

PARENTAL EMOTION PROCESSES INFLUENCE PARENTING PRACTICES AND **DEVELOPING CHILD EMOTION REGULATION**

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INTRODUCTION

- •Emotion regulation (ER) is a critical skill for children's development and is learned in part from parents (socialization).
- •Socialization of ER occurs via parental modeling and parental ER practices and influences children's subsequent ER processes.^{1,2}
- •More recently, research has been investigating how parents' own ER influences their socialization practices and children's subsequent ER.^{3,4}
- Physiological measures such as respiratory sinus arrhythmia (RSA), used as an indirect measure of ER can contribute to our understanding of how parental intrapersonal ER processes influence their socialization practices and children's subsequent ER.^{2,6}

RESEARCH QUESTIONS

1. How does parent physiology during an emotional challenge relate to parent socialization practices? 2. How does parent physiology relate to children's physiology during an emotional task?

METHODS

- 181 diverse children ages 3-11 participated in this study (*M*= 7.18, SD = 2.27, 51.4% female) with their parents (M= 40.33, SD = 6.92, 84.5% mothers)
- Coping with Children's Negative Emotions Scale (CCNES)-parents endorse various ER strategies: punishing, problem focused, emotion focused, encouraging, and minimizing ⁵
- Reported strategies reflect average endorsement of each strategy on a scale of 1-7
- Enacted strategies coded based on interpretation of CCNES descriptions and averaged across three coders to reflect average frequency of each ER strategy
- RSA was measured continuously throughout the visit and ٠ averaged within task phase as per lab protocol









PHASE 3- WITH PARENT

PHASE 1- WITH **EXPERIMENTER**

PHASE 2- ALONE

• Wrong Gift Task- Children rank prizes from their most to least favorite; given their least favorite (emotional challenge)

RSA measured across three social contexts (above)

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RESULTS

- Two RSA reactivity difference scores were calculated for parent and child: RSA pre emotional challenge minus RSA during challenge; RSA during challenge minus RSA post challenge.
- Parent RSA suppression during the emotional challenge (phase 3) after baseline was positively associated with parental supportive strategy use (problem-focused reactions, emotion-focused reactions, expressive encouragement). See Figure 1.
- Parent RSA suppression during phase 3 after baseline was positively associated with children's RSA suppression during phase 3 after baseline. See Figure 2.
- Interestingly, parent RSA reactivity after the challenge was **NOT** associated with child RSA after the challenge. See Table 1.

Table 1

Means, standard deviations, and correlations with confidence intervals

Variable	М	SD	1	2	3	4	5	6	7	8
1. Child Gender	0.52	0.50								
2. Child Age	7.19	2.28	14 [28, .00]							
3. Supportive Report	5.47	0.85	04 [19, .11]	07 [22, .08]						
4. Supportive Use	1.98	1.15	12 [26, .04]	01 [16, .15]	.14 [01, .29]					
5. Unsupportive Report	2.66	0.93	.02 [13, .17]	.02 [13, .17]	02 [17, .13]	.13 [02, .28]				
6. Unsupportive Use	0.43	0.75	00 [15, .15]	13 [27, .02]	.02 [13, .17]	.26** [.11, .39]	.10 [05, .25]			
7. Child RSA Pre-Challenge	-0.37	0.90	.04 [12, .19]	.12 [04, .27]	.10 [06, .26]	.12 [04, .28]	.02 [14, .18]	.12 [05, .27]		
8. Child RSA Challenge- Post	-0.12	0.82	03 [18, .13]	11 [26, .05]	04 [20, .12]	.03 [13, .19]	.01 [15, .17]	16 [31, .00]	60** [69,49]	
9. Parent RSA Pre - Challenge	-0.59	1.10	05 [20, .11]	.04 [12, .20]	.03 [13, .18]	.19* [.03, .34]	.06 [10, .22]	04 [20, .13]	.34** [.20, .47]	08 [24, .07]
10. Parent RSA Challenge -Post	0.51	1.13	02 [17, .14]	00 [16, .15]	04 [20, .12]	13 [29, .03]	.04 [12, .20]	.15 [01, .30]	30** [44,15]	.07 [09, .22]

Note. M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates p < .05. ** indicates p < .1









uring the emotional challenge after baseline and child RS

DISCUSSION

<u>RQ1</u>: How does parent physiology during an emotional challenge relate to parent socialization practices?

- Parent RSA suppression during the emotional challenge was related to supportive strategy use. This is in line with previous work demonstrating that RSA suppression is related to engagement in tasks (e.g., solving a puzzle)⁷.
- Although RSA augmentation is related to intrapersonal ER strategy use,⁸ perhaps deploying supportive strategies *interpersonally* requires less physiological calming and more physiological mobilizing.

RQ2: How does parent physiology relate to children's physiology during an emotional task?

- Parent RSA suppression during the emotional challenge after baseline was positively related to children's RSA suppression during the emotional challenge. Although this does not support previous work that demonstrates parent supportive strategy use is related to child physiological calming⁴, it *is* in line with work suggesting that changes in parent physiology drives changes in child physiology⁹.
- Thus, parental intrapersonal processes have both a direct (physiologically) and indirect (via socialization practices) effect on children's subsequent ER.
- Interestingly, there was no correlation between parent RSA reactivity after the challenge and children's RSA reactivity after the challenge, suggesting that parental intrapersonal ER processes are especially important in relation to how children react to challenges.
- Future work should continue to investigate how parental intrapersonal processes are involved in

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