

eTable 1.

Model-Estimated Intercepts and Standard Deviations for Infants Born at Various Terms^a

Behavior	Group	1 SD Below the Estimated Mean	Estimated Mean	1 SD Above the Estimated Mean
Holding	FT	34.3	39.4	44.5
	PT no BI	33.2	38.3	43.4
	PTBI	33.2	38.3	43.4
Bilateral holding	FT	10.5	13.1	16.3
	PT no BI	11.1	13.8	17.2
	PTBI	12.5	15.5	19.3
Bouts of behavior ^b	FT	4.7	5.4	6.3
	PT no BI	3.5	4.0	4.7
	PTBI	2.7	3.2	3.7
Overall behavioral performance	FT	44.1	48.1	52.1
	PT no BI	24.5	28.5	32.5
	PTBI	18.5	22.5	26.5
Individual behaviors	FT	40.3	45.3	51.0
	PT no BI	30.7	34.6	38.9
	PTBI	25.2	28.4	32.0
Combination behaviors	FT	5.6	7.5	10.0
	PT no BI	3.5	4.7	6.3
	PTBI	0.8	1.0	1.4
Touching the body	FT	77.2	83.8	90.3
	PT no BI	65.6	72.1	78.7
	PTBI	52.0	58.5	65.0
Looking	FT	5.4	6.8	8.6
	PT no BI	5.7	7.2	9.1
	PTBI	4.8	6.0	7.6
Looking while acting	FT	0	0	0
	PT no BI	0	0	0
	PTBI	0	0	0
Squeezing	FT	0.9	1.4	2.1
	PT no BI	0.4	0.7	1.1
	PTBI	0	0	0
Throwing	FT	0	0	0
	PT no BI	0	0	0
	PTBI	0	0	0
Banging	FT	0.4	0.8	1.6
	PT no BI	0	0	0.1
	PTBI	0	0	0
Cyclical movement	FT	2.5	3.9	6.0
	PT no BI	2.8	4.3	6.8
	PTBI	0	0	0
Fingering	FT	0.2	0.3	0.5
	PT no BI	0.5	0.8	1.3
	PTBI	0	0.1	0.5
Manipulation	FT	0.3	0.9	2.9
	PT no BI	0.4	1.1	3.5
	PTBI	0.3	1.0	3.0

^a Values are reported as percentages, unless otherwise indicated. There was not enough variability in the intercepts for the looking while acting and throwing variables for variances to be calculated for the model-estimated intercepts. FT=full-term, PT no BI=preterm without significant brain injury, PTBI=preterm with significant brain injury.

^b Values are reported as counts per minute.

Impaired Object Exploration Behaviors in Infants Born Preterm

eTable 2.

Raw Data Means and Standard Errors of the Mean (SEM) for Each Behavior Over Time for Infants Born at Various Terms^a

Behavior	Group	Value	Corrected Age (mo)								
			0	1.5	3	4	6	9	12	18	24
Holding	FT	\bar{X}	39.9	45.3	64.6	74.8	84.2	84.3	77.2	78.5	74.1
		SEM	5.3	3.3	3.5	2.0	2.2	3.6	4.0	5.1	3.4
	PT no BI	\bar{X}	45.4	44.3	59.4	70.7	84.7	89.5	80.8	80.6	83.3
		SEM	6.1	4.4	3.1	1.9	1.9	2.1	4.6	3.9	3.7
	PTBI	\bar{X}	41.8	49.0	57.2	69.2	84.4	78.1	73.6	70.4	75.8
		SEM	4.9	5.3	7.7	7.1	5.7	4.4	9.8	7.7	11.6
Bilateral holding	FT	\bar{X}	2.9	1.3	7.9	25.2	47.1	43.0	56.6	54.8	57.0
		SEM	2.1	0.8	1.8	4.2	3.2	2.9	3.11	3.4	1.4
	PT no BI	\bar{X}	4.9	1.0	7.2	16.9	43.9	48.0	44.8	57.1	53.9
		SEM	4.9	1.0	2.6	3.4	5.1	4.0	2.9	2.8	3.9
	PTBI	\bar{X}	0	0	0.8	13.5	36.5	29.0	37.0	41.9	59.8
		SEM	0	0	0.6	6.2	13.4	9.2	12.3	6.7	2.2
Bouts of behavior ^b	FT	\bar{X}	6.4	7.2	12.1	20.1	34.7	25.4	30.0	24.3	29.5
		SEM	1.9	0.8	1.1	2.0	1.7	1.5	1.4	1.9	1.3
	PT no BI	\bar{X}	3.3	6.2	10.3	16.6	27.9	27.3	28.6	26.9	27.8
		SEM	0.6	1.0	1.1	1.4	1.6	2.4	2.2	2.0	2.2
	PTBI	\bar{X}	2.5	7.2	9.9	15.4	23.8	34.2	31.5	30.4	22.5
		SEM	0.5	0.7	2.1	2.3	4.3	3.9	5.6	5.3	4.5
Overall behavioral performance	FT	\bar{X}	44.4	50.7	63.7	70.8	74.7	66.1	66.8	57.9	64.2
		SEM	7.9	3.8	3.3	3.1	1.4	2.6	2.4	3.3	5.2
	PT no BI	\bar{X}	23.7	38.1	53.7	66.8	76.5	73.1	64.3	62.7	61.1
		SEM	4.9	5.1	4.4	3.5	92.1	3.3	2.6	2.9	3.8
	PTBI	\bar{X}	22.3	38.3	46.0	55.1	70.7	71.1	69.9	68.1	65.8
		SEM	8.6	11.0	6.4	7.6	8.9	4.0	3.1	6.2	2.4
Individual behaviors	FT	\bar{X}	34.9	47.3	55.6	49.5	51.3	50.4	53.4	43.5	46.4
		SEM	6.1	3.3	2.9	2.7	1.2	2.4	1.9	1.3	2.8
	PT no BI	\bar{X}	23.5	38.2	48.6	51.4	52.3	56.3	53.4	49.9	45.6
		SEM	4.8	5.3	3.3	1.9	1.9	2.8	2.2	1.9	2.7
	PTBI	\bar{X}	22.3	38.1	40.6	39.5	53.6	53.7	52.3	56.1	52.5
		SEM	8.6	9.9	6.3	4.9	5.6	3.2	2.1	3.9	4.4
Combination behaviors	FT	\bar{X}	6.1	2.6	8.4	21.5	23.3	15.7	13.3	14.4	17.8
		SEM	3.9	0.8	1.4	1.9	1.9	2.2	1.7	2.1	2.0
	PT no BI	\bar{X}	0.2	0.7	7.8	17.8	25.1	15.8	11.5	12.8	15.6
		SEM	0.2	0.3	2.0	2.2	1.7	2.6	1.5	1.8	2.4
	PTBI	\bar{X}	0	0.3	3.9	11.4	17.5	20.8	14.4	12.0	13.3
		SEM	0	0.2	1.7	3.4	4.7	4.7	3.6	2.4	4.0
Touching the body	FT	\bar{X}	71.4	67.1	70.1	60.7	40.1	23.2	20.1	20.1	19.0
		SEM	5.1	3.7	2.6	3.1	2.9	3.1	3.2	2.7	3.3
	PT no BI	\bar{X}	65.1	52.4	61.1	59.6	42.0	23.4	13.8	18.3	24.6
		SEM	7.5	5.7	3.3	2.8	3.3	4.3	2.8	3.3	4.6
	PTBI	\bar{X}	61.5	51.6	48.9	47.5	34.3	30.3	20.4	14.5	11.1
		SEM	14.7	9.0	5.8	6.5	7.3	10.8	7.9	4.3	7.1
Looking	FT	\bar{X}	0.6	0.8	2.3	14.7	23.6	33.7	41.6	40.7	48.3
		SEM	0.6	0.5	0.8	2.5	2.5	3.3	2.3	2.8	0.4
	PT no BI	\bar{X}	0	0.7	3.3	11.7	29.3	36.8	39.2	37.7	40.4
		SEM	0	0.5	1.5	2.8	4.1	3.2	3.0	2.4	4.0
	PTBI	\bar{X}	0	0.2	2.4	8.8	25.9	40.4	41.3	44.4	53.7
		SEM	0	0.2	1.6	4.5	7.5	5.1	6.4	8.1	5.1

