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BACKGROUND

- Parent-child conflict is a hallmark of the adolescent period and serves as an important context for parental socialization and navigating conflict discussions is a challenge for parents during the transition to adolescence (Martin et al., 2017)
- Under conditions of environmental stress, RSA suppression (reflective of PNS withdrawal) facilitates adaptive responding to environmental demands (Porges, 2001)
- RSA suppression (vagal withdrawal) is associated with sensitive parenting behaviors (Mills-Koonce et al., 2009; Moore et al., 2009)
- Set-shifting supports the ability of individuals to take multiple perspectives and consider alternative approaches, actions, or directions while actively maintaining the task goal (Diamond, 2001)
- This component of EF may serve to reduce rigid response contingencies and allow for greater plasticity in the service of socialization goals
- Parental attributions characterized by the belief that the child's misbehavior is intentional have been referred to as 'dysfunctional child-oriented attributions' and are associated with greater use of punitive and overreactive parenting behaviors (Dix et al., 1986)

AIMS:

- Hypothesis 1:** Parental difficulties in vagal regulation during conflict would be associated with use of more hostile and insensitive conflict behaviors over time
- Hypothesis 2:** Parental set-shifting capacity would moderate these associations such that parental vagal dysregulation and difficulties would be more pronounced for those parents with lower set-shifting capacity
- Hypothesis 3:** Dysfunctional child-oriented attributions would mediate this moderating effect

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METHODS

Participants: 193 families: mothers and their 12-14 year old children (50% female)

- Median family income ranged from \$55,000-74,999
 - European American (73%)
 - African American (13.5%)
 - Latino (12%)

Procedure:

Families visited the laboratory at University of Rochester for two waves of data collection spaced one year apart.

Construct	Method	Measure
Parental Hostile Conflict Behavior	Questionnaire completed by adolescents at Wave 1 and Wave 2	Conflict Behavior Questionnaire (CBQ; Prinz et al., 1979)
Dysfunctional Child-Oriented Attributions	Questionnaire completed by mothers and fathers at Wave 2	Parent Cognition Scale (PCS; Snarr et al., 2009)
Set-Shifting Capacity	Trail Making Task (Strauss et al., 2006) administered at Wave 1	Total time in seconds to complete Part B
RSA Reactivity	Recorded during a 6 minute conflict discussion with parents and their adolescent at Wave 1	Indicated by HRV, calculated using CardioPro Infinity's HRV Analysis Module Created a residualized change score in which RMSSD in the final minute of the task was regressed over RMSSD in the beginning of the task

