## Prenatal Buds of Conditional Regard and Autonomy Support: Associations with Postnatal Parenting and Child Adjustment

## **Supplementary Materials**

#### Confirmatory Factor Analysis (CFA) for the temperament scales

**Fig. 1.** Confirmatory factor analysis for child temperament (T2). Model fit;  $(\chi 2 (51) = 90.6, p = .001, \text{RMSEA} = .05 [.03.07], \text{CFI} = .97, \text{NFI} = .93, \text{TLI} = 95.)$  Standardized regression coefficients and correlations are reported. Dashed lines = non-significant paths. \*\*p < .01.

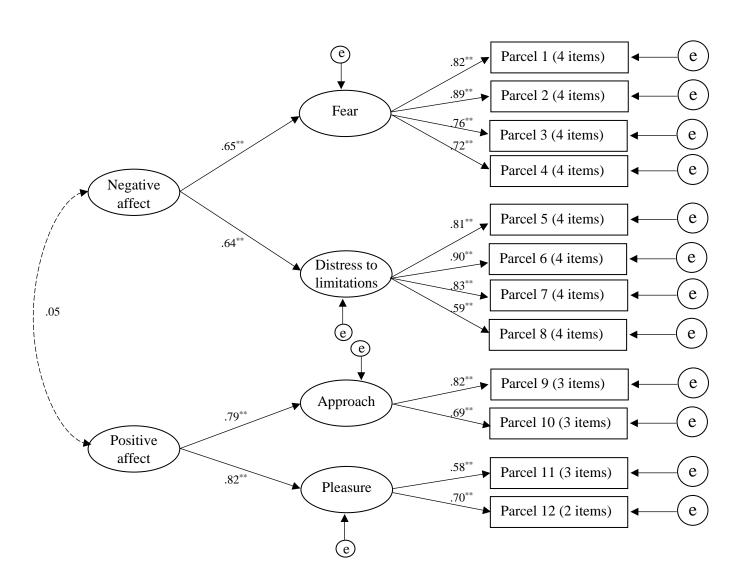


Table 1. Items of Temperament CFA					
Variable	Parcel	Item			
Fear	Parcel 1	In the last two weeks, when introduced to an unfamiliar adult, how often did the baby cling to a parent?			
		In the last two weeks, when an unfamiliar adult came to your home or apartment, how often did your baby cry when the visitor attempted to pick her/him up?			
		In the last two weeks, when visiting a new place, how often did the baby show distress for the first few minutes?			
		In the last two weeks, when an unfamiliar adult came to your home or apartment, how often did your baby allow her/himself to be picked up without protest? (R)			
	Parcel 2	When in the presence of several unfamiliar adults, how often did the baby cling to a parent?			
		When in the presence of several unfamiliar adults, how often did the baby cry?			
		When in the presence of several unfamiliar adults, how often did the baby continue to be upset for 10 minutes or longer?			
		How often during the last week did the baby startle at a sudden change in body position (for example, when moved suddenly)?			
	Parcel 3	In the last two weeks, when visiting a new place, how often did the baby continue to be upset for 10 minutes or more?			
		In the last two weeks, when your baby was approached by an unfamiliar person when you and s/he were out (for example, shopping), how often did the baby show distress?			
		In the last two weeks, when your baby was approached by an unfamiliar person when you and s/he were out (for example, shopping), how often did the baby cry?			
		How often during the last week did the baby cry or show distress at a change in parents'			
		appearance, (glasses off, shower cap on, etc.)?			
	Parcel 4	In the last two weeks, when introduced to an unfamiliar adult, how often did the baby refuse to go to the unfamiliar person?			
		In the last two weeks, when introduced to an unfamiliar adult, how often did the baby hang back from the adult?			
		In the last two weeks, when introduced to an unfamiliar adult, how often did the baby never "warm up" to the unfamiliar adult?			
		How often during the last week did the baby startle to a sudden or loud noise			
Distress to limitations	Parcel 5	When something the baby was playing with had to be removed, how often did s/he seem not bothered? (R)			
		How often during the last week did the baby: protest being placed in a confining place (infant seat, play pen, car seat, etc)?			
		When placed on his/her back, how often did the baby fuss or protest?			
		After sleeping, how often did the baby fuss or cry immediately?			

