

**Table 1: Postpartum maternal attachment scale**

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***'Core maternal attachment' subscale***

1. I enjoy interacting with my child
2. I feel at peace when my child is close by
- \*4. I am not that interested in my child
5. I speak to my baby when caring for him/her
- \*6. I don't find my baby cute
- \*7. I worry about my child in many ways when my child is not with me
8. I am willing to do anything for my child
9. I want to touch or hold my baby when I see him/her
11. I feel my child is terribly precious
- \*18. I miss touching or holding my baby when he/she is not with me
19. Taking care of the baby is fun

***'Anxiety regarding children' subscale***

3. Thinking about the future makes me anxious whether I can raise him/her properly
10. It scares me to touch my baby
12. I don't know how to interact with my baby
13. I have trouble actually feeling the baby is mine
14. I worry my baby might get sick
15. I feel there is something more I should be doing for my child
16. I feel holding my baby could break him/her
17. I sometimes don't know what to do for my baby

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\*Reverse items

**Table 2: Subject attributes**

		NICU mothers & infants		Control mothers & infants	
		<i>n</i>	(%)	<i>n</i>	(%)
<b>Maternal factors</b>					
Marital status	Married	151	(99.3)	415	(99.5)
	Engaged	1	(0.7)	1	(0.2)
	Single	0	(0.0)	1	(0.2)
	Unknown	1	(0.7)	---	---
Employment	Full-time house wife	115	(75.2)	334	(80.1)
	Company employee	11	(7.2)	36	(8.6)
	Self-employed	7	(4.6)	14	(3.4)
	Part-time work	12	(7.8)	9	(2.2)
	Other	6	(3.9)	24	(5.8)
	Unknown	2	(1.3)	---	---
Mother's education	Junior high school graduate	4	(2.6)	7	(1.7)
	High school graduate	34	(22.2)	84	(20.1)
	College graduate	43	(28.1)	125	(30.0)
	Professional school/junior college graduate	69	(45.1)	197	(47.2)
	Other	3	(2.0)	2	(0.5)
	Unknown	---	---	2	(0.5)
Course of pregnancy	Normal	80	(52.3)	299	(71.7)
	Complications*	67	(43.8)	118	(28.3)
	Unknown	6	(3.9)	---	---
Mode of delivery	Transvaginal	109	(71.2)	359	(86.1)
	Cesarean	38	(24.8)	52	(12.5)
	Unknown	6	(3.9)	6	(1.4)
<b>Newborn's factors</b>					
Birth order	Primipara	96	(62.7)	218	(52.3)
	Multipara	56	(36.6)	118	(28.3)
	Unknown	1	(0.7)	81	(19.4)
Primary illness	Low birth weight	68	(43.6)	---	---
	Respiratory disorder	34	(21.8)	---	---
	Hyperbilirubinemia	32	(20.5)	---	---
	Other	21	(13.5)	---	---
	Unknown	1	(0.5)	---	---
<b>Peripheral conditions</b>					
Father's education	Junior high school graduate	4	(2.6)	12	(2.9)
	High school graduate	40	(26.1)	73	(17.5)
	College graduate	83	(54.2)	285	(68.3)
	Professional school/junior college graduate	20	(13.1)	26	(6.2)
	Other	6	(3.9)	18	(4.3)
	Unknown	---	---	3	(0.7)

\*Threatened abortion, premature delivery, etc.

**Table 3: Scores for each rating scale**

	NICU admitted infant group mothers			Full-term infant (control) group mothers		
	Mean score	S.D.	Range	Mean score	S.D.	Range
ZSDS scores	41.9	7.53	26~63	41.5	6.41	22~59
Postpartum Maternal Attachment						
Anxiety regarding children	17.9	4.08	10~29	16.9	3.86	9~29 ***
Core maternal attachment	40.6	3.59	26~44	38.3	4.33	26~44 *