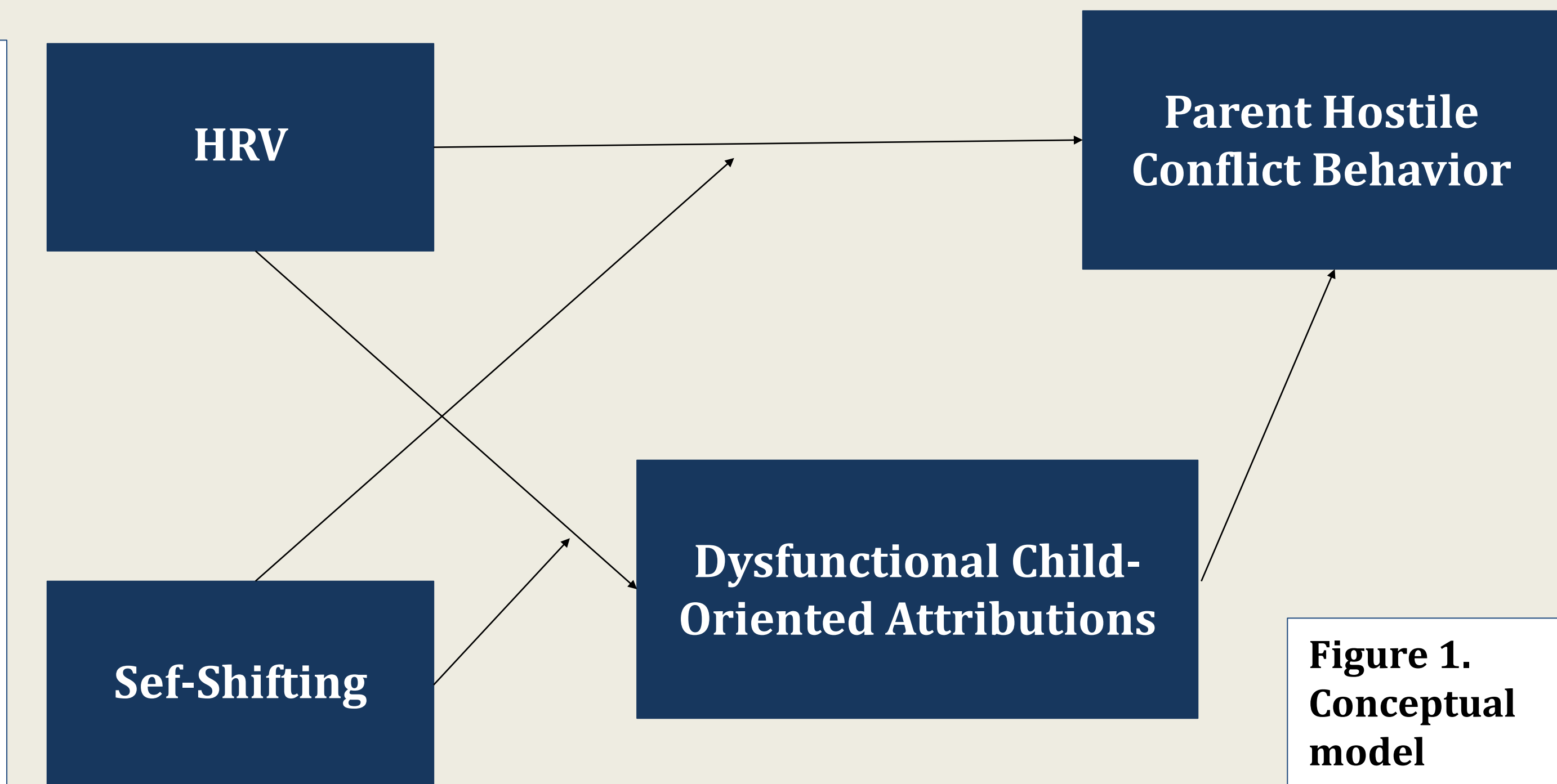


Figure 1. Conceptual model

RESULTS & DISCUSSION

- Fathers and mothers with dampened HRV suppression demonstrated increases in hostile conflict behavior over time ($\beta = .16, p < .02$ and $\beta = .16, p < .05$ respectively)
- The interaction between HRV reactivity and set-shifting capacity was significant for fathers, but not mother's hostile conflict behavior over time
- Simple slope analyses for fathers revealed that the simple slope for poorer set-shifting capacity (+1 SD) was significantly different from zero ($B = 1.71, p = <.001$) (Figure 2)
- For fathers with poorer set-shifting capacity, dampened HRV suppression significantly predicted father's dysfunctional child-oriented attributions at wave 2 ($B = 0.24, p = .02$) (Figure 3)
- A bootstrapping test indicated that mediated moderation was taking place → the combination of dampened HRV suppression and poorer set-shifting capacity predicted more dysfunctional child-responsible attributions and thereby, increases in hostile conflict behavior by fathers between the two waves

Discussion:

- Parental difficulties in HRV suppression in the context of parent-adolescent conflict discussions were associated with increases in hostile and insensitive conflict behavior with their adolescent
- Set-shifting capacity may operate as a potential individual difference variable with respect to the association between RSA reactivity and fathers' increased hostile conflict behavior
- Results supported the role that fathers' dysfunctional child-oriented attributions regarding the locus of adolescent behavior may play an explanatory role in this moderating effect
- Consistent with the father vulnerability hypothesis (Cummings et al., 2010)

