Teacher Sensitivity and the Link between Difficult Temperament and Childhood Social Problems

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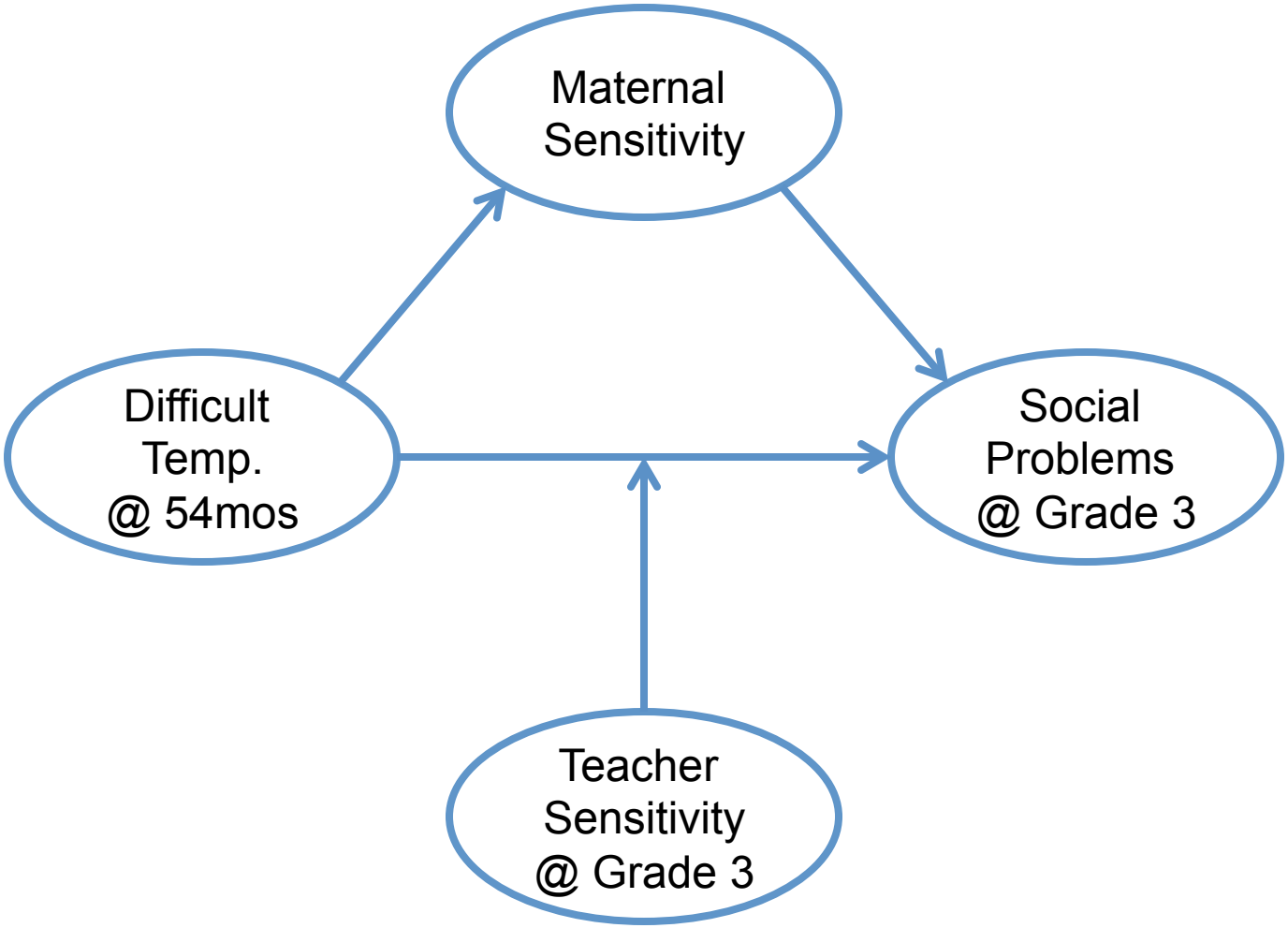
Social Problems in Childhood

- Implications for social & academic successes
  - Early social problems predict poorer adjustment
    Campbell, Spieker, Burchinal, & Poe, 2006; Coie, Lochman, Terry, & Hyman, 1992
  - Childhood externalizing problems negatively predict completion of high school and college enrollment
    McLeod & Kaiser, 2004
  - Peer victimization predicts school disengagement & low academic achievement. Iyer et al, 2006
- Early school years important for developing social skills and relationships. Ladd & Coleman, 1997

Factors Impacting Social Problems

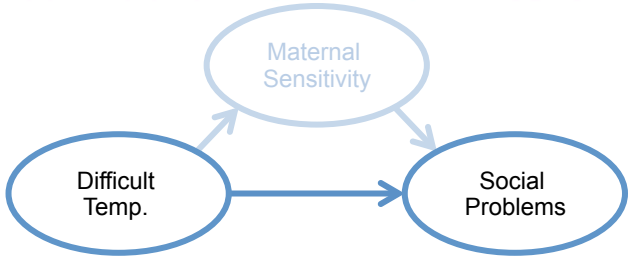
- Temperament
  - Fear & Effortful Control predicted future overt bullying for fifth graders. Terranova, Morris, & Boxer, 2008
  - Higher activity level related to lower prosocial and greater aggressive behaviors. Sterry, Reiter-Purtill, Garstein, Gerhart, Vannatta, & Noll, 2010
- Parents
  - Warm, positive parenting related to higher prosocial and lower aggressive behaviors. Comitrovich & Bierman, 2001
- Teachers (less is known)
  - Teacher-child conflict mediated link between difficult temperament & peer interactions. Rudasill, Niehaus, Buhs, & White, 2013

