Affect Recognition as a Predictor of Rule-Breaking and Aggressive Behavior in Childhood

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Introduction

- Affect recognition (AR) is a sociocognitive skill that is crucial for socialization[1]

- AR is related to prosocial and adaptive behavior in childhood[2]

- Deficits in AR, particularly the inability to recognize anger and fear, may be associated with the presence of maladaptive social behaviors[3,4]

Deficits in Affect Recognition → Failure to be guided by others' social cues → Maladaptive social behaviors
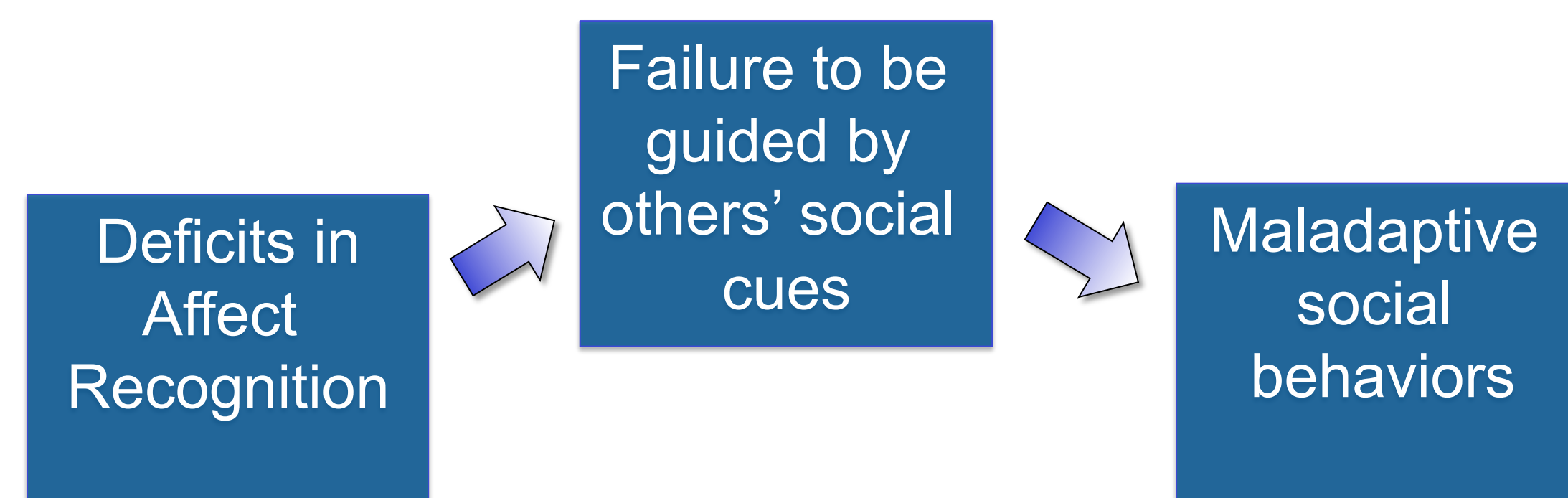
- Childhood externalizing behaviors also represent risk factors for the development of social problems later in life, such as delinquency, school failure, and substance abuse[5]

- Given that externalizing problems in childhood are related to later social problems, it appears important to identify which early factors may predict rule-breaking and aggressive behaviors

- The current study aims to investigate the contribution of affect recognition to rule-breaking and aggresive behaviors in childhood

Hypothesis

A poorer affect recognition will predict greater rule-breaking and aggressive behaviors

Method

Participants

- 76 typically developing children (41 girls) from middle-class families

- aged between 6 and 12 years old (M = 9.2 years old, SD = 1.67 years)

Measures

NEPSY II Affect Recognition subtest

- Measures children's ability to identify affect, discriminate between subtle emotional expressions, and their recognition memory for affect

- Children are asked to match phototographs of children's faces displaying the same affect (e.g., happy, sad, angry).

Child Behavior Checklist (CBCL)

- Behavior problems in the last 6 months reported by the primary caregiver
- Rule-breaking behavior subscale
  - ex: Breaks his/her own things
- Agressive behavior subscale
  - ex: Hurts other

Statistical analyses

- Two linear regressions were conducted to predict Rule-Breaking and Aggressive Behaviors based on Affect Recognition

Results

Correlations between Rule-Breaking and Aggressive Behaviors and Affect Recognition

