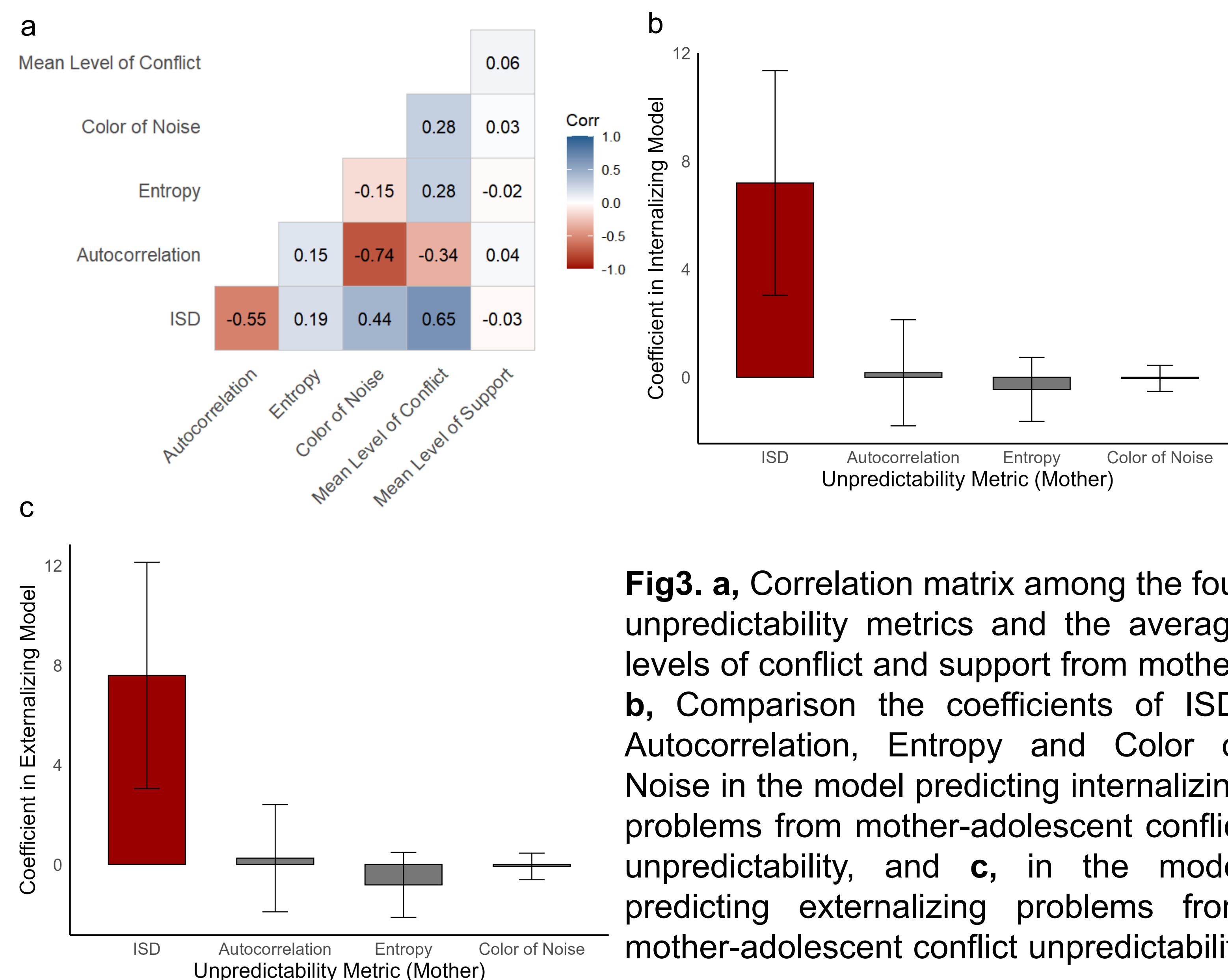


Fig3. a, Correlation matrix among the four unpredictability metrics and the average levels of conflict and support from mother. b, Comparison the coefficients of ISD, Autocorrelation, Entropy and Color of Noise in the model predicting internalizing problems from mother-adolescent conflict unpredictability, and c, in the model predicting externalizing problems from mother-adolescent conflict unpredictability.