\*  $p < 0.05$ , \*\*\*  $p < 0.001$

**Table 4: Significantly different item scores**

	NICU mothers		Control mothers		t-value
	Mean	S.D.	Mean	S.D.	
<b>'ZSDS'</b>					
1. I feel down-hearted and blue	1.85	0.81	1.60	0.62	-3.92***
3. I have crying spells or feel like it	2.14	0.95	1.72	0.77	-5.49***
4. I have trouble sleeping at night	2.22	0.90	2.51	0.88	3.44***
<b>'Postpartum maternal attachment' scale</b>					
<b>'Core maternal attachment' subscale</b>					
2. I feel at peace when my child is close by	3.70	0.55	3.53	0.57	-3.12**
7. I worry about my child in many ways when my child is not with me	3.54	0.70	3.16	0.82	-5.11***
8. I am willing to do anything for my child	3.60	0.59	3.37	0.65	-4.00***
9. I want to touch or hold my baby when I see him/her	3.78	0.46	3.46	0.66	-5.58***
11. I feel my child is terribly precious	3.77	0.55	3.63	0.55	-2.70**
18. I miss touching or holding my baby when he/she is not with me	3.68	0.62	3.09	0.81	-8.30***
<b>'Anxiety regarding children' subscale</b>					
14. I worry my baby might get sick	3.27	0.82	3.03	0.81	-3.23***
15. I feel there is something more I should be doing for my child	2.85	0.80	2.63	0.78	-2.96**
16. I feel holding my baby could break him/her	20.10	0.95	1.74	0.04	-3.35***

\*\* p<0.01, \*\*\* p<0.001.

**Table 5: Correlation matrix with means and SD on significant associations between the 2 subscales and observed variables**

	<u>Mean</u>	<u>S.D.</u>	1	2	3	4	5	6
			Birth order	Positive maternal feelings in learning of pregnancy	Father's positive reaction	ZSDS score	Core maternal attachment	Anxiety regarding children
1. Birth order	1.5	0.76		-0.06	-0.35***	-0.10	0	-0.35***
	1.6	0.74		(-0.07)	(-0.24***)	(-0.02)	(-0.09)	(-0.40***)
2. Positive maternal feelings in learning of pregnancy	3.0	0.24			0.29***	-0.22***	0.26***	-0.14**
	3.0	0.25			(0.24***)	(-0.12**)	(0.09)	(-0.01)
3. Father's reaction	2.7	0.5				-0.25***	0.35***	0.07
	2.6	0.54				(-0.11)	(0.15**)	(0.09)
4. ZSDS score	41.9	7.53					-0.27***	0.33***
	41.5	6.41					(-0.30***)	(0.39***)
5. Core maternal attachment	40.6	3.59						-0.09
	38.3	4.33						(-0.12**)
6. Anxiety regarding children	17.9	4.08						
	16.9	3.86						

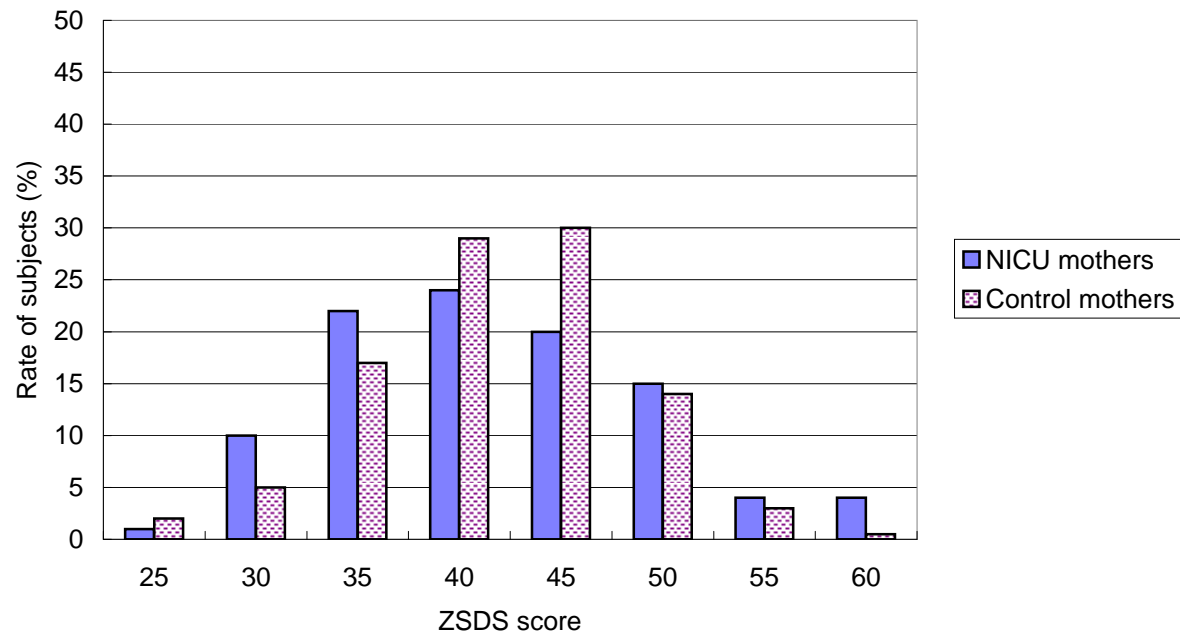
Figures in parentheses = data from full-term control group mothers

\* p<0.05, \*\*p<0.01, \*\*\* p<0.001.

