

A longitudinal study of child sleep in high and low risk families: relationship to early maternal settling strategies and child psychological functioning

Article

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Table 1

Child Characteristics at 5-years for High versus Low Adversity Groups

	Low Risk	High Risk	Statistic
	<i>n</i> = 57	<i>n</i> = 41	
Age in months, <i>M</i> (<i>SD</i>)	67.2 (2.6)	68.5 (4.2)	<i>t</i> (61.3) = -1.83†
Proportion female, <i>N</i> (%)	33 (51.6)	30 (51.7)	$\chi^2(1) < 0.01$
CBCL Scores, <i>M</i> (<i>SD</i>)			
Anxiety-depression	2.29 (1.73)	3.16 (2.33)	<i>t</i> (96) = -2.13*
Aggression	4.11 (3.97)	6.62 (4.95)	<i>t</i> (96) = -2.62*
WPSSI, <i>M</i> (<i>SD</i>)			
Full scale IQ	116.2 (12.8)	100.4 (13.9)	<i>t</i> (96) = 5.78***
Verbal IQ	116.8 (13.0)	99.7 (15.7)	<i>t</i> (96) = 5.84***
Performance IQ	111.6 (12.5)	100.9 (12.5)	<i>t</i> (96) = 4.16***

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$

CBCL: Child Behaviour Checklist, WPSSI-R: Wechsler Preschool and Primary Scale of Intelligence - Revised

Table 2

Sleep parameters reported by risk status at 5-years: means and standard deviations (in parentheses) (see text for multivariate analysis of risk group effects)

	Low Risk	High Risk
	<i>n</i> = 57	<i>n</i> = 41
SD Sleep Period (hrs)	11.03 (0.62)	11.20 (0.70)
SD Disturbance Index	-0.18 (0.65)	0.23 (0.91)
AG Sleep Duration (hrs)	10.51 (0.63)	10.34 (0.69)
AG Sleep percentage	96.4 (3.2)	96.3 (3.5)

SD: Sleep Diary, AG: Actigraphy.

Table 3

Correlations between self-reported maternal settling strategies (PIBBS) in the first 12-months of life and child sleep parameters at 5-years

	Sleep Diary		Actigraphy	
	Sleep Period	Disturbance Index	Sleep Duration	Sleep Efficiency
<i>1-3 months PIBBS</i>				
Active Movement	.03	.21†	-.21*	.04
Active Soothing	-.23*	.35***	-.22*	.02
Parental Presence	-.04	.34***	-.24*	.09
Total involvement	-.07	.36***	-.27**	.06
<i>12-months PIBBS</i>				
Active Movement	-.06	.25*	-.21*	-.05
Active Soothing	-.19†	.32***	-.11	.16
Parental Presence	-.06	.33***	-.17	.20†
Total involvement	-.14	.38***	-.20†	.13

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$

PIBBS; Parental Interactive Bedtime Behaviour Scale

Table 4

Concurrent and prospective associations between child sleep parameters and emotional-behavioural and cognitive outcomes at 5-years

	Anxiety/Depression ¹	Aggression ¹	IQ ²
<i>12-month assessments</i>			
SD Sleep Period	-.01	-.05	.04
SD Disturbance Index	-.12	.07	-.26**
ISQ Score	.21*	.02	-.23*
<i>18-month assessments</i>			
SD Sleep Period	-.03	-.03	.07
SD Disturbance Index	.01	.09	-.27*
ISQ Score	.13	-.03	-.09
<i>5-year assessments</i>			
SD Sleep Period	-.15	-.13	-.10
SD Disturbance Index	.22*	.06	-.10
AG Sleep Duration	-.25*	-.25*	.05
AG Sleep Efficiency	-.08	-.12	-.06
Reported Difficulties	.23*	.30***	-.07

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .005$; ¹Child Behaviour Checklist, ²Wechsler Preschool and Primary Scale of Intelligence - Revised.

SD: Sleep Diary, ISQ: Infant Sleep Questionnaire, AG: Actigraphy