Affect Recognition

Rule-Breaking Behavior r = .30**

Aggressive Behavior r = .23*
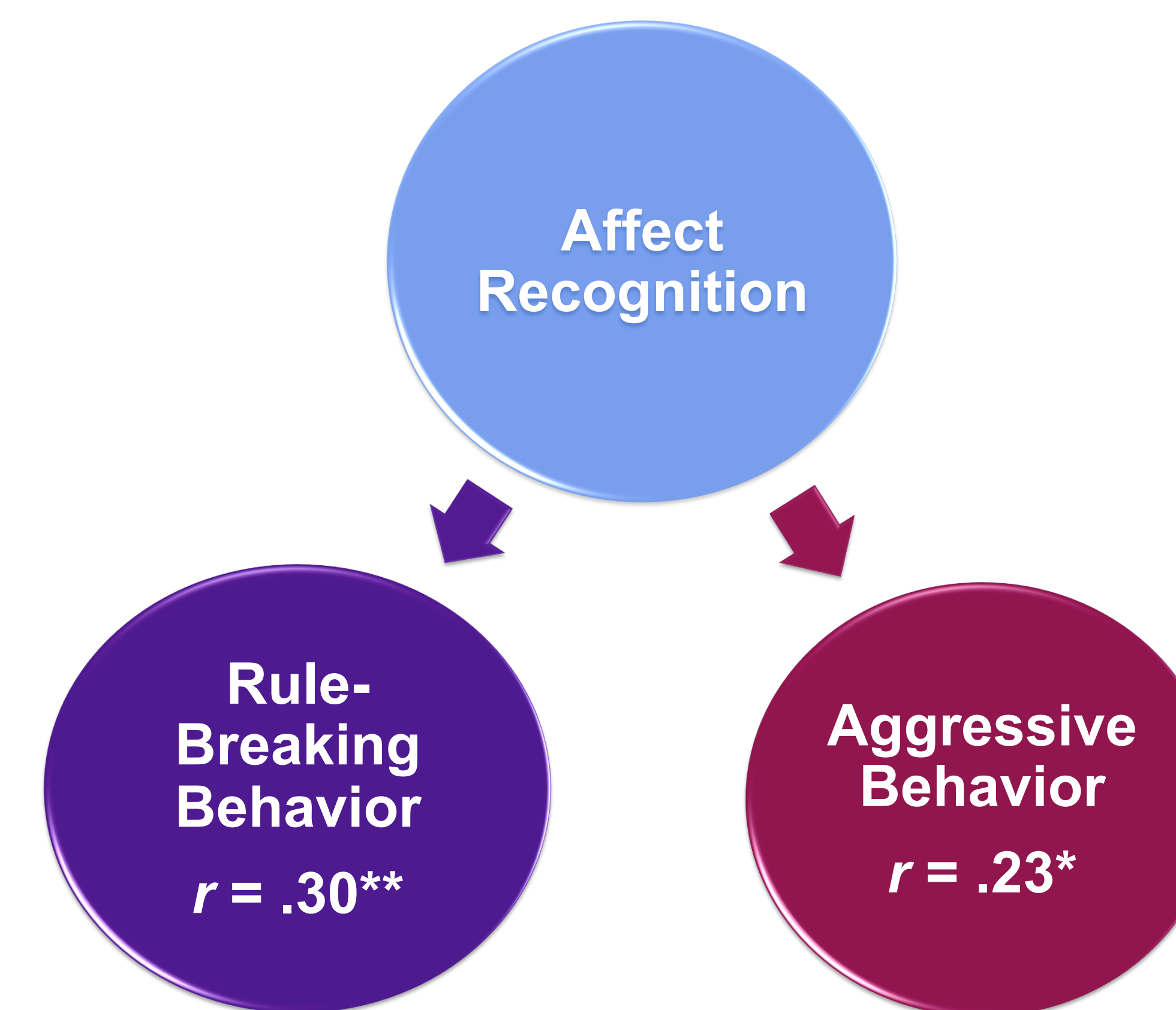
*p < .05. **p < .01.

Linear regression

Rule-Breaking Behavior
- A significant regression equation was found ($F(1,73)$ = 7.28, p = .009)
- Rule-Breaking Behavior is negatively associated with Affect Recognition (β= -.30, p = .009)
- Affect Recognition predicts 9.1% of Rule-Breaking Behavior (R^2 = .091)

Aggressive Behavior
- A significant regression equation was found ($F(1,73)$ = 4.02, p = .049)
- Aggressive Behavior is negatively associated with Affect Recognition (β= -.23, p = .049)
- Affect Recognition predicts 5.2% of Aggressive Behavior (R^2 = .052)

Discussion

- AR has been previously associated with social competence[2]

- Results indicate that AR predicts the rate of rule-breaking and aggressive behaviors among typically developing children

- Deficits in AR are more consistently related to externalizing problems in clinical populations than in normative populations[2]

- Emotion-based prevention programs show promise by improving affect recognition and decreasing externalizing behaviors in children at-risk[4]

- Results suggest that early intervention on emotion processing in childhood could lead to a decrease in rule-breaking and aggressive behavior in children

References

1. Fridlund, A.J. (1991). Evolution and facial action in reflex, social motive, and paralanguage. *Biological Psychology, 32,* 3–100.
2. Izard, C. E., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science, 12*(1), 18-23. doi:10.1111/1467-9280.00304
3. Izard, C. E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives On Psychological Science (Wiley-Blackwell), 2*(3), 260-280. doi:10.1111/j.1745-6916.2007.00044.x
4. Izard, C. E., King, K. A., Trentacosta, C. J., Morgan, J. K., Lanrenceau, J. P., Krauthamer-Ewing, E. S., & Finlon, K. J. (2008). Accelerating the development of emotion competence in Head Start children: Effect on adaptive and maladaptive behavior. *Development and Psychopathology, 20,* 369-397.
5. Tremblay, R.E., Masse, L.C., Vitaro, F., & Dobkin, P.L. (1995). The impact of friends' deviant behavior on early onset delinquency: Longitudinal date from 6 to 13 years of age. *Development and Psychopathology, 7,* 649–667.