

The stability and continuity of parenting cognitions and principles following a premature delivery

Alice Winstanley^{i, ii}, Marc H. Bornsteinⁱⁱⁱ, Rebecca G. Sperottoⁱ, and Merideth Gattisⁱ

ⁱ Cardiff University, Wales; ⁱⁱ University of Cambridge, UK; ⁱⁱⁱ Eunice Kennedy Shriver National Institute of Child Health and Human Development

- Preterm birth places infants in the extrauterine world before they are biologically ready and forces parenthood onto the caregivers
- Aim was to understand the stability and continuity of how parents approach caregiving and their cognitions about child development following a preterm delivery

Participants

Mothers and infants seen following birth in the hospital and again at 5 months in the lab

Preterm infants ($n = 39$): born between 30 and 37 weeks gestation with few complications beyond premature delivery

Term infants ($n = 61$): born between 37 and 42 weeks gestation with few medical complications

Definitions – consistency

Stability: reflects consistency at an individual level

Continuity: reflects consistency at a group level

Measures

Baby Care Questionnaire (BCQ): parent’s support of structure and attunement, as well as parenting practices, such as breastfeeding, co-sleeping and holding (Winstanley & Gattis, under review)

Structure: support of routines and regularity

Attunement: trust and use of infant’s cues and support of close physical contact

Concepts of Development Questionnaire (CODQ): level of complexity that parents cognize about child development (Sameroff & Feil, 1985)

Categorical: cognitions restricted to single determinants and single outcomes

Perspectivist: development viewed from multiple perspectives, understanding that parents are also dynamic factors that can become better or worse partners in developmental process

Complexity: complexity of cognitions about child development (balance of categorical and perspectivist)



Results

	Preterm infants			Term infants			Stability
	Birth	5 months	<i>r</i>	Birth	5 months	<i>r</i>	Significant correlation between birth and 5 months
	<i>M (SD)</i>	<i>M (SD)</i>		<i>M (SD)</i>	<i>M (SD)</i>		
BCQ							Continuity
Structure	2.75 (0.28)	2.77 (0.30)	.28	2.63 (0.34)	2.66 (0.37)	.62***	No main effect of age or age x birth status interaction
Attunement	2.85 (0.21)	2.95 (0.21)	.48**	2.95 (0.31)	2.98 (0.32)	.59***	
CODQ							Within-subjects: age (birth vs. 5 months)
Categorical	1.90 (0.28)	2.08 (0.25)	.43**	1.96 (0.30)	1.97 (0.23)	.61***	Between-subjects: birth status (preterm vs. term)
Perspectivist	2.81 (0.27)	2.95 (0.30)	.47**	2.95 (0.34)	3.03 (0.32)	.42***	
Complexity	2.96 (0.20)	2.93 (0.20)	.41**	2.96 (0.26)	3.03 (0.22)	.56***	

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Structure: continuous for mothers of preterm and term infants

No main effect of age, $F(1, 98) = 0.39$, $p = .533$, or birth status, $F(1, 98) = 3.80$, $p = .054$, or interaction between birth status and age, $F(1, 98) = 0.02$, $p = .879$

Attunement: continuous for mothers of preterm and term infants

No main effect of age, $F(1, 98) = 2.20$, $p = .141$, or birth status, $F(1, 98) = 2.66$, $p = .106$, or interaction between birth status and age, $F(1, 98) = 0.35$, $p = .557$

Complexity: continuous for mothers of preterm and term infants

No main effect of age, $F(1, 98) = 0.01$, $p = .940$, or birth status, $F(1, 98) = 3.01$, $p = .086$, or interaction between birth status and age, $F(1, 98) = 1.27$, $p = .262$

Categorical: continuous for mothers of term but not preterm infants

Main effect of age, $F(1, 98) = 11.60$, $p = .001$ and significant interaction between birth status and age, $F(1, 98) = 7.77$, $p = .006$, but no main effect of birth status, $F(1, 98) = 0.41$, $p = .525$

Simple effects analyses: significant main effect of age for mothers of preterm infants, $F(1, 98) = 15.72$, $p < .001$, but not for mothers of term infants, $F(1, 98) = 0.24$, $p = .622$

Perspectivist: not continuous for mothers of preterm or term infants

Main effect of age, $F(1, 98) = 11.49$, $p = .001$, but no main effect of birth status, $F(1, 98) = 3.75$, $p = .056$, and no interaction between birth status and age, $F(1, 98) = 0.97$, $p = .328$

Conclusions

Principles

- Structure and attunement were continuous for mothers of preterm and term infants
- Structure was only stable for mothers of term infants
- Attunement showed stability for both mothers of preterm and term infants

Cognitions

- The complexity scale was continuous for mothers of preterm and term infants
- The categorical scale was not continuous for mothers of preterm infants
 - Mothers of preterm infants increased significantly while mothers of term infants did not differ from birth to 5 months
- The perspectivist scale was not continuous for mothers of preterm or term infants with scores increasing with age
- All subscales of the CODQ were stable for mothers of term and preterm infants

Implications

- Different maternal cognitions following preterm and term deliveries may have important effects on the child
 - Directly or indirectly through maternal behaviours and practices