The Hypothesized Model



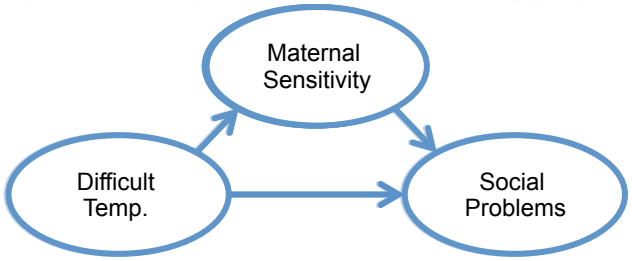
Background

Child-By-Environment: Difficult Temperament



- Goodness-of-Fit Hypothesis Lerner & Lerner, 1983; Thomas & Chess, 1977
- Some temperamental traits may not be well suited for the traditional classroom, relating to poor school adjustment and academic achievement. (for review, see: Al-Hendawi, 2013)
  - "Difficult" Temperament
    - High activity, anger/frustration, approach, low inhibitory control. Rudasill, Reio, Stipanovic, & Taylor, 2010.
- Difficult children at-risk for externalizing problems and poorer peer relationships. Reid, Hong, & Wade, 2009; Rudasill et al., 2013; Sterry et al., 2010; Walker, Berthelsen & Irving, 2001

Child-By-Environment: Maternal Sensitivity

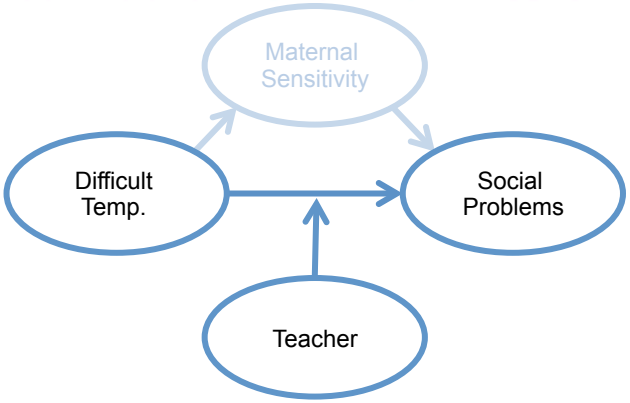


- Parenting Practices
  - Difficult children with parents that endorse harsh discipline exhibit higher externalizing behaviors.

    Miner & Clark-Stewart, 2008
- Maternal Sensitivity
  - "a mother's availability and responsiveness to a child's needs and her ability to support the child's growing need for autonomy by following the child's signals consistently and appropriately." Ainsworth, Biehar, Waters, & Wall, 1978, from Mintz, Hamre, & Hatfield, 2011, p. 363
  - Related to difficult temperament and social adjustment

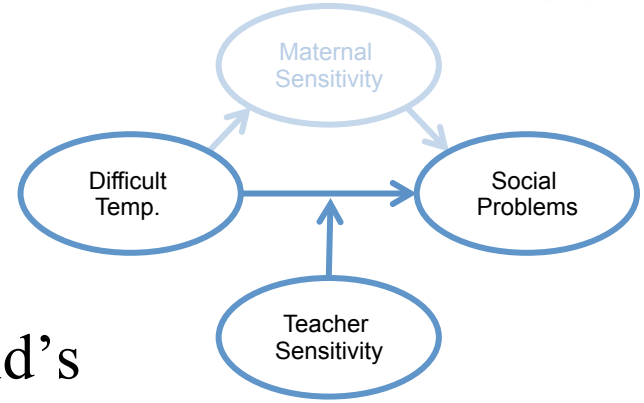
    Rothbaum & Weisz, 1994; Van Zeijl et al., 2006

Child-By-Environment: The Role of the Teacher



- Teachers may moderate the link between temperament & adjustment
  - Higher teacher *instructional support* associated with better social relationships for children with difficult temperament. Curby, Rudasill, Edwards, & Pérez-Edgar, 2011
  - Greater teacher *emotional support* predicted social competence in Kindergartners. Curby, Brock, & Hamre, 2013