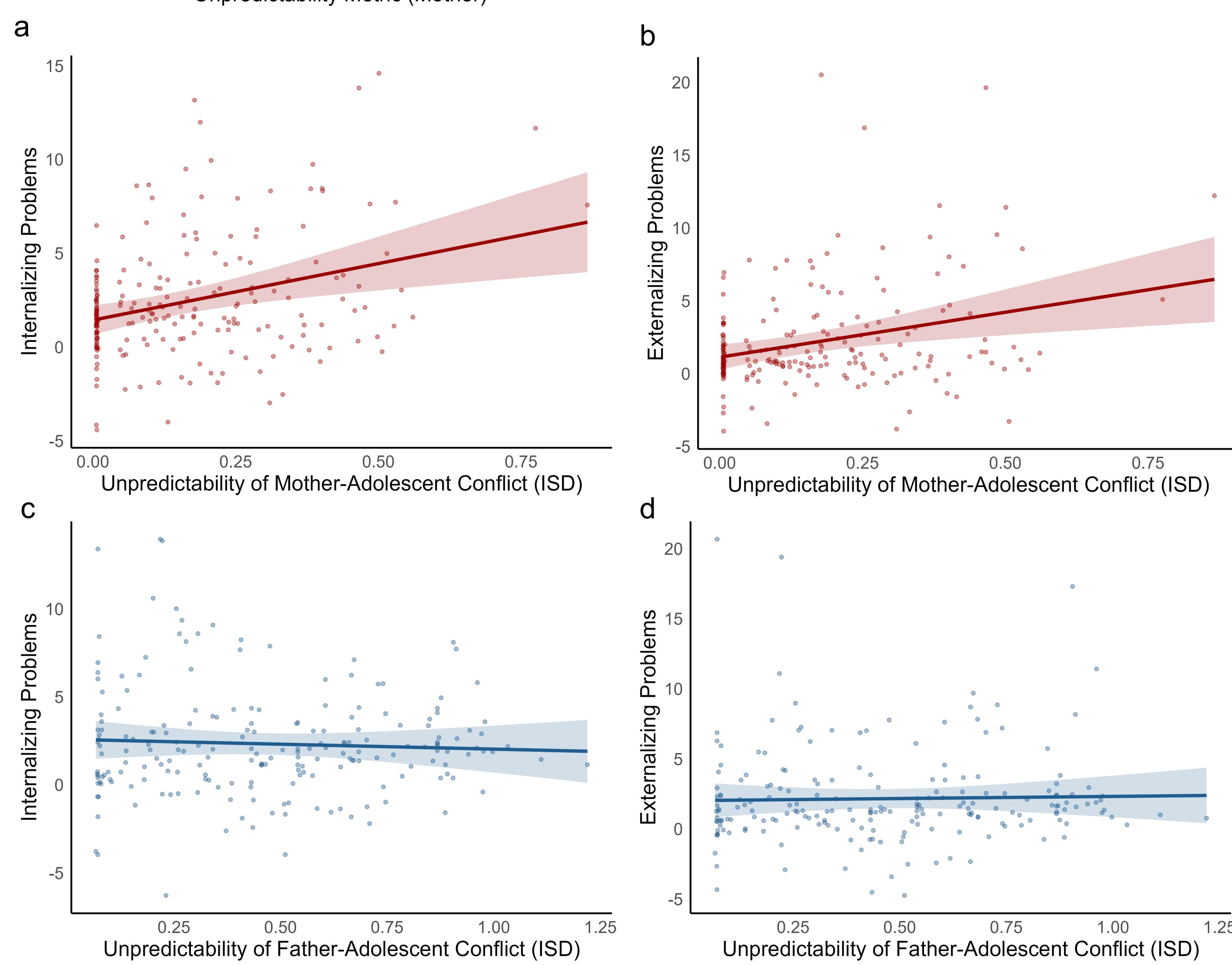


Fig4. Partial residual and partial regression plots showing the contribution of a, unpredictability in mother-adolescent conflict to internalizing problems, and b, externalizing problems, c, unpredictability in father-adolescent conflict to internalizing problems, and d, externalizing problems.

## Conclusion

- The **unpredictability of mother-adolescent conflict** showed a stronger association with adolescent adjustment than the unpredictability of father.
- Among the unpredictability metrics, **ISD** emerged as a more robust predictor of adolescent's outcomes.

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