	Parcel 6	After sleeping, how often did the baby cry if someone doesn't come within a few minutes?
		How often did the baby seem contented when left in the crib? (R)
		When something the baby was playing with had to be removed, how often did s/he cry or show distress for a time?
		When the baby wanted something, how often did s/he become upset when s/he could not get what s/he wanted?
	Parcel 7	How often did the baby seem angry (crying and fussing) when you left her/him in the crib?
		When the baby wanted something, how often did s/he have tantrums (crying, screaming, face red, etc.) when s/he did not get what s/he wanted?
		When hair was washed, how often did the baby smile? (R)
		After sleeping, how often did the baby play quietly in the crib? (R)
	Parcel	How often did the baby fuss or cry when put to sleep during daytime?
	8	When face was washed, how often did the baby fuss or cry?
		When placed in an infant seat or car seat, how often did the baby show distress at first; then quiet down?
		Before falling asleep at night during the last week, how often did the baby show no fussing or crying? (R)
Approach	Parcel 9	How often during the last week did the baby show a strong desire for something s/he wanted?
		In the last two weeks when familiar relatives/friends came to visit, how often did your baby get excited?
		When your baby saw a toy s/he wanted, how often did s/ get very excited about getting it?
	Parcel	When given a new toy, how often did the baby immediately go after it?
	10	How often during the last week did the baby move quickly toward new objects?
		In the last two weeks, when visiting a new place, how often did the baby get excited about exploring new surroundings?
Pleasure	Parcel	How often during the last week did the baby enjoy being read to?
	11	How often during the last week did the baby enjoy hearing the sound of words, as in nursery rhymes?
		How often during the last week did the baby enjoy the feel of soft blankets?
	Parcel 12	How often during the last week did the baby enjoy gentle rhythmic activities, such as rocking or swaying?
		How often during the last week did the baby enjoy listening to a musical toy in a crib?

		$\mathbf{M}$	SD	1	2	3	4	5
1.	Toddlers' fear (T2)	2.61	0.72	1				
2.	Toddlers' distress to limitations (T2)	3.50	0.74	.7**	1			
3.	Toddlers' pleasure (T2)	5.43	0.77	.04	17**	1		
4.	Toddlers' approach (T2)	5.72	0.63	.08	.08	.40**	1	
5.	Toddlers' surgency (T2)	5.55	0.66	.05	17**	.31**	.28**	1
6.	Toddlers' soothability and cuddliness (T2)	5.60	0.59	04	27**	.43**	.22**	.49**

p < .05. p < .01.

#### Confirmatory factor analysis (CFA) for the general orientation prenatal T1 scales

**Fig. 2.** Confirmatory factor analysis for prenatal orientation (T1). Model fit; ( $\chi$ 2 (8) = 19.4, p = .01, RMSEA = .07 [.03 .11], CFI = .99, NFI = .98, TLI = .97). Standardized regression coefficients and correlations are reported. \*\*p < .01.

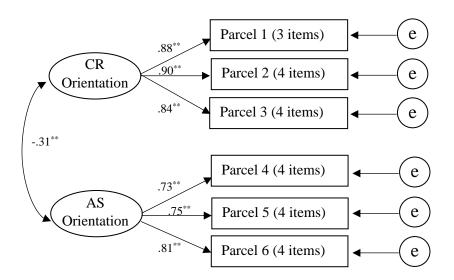


Table 3. Items of prenatal orientation CFA							
Variable	Variable Parcel Item						
Conditional Regard	Parcel 1	If my child will behave is a way that is unacceptable to me, I will show him less affection					
Orientation		I will try to make my child achieve good grades, by making him feel that at least some of my esteem depends on his achievement.					
		I will encourage my child to learn new words by being especially warm towards him each time he says a new word.					
	Parcel	I will show him more affection toward my child when he behaves properly					
	2	I will try to make my child invest in school, by making him feel that at least some of my affection depends on his investment					
		I will encourage my child to engage in activities that promote thinking by being especially warm towards him each time he engages in such activities					
		I will try to make my child behave properly by making him feel that at least some of my affection depends on his behavior					
	Parcel	When my child will invest in school, I will be more affectionate toward him					
	3	If my child will not invest in school, I will be less affectionate toward him					
		If my child will not want to engage in activities that promote thinking, I will make him feel that I'm less proud of him.					
		If my child will not be interested when I will try to teach him new words, I will show him I'm disappointed					
Autonomy Support	Parcel 4	As a mother, I will want my child to feel comfortable expressing the criticism he has of me.					
Orientation		The main way in which I will try to encourage my child in learning new words is by letting him choose the type of activities and the time when they are carried out.					
		In situations when my child will be satisfied with the grades he gets at school, but I will think that his grades should be higher, I will tell him that I accept and understand that school is not his whole world					
		Whenever it is possible, I will let my child to choose what to do.					
	Parcel 5	If my child doesn't invest enough in his studies, I will try to understand what he is going through - before I react.					
		In situations when my child will think that he is investing enough in his studies, but I will think that he is not investing enough, I will accept that he does not have to agree with my position					
		From a young age I will tell my child that if he thinks differently from me - it is important that he tell me					
		The main method by which I will try to encourage my children's knowledge and thinking is by finding activities that promote thinking that he can really enjoy.					
	Parcel	I will try to see my child's point of view, even when I think he is wrong					
	6	I will allow my child to talk about things he does not like in our family					
		In situations when my child will be satisfied with the grades he receives at school, but I will think that his grades should be higher, I will recognize his right to think and act differently.					