Child-By-Environment: Teacher Sensitivity

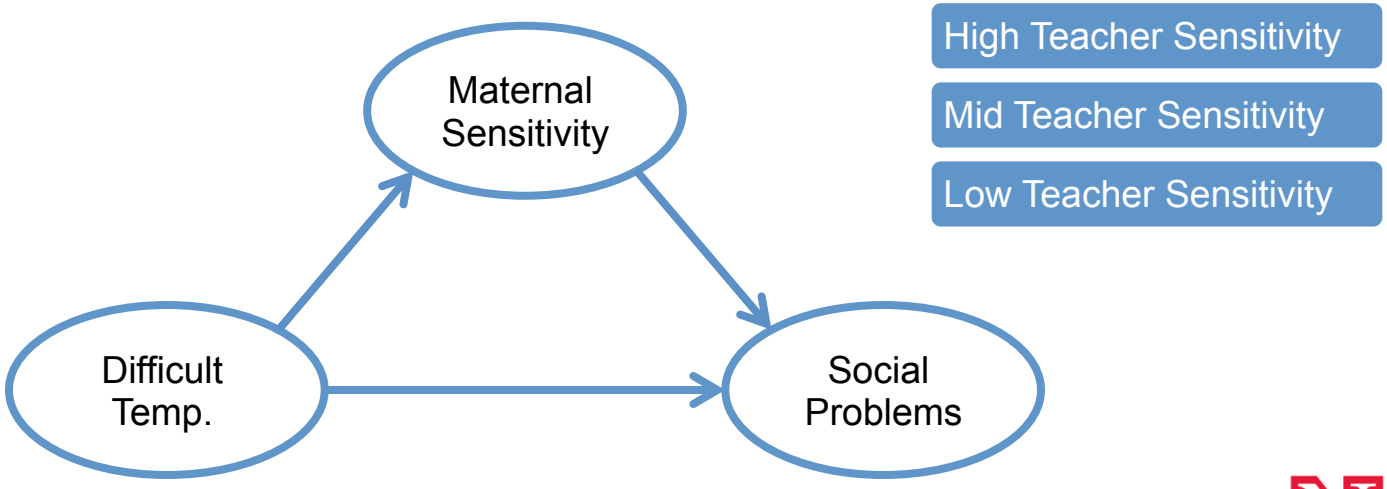


- Sensitive teachers interact with children with "awareness of the child's preferred learning style, mood, and activity preferences."
- "Less sensitive behavior is marked by inconsistency, intrusiveness, detachment, and poorly timed responses to children's cues." Pianta, 1999, from Rimm-Kauffman et al., 2002, p. 454
- Teacher sensitivity has been shown to have a buffering effect for children at-risk of developing social problems.
  - Shyness Buhs, Rudasill, Kalutskaya, & Griese, in press
  - Boldness Rimm-Kauffman et al 2002

The Current Study

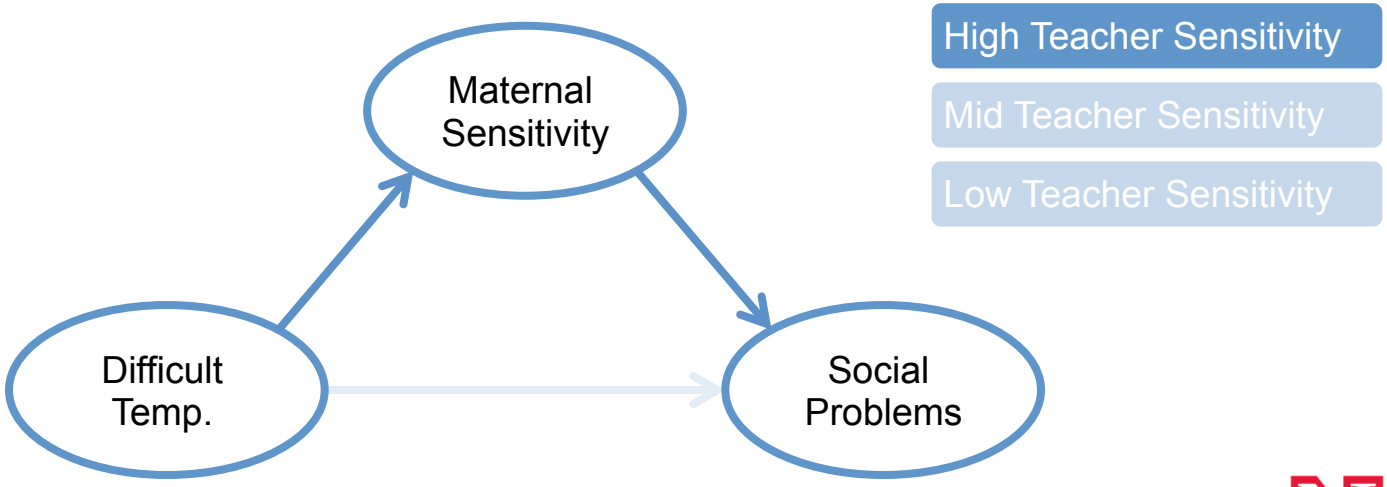
The Current Study

- Research Question
  - Does Teacher Sensitivity moderate the relationship between Difficult Temperament and Social Problems?



The Current Study

- Research Question
  - Does Teacher Sensitivity moderate the relationship between Difficult Temperament and Social Problems?
- Hypothesis
  - High teacher sensitivity should buffer difficult children from social problems.