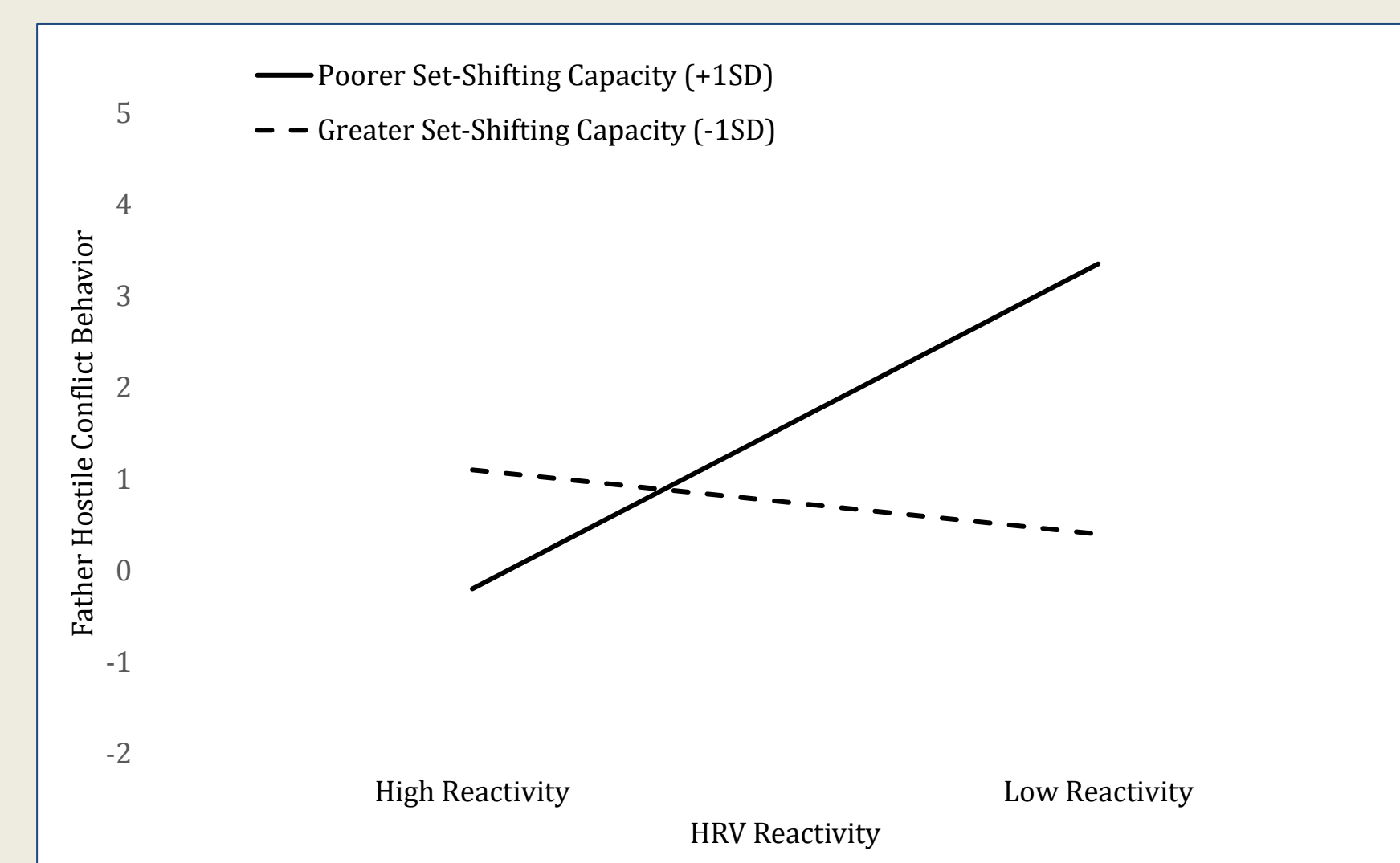


Figure 2. HRV Reactivity-X- Set-Shifting Capacity Interaction on Changes of Father Hostile Conflict Behavior. Dashed line represents non-significant slope. High and low HRV reactivity were calculated at ± 1 standard deviation from the mean. Low HRV reactivity referred to dampened HRV suppression during parent-adolescent conflict discussion.