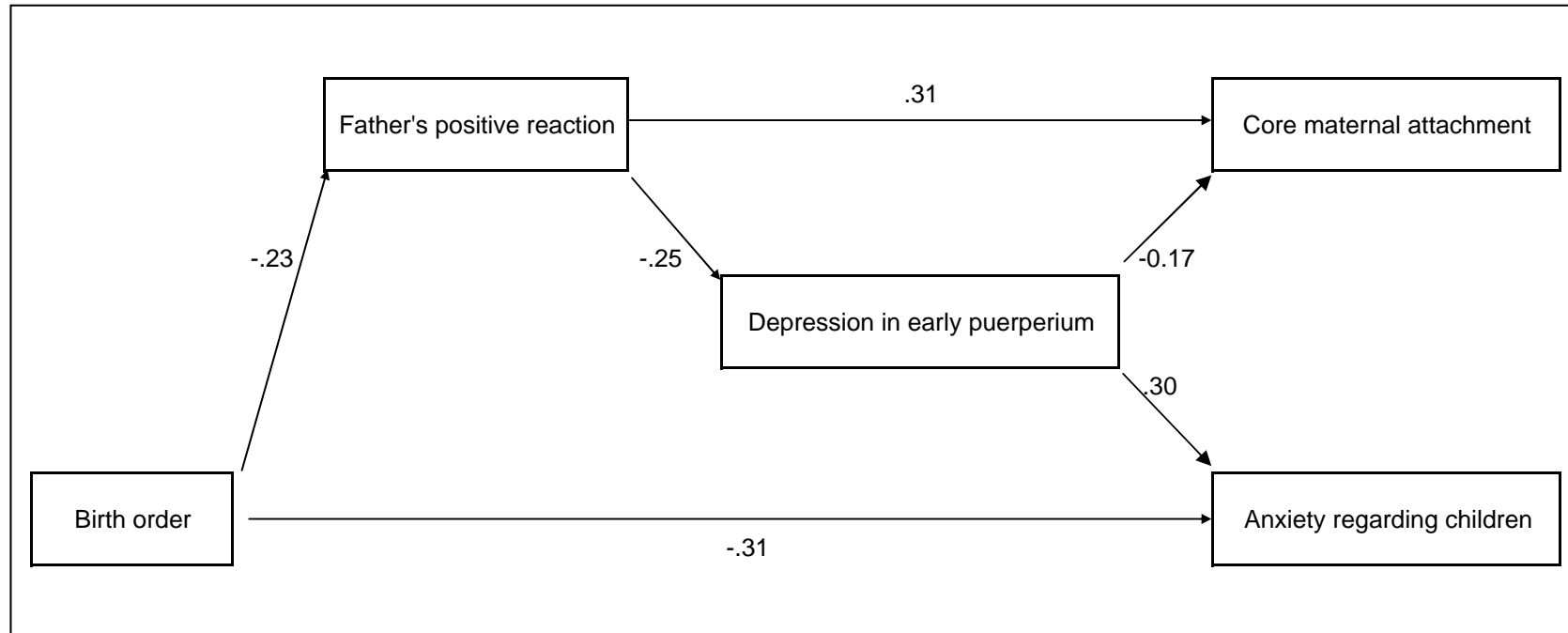
Note: Significant correlation was not found between other tested factors (eg. mother's age, birth weight, duration of hospitalization, education, place/mode of delivery, support, children in the same age group, etc.).

**Table 6: Analysis of variance according to cardinal symptom of the infant**

Variance	Sum of squares	Degree of freedom	Mean square	F-value	Multiplex comparison	
<i>'Depression in early puerperium'</i>						
<b>Between rank</b>	3494.760	3	1164.920	35.73	Low birth weight > respiratory disorder	Respiratory disorder > hyperbilirunemia
<b>Within rank</b>	4499.048	138	32.601		Low birth weight > hyperbilirunemia	
<b>Overall</b>	7993.810	141			Low birth weight > other disorders	
<i>'Anxiety regarding children'</i>						
<b>Between rank</b>	424.680	3	141.560	10.28	Low birth weight > respiratory disorder	
<b>Within rank</b>	1913.222	139	13.764		Low birth weight > hyperbilirunemia	
<b>Overall</b>	2337.902	142			Low birth weight > other disorders	



**Figure 1.** Distribution of Zung's self-rating depression scores (ZSDS).



**Figure 2.** Results of path analysis (path diagram) of NICU mothers

Note: Significant paths were not obtained between other tested factors (eg. feelings regarding pregnancy, pregnancy, child-rearing support, children in same age group).