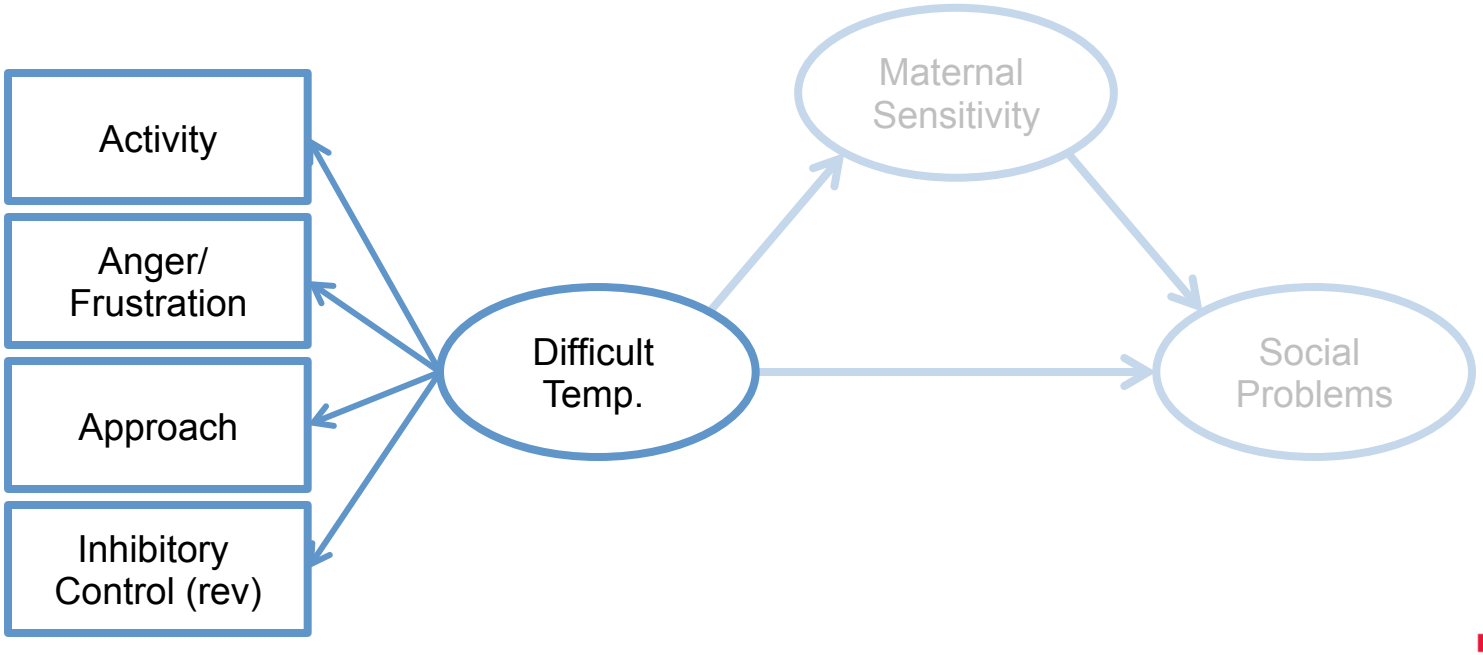


The Current Study

- Dataset
  - NICHD Study of Early Child Care and Youth Development (SECCYD)
    - Followed 1,300+ children from birth through age 15
    - Data collected from 10 sites throughout the U.S.
- Sample
  - n = 957 (476 boys, 481 girls)
  - White (82.3%), Black (11.8%), Hispanic (4.4%), Asian (1.3%)
  - Median Household Income: $55,000
  - 6.3% on Public Assistance