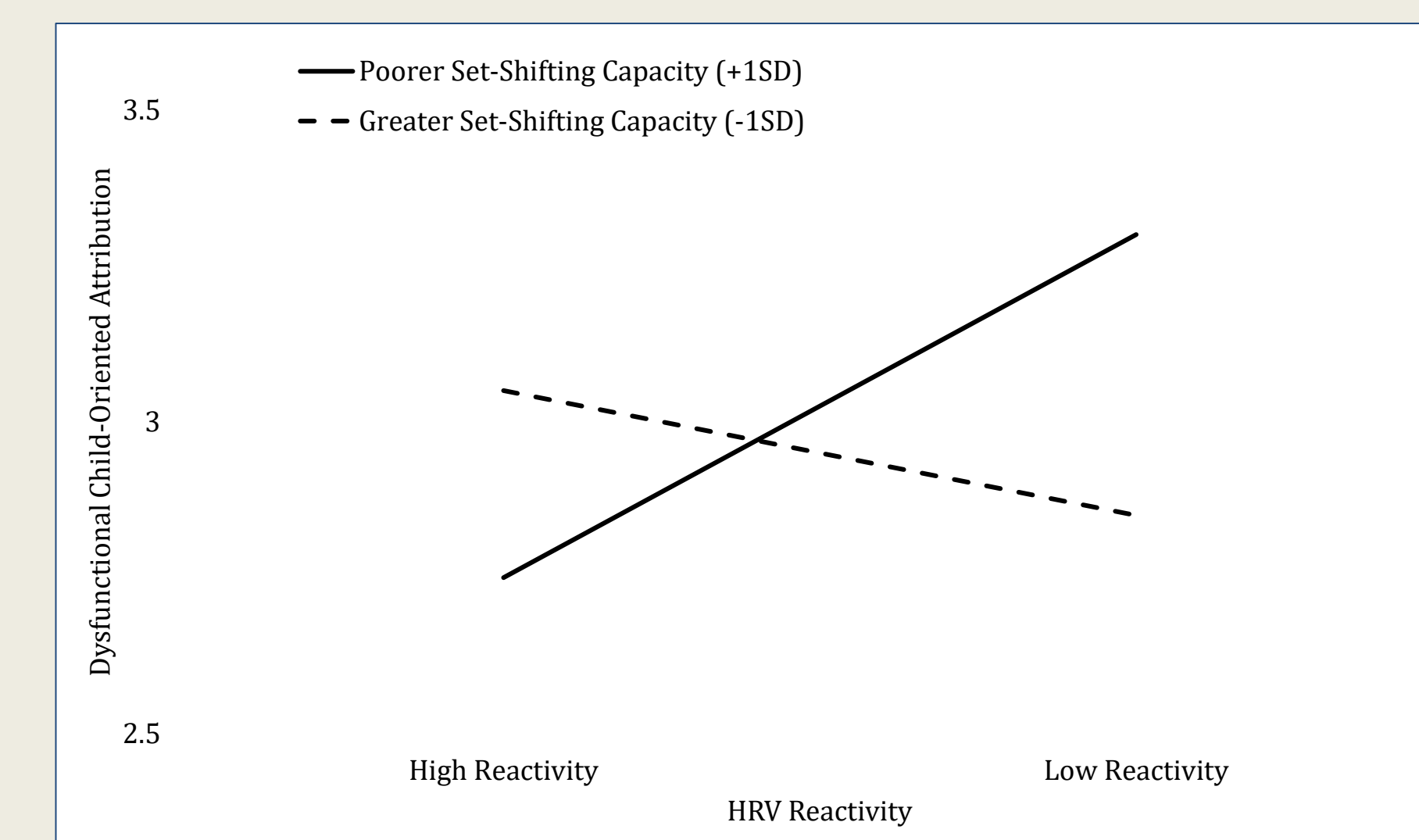


Figure 3. HRV Reactivity-X- Set-Shifting Capacity Interaction on Wave 2 Dysfunctional Child-oriented Attributions for Fathers. Dashed line represents non-significant slope. High and low HRV reactivity were calculated at ± 1 standard deviation from the mean. Low HRV reactivity referred to dampened HRV suppression during parent-adolescent conflict discussion.