I will try to arouse my child's interest in new words, mainly by making him feel the pleasure of learning new things.

#### Confirmatory factor analysis (CFA) for the specific maternal behavior T3 scales

**Fig. 3.** Confirmatory factor analysis for maternal behavior (T3). Model fit;  $(\chi 2 (67) = 132.9, p = .00, RMSEA = .06 [.04 .07], CFI = .93, NFI = .87, TLI = .89). Standardized regression coefficients and correlations are reported. Dashed lines = non-significant paths. **<math>p < .01$ .

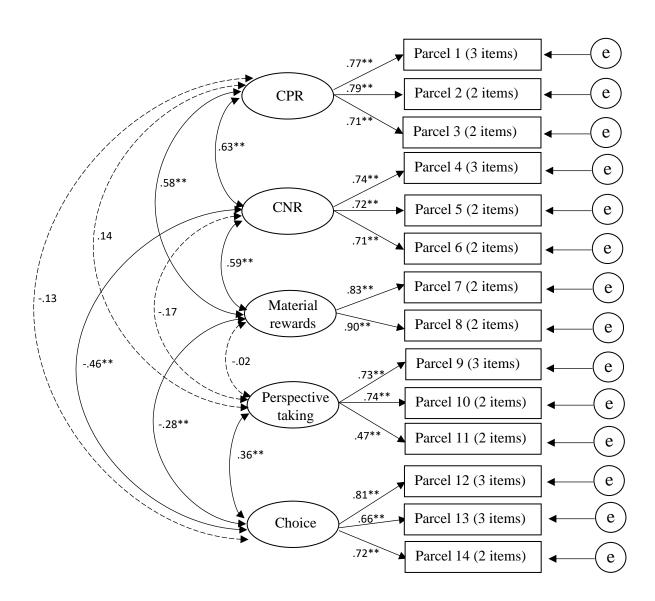


Table 4. Item.	s of Mater	rnal Behavior CFA
Variable	Parcel	Item
CPR	Parcel 1	I encourage my child to engage in activities that promote thinking by being especially warm towards him each time he engages in such activities
		I encourage my child to learn new words by being especially warm toward him each time he says a new word.
		I try to make my child listen to me by giving him praise and showing him I'm proud of him when he does as I ask.
	Parcel 2	When my child behaves properly, in order for him to continue, I give him extra care and affection.
		In order for my child to persist in activities that promote thinking, I show him that I'm very proud of him when he plays in this type of activity.
	Parcel 3	In order for my child to persist in difficult tasks, anytime he tries to do something difficult, I intentionally show him more affection.
		In order for my child to learn to behave properly, I'm nicer to him when he behaves properly.
CNR	Parcel 4	If my child does not listen or concentrate when trying to teach him something new (words, games), I show him that I am angry or sad.
		My child learns that I do not allow him to give up immediately when he encounters a new or very difficult task.
		In order for my child to learn to behave properly, I show him less affection when he behaves in a way that is unacceptable to me.
	Parcel 5	If my child does not do as I tell him to, so that he will learn to listen to me - I show him that I am angry or sad.
		If my child gives up quickly when a game frustrates him, then, so that he learns not to give up, I show him that I am disappointed in him.
	Parcel 6	If my child is not interested when I will try to teach him new words, I show him I'm disappointed
		My child knows that if he doesn't try to learn new things, I will be less nice to him.
Material rewards	Parcel 7	In order for my child to get used to investing and concentrating on difficult tasks, I give him all kinds of prizes
		The main method by which I try to encourage my child's knowledge and thinking is by giving him prizes when he plays games that require thinking and mental effort
	Parcel 8	In order for my child to get used to listening to me, I give him all kinds of prizes when he does as I ask.
		The main method by which I try to make my child behave properly is by giving him prizes when he behaves properly
Perspective taking	Parcel 9	When my child misbehaves, first, I try to feel and understand what is going through him that makes him behave that way.
		I will try to see to my child's point of view, even when I think he is wrong