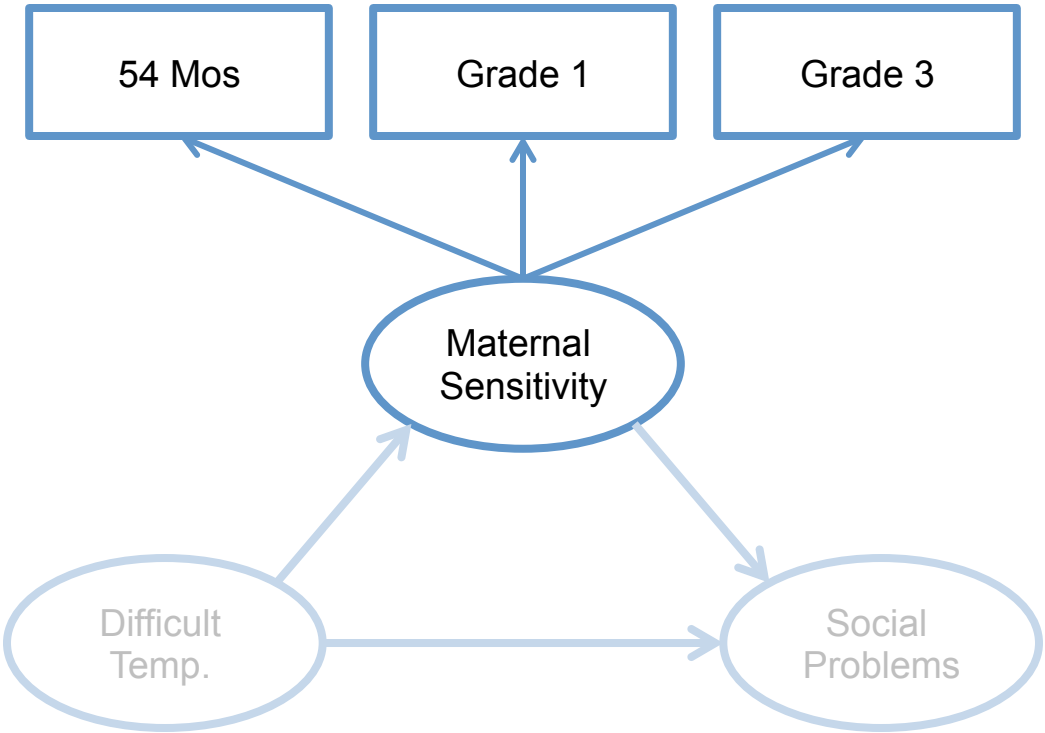
Measures – Difficult Temperament

- Mother Reported via CBQ at age 54 months
- Activity, Anger/Frustration, Approach, Inhibitory Control(rev). Rudasill, Niehaus, Buhs, & White, 2013



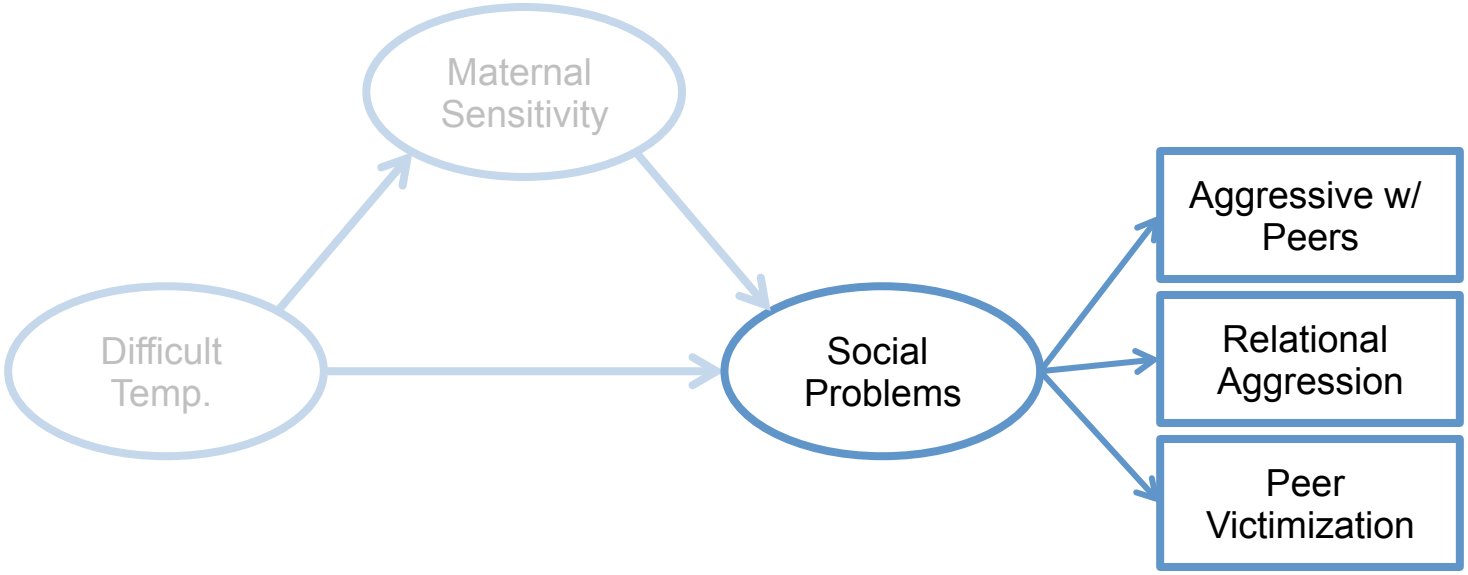
Measures – Maternal Sensitivity

- Observer ratings of mother-child interactions
- Supportive presence, respect for autonomy, hostility(rev)



Measures – Social Problems

- Teacher-reported at Grade 3



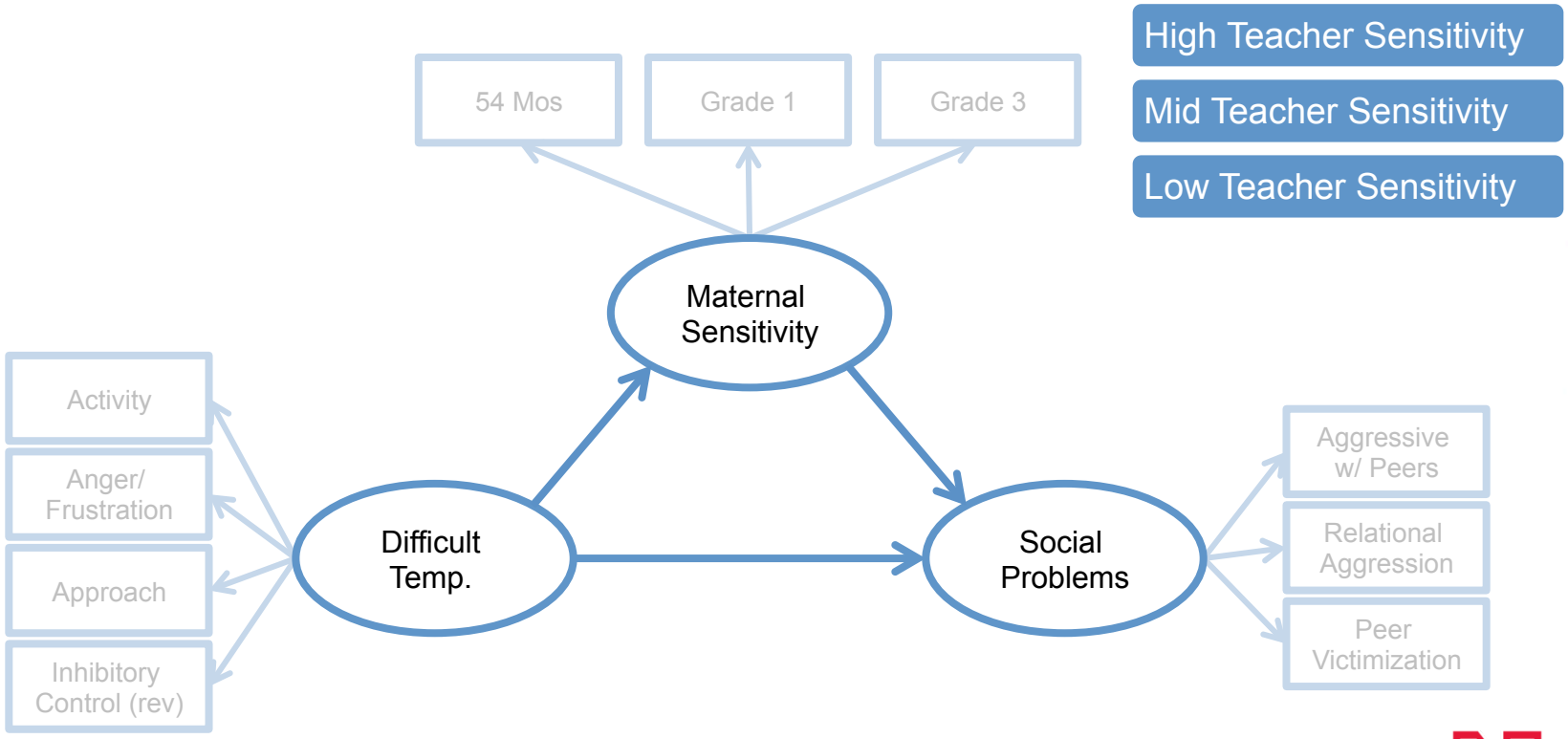
Measures – Teacher Sensitivity

- Classroom Observation System (COS) developed for SECCYD
- Global ratings of Grade 3 primary teacher sensitivity
- Composites from 3 observations, range 1-7
- Three levels of sensitivity

High Teacher Sensitivity	$X_i > 5.9542$
Mid Teacher Sensitivity	$3.886 \leq X_i \leq 5.9542$
Low Teacher Sensitivity	$X_i < 3.886$

Analyses

- Structural Equation Modeling using Robust Maximum Likelihood, Mplus 7.0 (Muthén & Muthén, 1998-2012)