When my child screams loudly out of frustration, it's important to me that he feels that I understand his frustration, even if I don't let him do what he Parcel When my child does not listen to my voice, first, I try to understand how he 10 feels about my demand. When my child will know how to speak better, then, when he shouts or screams, I will talk to him to understand why he feels that way. Parcel When my child is not interested in a game that can promote his development 11 - first, I try to understand how he feels about it If my child gives up quickly and does not invest when a game frustrates him, first, I try to understand what makes him react that way Choice Parcel I try to strengthen my children's desire to play games that require 12 concentration, thinking and patience, by giving him the feeling that there is no pressure, and in the end, he decides whether he will play or not. In situations where my child will think that he is investing enough in his studies, but I will think that he is not investing enough, I will accept that there are other things that interest him more than studies When my child has to make a decision that will be difficult for him, I will solve the matter by simply making the decision for him (R) Parcel Whenever it is possible, I let my child choose what to do 13 The main way in which I'm trying to encourage my child in learning new words is by letting him choose the type of activities and the time when they are carried out In situations when my child will be satisfied with the grades he receives at school, but I will think that his grades should be higher, I will recognize his right to think and act differently. In situations when my child will think that he is investing enough in his Parcel 14 studies, but I will think that he is not investing enough, I will accept that he does not have to agree with my position In situations when my child will be satisfied with the grades he gets at school, but I will think that his grades should be higher, I will tell him that I accept and understand that school is not his whole world

# SEM analysis examining the theoretical model and presented in Figure 2: standardized and unstandardized path coefficients, SE, and p-values

Table 5. SEM model: result table						
	unstandardized B	unstandardized SE	P	Standardized β	Standardized SE	P
CR Orientation (T1)				•		
CPR (T3)	.49**	.04	.00	.60**	.04	.00
CNR (T3)	.28**	.04	.00	.43**	.05	.00
Conditional material rewards (T3)	.33**	.04	.00	.41**	.05	.00
AS Orientation (T1)						
Perspective taking (T3)	.28**	.06	.00	.26**	.05	.00
Providing choice & preference realization (T3)	.71**	.06	.00	.61**	.04	.00
CPR (T3)						
Internalizing problems (T4)	.05**	.02	.01	.19**	.08	.01
Prosocial responses (T4)	.01	.06	.93	.01	.08	.93
CNR (T3)						
Internalizing problems (T4)	.06**	.02	.01	.18**	.07	.01
Prosocial responses (T4)	03	.07	.65	03	.08	.65
Conditional material rewards (T3)						
Internalizing problems (T4)	05**	.02	.00	2**	.06	.00
Prosocial responses (T4)	.01	.05	.89	.01	.08	.89
Perspective taking (T3)						
Internalizing problems (T4)	.01	.03	.75	.02	.06	.75
Prosocial responses (T4)	.2**	.06	.00	.21**	.07	.00
Providing choice & preference realization (T3)						
Internalizing problems (T4)	.01	.02	.82	.02	.06	.82
Prosocial responses (T4)	02	.05	.61	03	.05	.61
Positive affect (T2)						
CPR (T3)	.14	.09	.12	.08	.05	.12
CNR (T3)	11	.07	.14	08	.05	.14
Conditional material rewards (T3)	15	.1	.15	09	.06	.16
Perspective taking (T3)	.36**	.08	.00	.29**	.06	.00
Providing choice &	06	.07	.37	05	.05	.38
preference realization (T3)						
Internalizing problems (T4)	07**	.03	.01	15**	.06	.01
Prosocial responses (T4)	.23**	.06	.00	.20**	.05	.00
Negative affect (T2)						
CPR (T3)	04	.09	.69	02	.05	.69
CNR (T3)	05	.08	.54	04	.06	.54

Conditional material	.16	.11	.16	.09	.07	.17
rewards (T3)						
Perspective taking (T3)	.15**	.06	.01	.12**	.05	.01
Providing choice &	03	.06	.65	02	.05	.65
preference realization (T3)						
Internalizing problems (T4)	.16**	.02	.00	.36**	.05	.00
Prosocial responses (T4)	07	.07	.28	.06	.06	.28

<sup>\*</sup>p < .05. \*\*p < .01.