Results

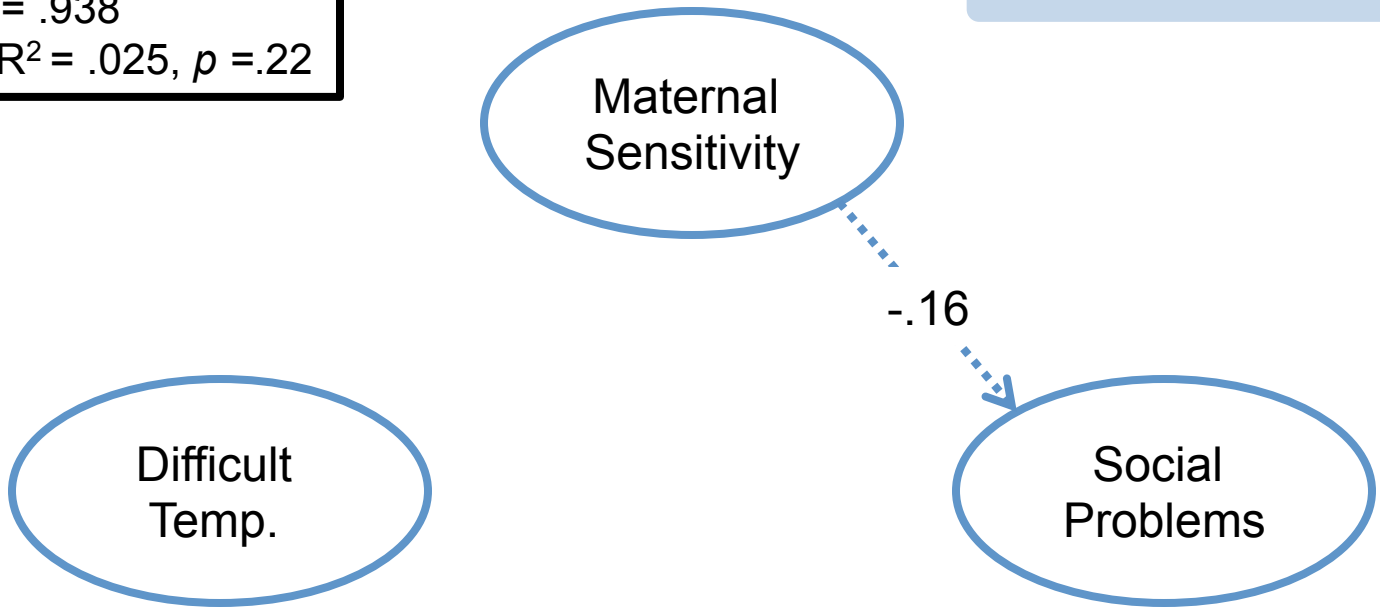
Results

N = 319
RMSEA = .051
CFI = .953
TLI = .938
SP R^2 = .025, *p* =.22

High Teacher Sensitivity

Mid Teacher Sensitivity

Low Teacher Sensitivity



standardized path coefficient significant at *p* < .05

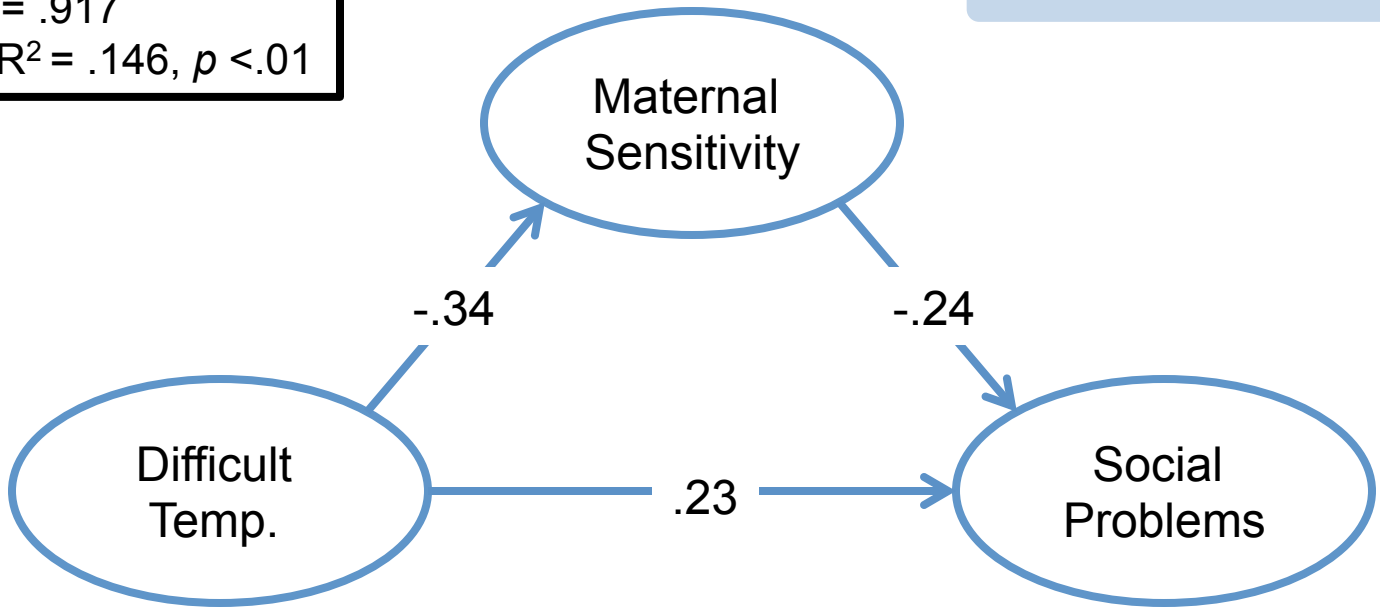
Results

N = 346
RMSEA = .068
CFI = .941
TLI = .917
SP R^2 = .146, p <.01

High Teacher Sensitivity

Mid Teacher Sensitivity

Low Teacher Sensitivity



standardized path coefficient significant at p < .01

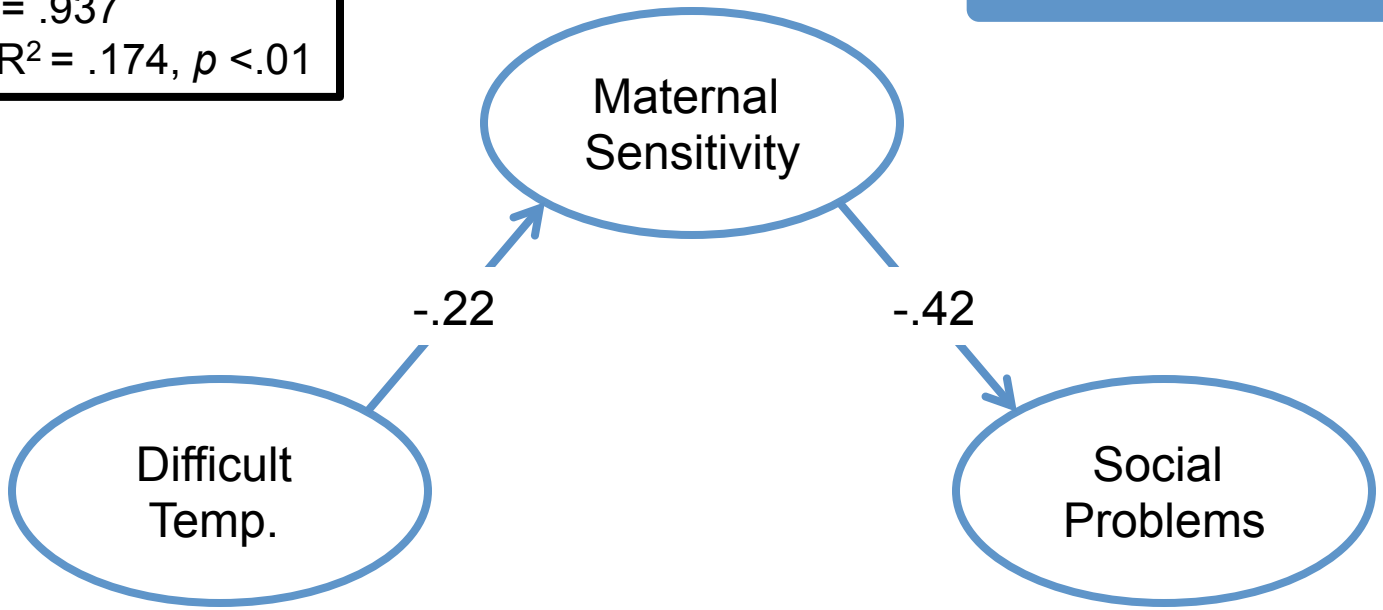
Results

N = 285
RMSEA = .048
CFI = .954
TLI = .937
SP R^2 = .174, p <.01

High Teacher Sensitivity

Mid Teacher Sensitivity

Low Teacher Sensitivity

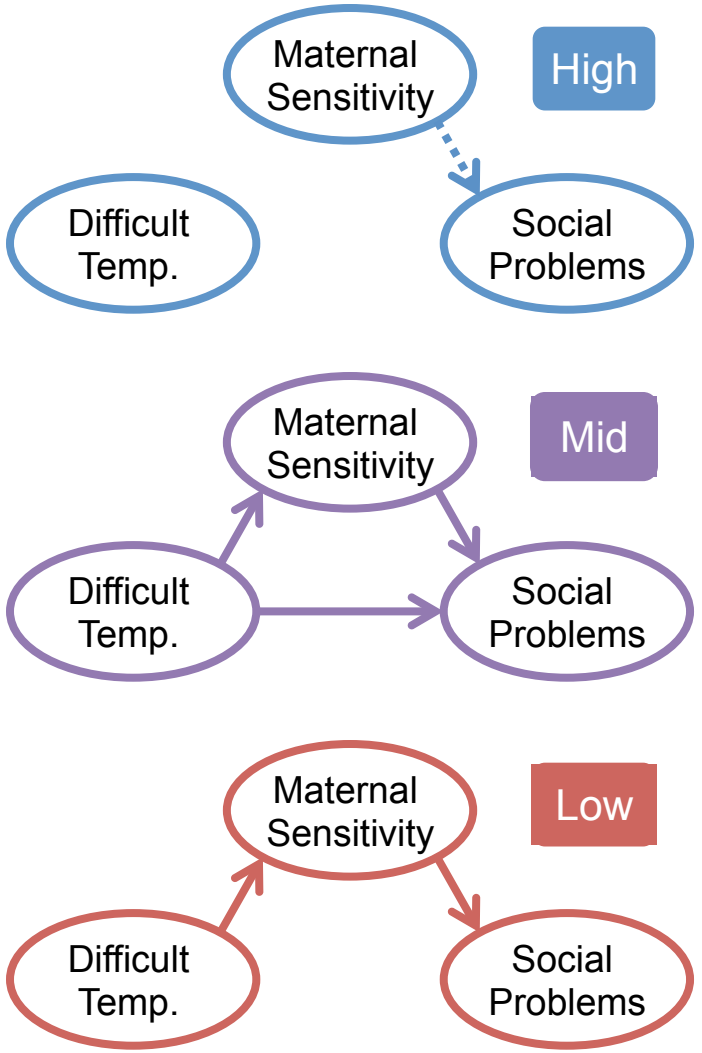


standardized path coefficient significant at p < .01

Discussion

Discussion

- In classrooms with high and low teacher sensitivity, no direct link was found between difficult temperament and social problems.
- High teacher sensitivity may buffer difficult children from social maladjustment.
- Low teacher sensitivity may also attenuate the link between temperament & adjustment.
- No link between Difficult Temp & Maternal Sensitivity in the High Teacher Sensitivity Group (?)



Limitations, Future Directions, & Implications

- Other factors related to level of teacher sensitivity may affect results (e.g., SES)
  - Explore group differences based on SES, perhaps control for in the model.
- Teacher bias in ratings of social problems?
  - Use observational measures of social problems
- Does teacher (or mother) sensitivity affect social skills?
- Examine trajectories of social problems & adjustment as functions of temperament and parent / teacher sensitivity
- Interventions that promote behavioral strategies to suit child temperament (e.g., INSIGHTS; McClowry, Snow, & Tarnis-LeMonda, 2005) may aid social adjustment in addition to reducing behavior problems.


Thank you!
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