## <u>Interactions between temperament dispositions and maternal attributes</u>

**Table 6.** *Interactions between child temperament and parenting in the prediction of the developmental outcomes* 

aevetopmentai outcomes	В	SE
Internalizing problems (T4)		
AS orientation (T1)	11	.27
Negative affect (T2)	.04	.48
Interaction	.02	.07
Internalizing problems (T4)		
CR orientation (T1)	13	.13
Negative affect (T2)	01	.13
Interaction	.04	.04
Internalizing problems (T4)		
Perspective taking (T3)	.14	.26
Negative affect (T2)	.38	.45
Interaction	03	.08
Internalizing problems (T4)		
Providing choice & preference realization (T3)	.13	.22
Negative affect (T2)	.36	.33
Interaction	04	0.6
Internalizing problems (T4)		
CPR (T3)	.05	.13
Negative affect (T2)	.15	.20
Interaction	00	.03
Internalizing problems (T4)		
CNR (T3)	.28	.18
Negative affect (T2)	.19	.15
Interaction	01	.05
Internalizing problems (T4)		
Conditional material rewards (T3)	.01	.12
Negative affect (T2)	.18	.10
Interaction	00	.03
Internalizing problems (T4)		
AS orientation (T1)	59	.53

Positive affect (T2)	59	.51
Interaction	.10	.09
Internalizing problems (T4)		
CR orientation (T1)	03	.26
Positive affect (T2)	09	.15
Interaction	.02	.05
Internalizing problems (T4)	4.4	25
Perspective taking (T3)	.41	.37
Positive affect (T2)	.31	.38
Interaction	07	.07
Internalizing problems (T4)		
Internalizing problems (T4)	02	15
Providing choice & preference realization (T3) Positive affect (T2)	.02 .00	.45 .37
Interaction	.00 00	.08
Interaction	00	.06
Internalizing problems (T4)		
CPR (T3)	.11	.33
Positive affect (T2)	.01	.26
Interaction	00	.06
	.00	.00
Internalizing problems (T4)		
CNR (T3)	18	.36
Positive affect (T2)	12	.18
Interaction	.04	.06
Internalizing problems (T4)		
Conditional material rewards (T3)	13	.29
Positive affect (T2)	08	.14
Interaction	.03	.04
D '1 (TM)		
Prosocial responses (T4)	<b>5</b> .6	77
AS orientation (T1)	.56	.77
Negative affect (T2)	.72	1.37
Interaction	11	.24
Prosperial responses (TA)		
Prosocial responses (T4) CR orientation (T1)	.25	.36
Negative affect (T2)	.23 .41	.37
Interaction	.41 10	.11
Interaction	10	.11
Prosocial responses (T4)		
Perspective taking (T3)	.13	.71
Negative affect (T2)	14	1.28
Interaction	.02	.22
interaction	.02	.22
Prosocial responses (T4)		
Providing choice & preference realization (T3)	1.16	.62
Negative affect (T2)	1.76	.93
Interaction	34	.18
Prosocial responses (T4)		
CPR (T3)	.52	.39
<u></u>		

Negative affect (T2)	.73	.56
Interaction	14	.12
Prosocial responses (T4)		
CNR (T3)	.53	.50
Negative affect (T2)	.47	.43
Interaction	15	.15
Prosocial responses (T4)		
Conditional material rewards (T3)	.01	.33
Negative affect (T2)	.09	.29
Interaction	.00	.09
Prosocial responses (T4)		
AS orientation (T1)	1.20	1.42
Positive affect (T2)	1.31	1.35
Interaction	19	.25
Prosocial responses (T4)		
CR orientation (T1)	23	.72
Positive affect (T2)	.19	.41
Interaction	.03	.13
Prosocial responses (T4)		
Perspective taking (T3)	65	98.
Positive affect (T2)	56	021.
Interaction	3.1	17.
Prosocial responses (T4)		
Providing choice & preference realization (T3)	.50	1.19
Positive affect (T2)	.71	1.00
Interaction	08	.21
Prosocial responses (T4)		
CPR (T3)	37	.88
Positive affect (T2)	03	.70
Interaction	.07	.15
Prosocial responses (T4)		
CNR (T3)	.51	.97
Positive affect (T2)	.53	.50
Interaction	07	.17
Prosocial responses (T4)		
Conditional material rewards (T3)	.6	.77
Positive affect (T2)	.56	.38
Interaction	10	.14
*n < 05 **n < 01	,10	** 1

\*p < .05. \*\*p < .01.