(Continued)

Impaired Object Exploration Behaviors in Infants Born Preterm

eTable 2.
Continued

Behavior	Group	Value	Corrected Age (mo)								
			0	1.5	3	4	6	9	12	18	24
Looking while acting	FT	\bar{X}	0.1	0.6	1.5	8.0	9.7	10.7	10.9	12.4	16.4
		SEM	0.1	0.5	0.6	1.7	1.2	1.6	1.8	1.7	0.1
	PT no BI	\bar{X}	0	0	0.9	5.9	11.4	11.5	9.2	9.7	13.2
		SEM	0	0	0.4	1.7	1.7	2.1	1.3	1.2	2.0
	PTBI	\bar{X}	0	0	0.6	3.7	7.4	16.2	14.8	10.8	12.6
		SEM	0	0	0.4	1.9	3.0	5.3	4.0	2.2	3.8
Squeezing	FT	\bar{X}	0	0.3	0.7	0.5	0.3	0.6	1.4	1.1	3.4
		SEM	0	0.2	0.4	0.2	0.1	0.6	0.5	0.5	0.6
	PT no BI	\bar{X}	0	0	0.7	1.1	0.7	0.3	1.3	2.2	2.5
		SEM	0	0	0.3	0.5	0.2	0.1	0.5	0.6	0.5
	PTBI	\bar{X}	0	0	0	0.1	0.3	0.9	2.4	3.9	2.5
		SEM	0	0	0	0.1	0.3	0.5	1.3	1.2	1.2
Throwing ^b	FT	\bar{X}	0	0	0	0	0	0.5	1.8	1.2	1.9
		SEM	0	0	0	0	0	0.4	0.7	0.4	0.9
	PT no BI	\bar{X}	0	0	0	0	0	0	0.3	1.4	0.9
		SEM	0	0	0	0	0	0	0.2	0.5	0.3
	PTBI	\bar{X}	0	0.1	0	0	0	0.3	0.3	1.0	2.3
		SEM	0	0.1	0	0	0	0.2	0.3	0.8	2.1
Banging	FT	\bar{X}	0	0.2	0.1	1.5	6.0	2.0	1.6	1.1	0.9
		SEM	0	0.2	0.1	0.9	1.4	0.8	0.5	0.4	0
	PT no BI	\bar{X}	0	0	0.1	0.5	1.6	2.0	1.9	0.8	0.9
		SEM	0	0	0.1	0.4	0.6	0.8	0.7	0.6	0.4
	PTBI	\bar{X}	0	0	0.3	0	0.5	2.7	0.7	2.2	0
		SEM	0	0	0.3	0	0.3	0.9	0.4	2.2	0
Cyclical movement	FT	\bar{X}	0.7	1.2	1.6	1.6	1.5	3.5	4.2	3.5	2.7
		SEM	0.7	0.6	0.5	0.9	0.5	0.9	0.9	0.8	0.5
	PT no BI	\bar{X}	0	0.7	1.1	2.6	2.5	3.4	4.6	4.2	3.2
		SEM	0	0.6	0.5	1.4	0.8	1.1	1.1	1.0	1.0
	PTBI	\bar{X}	0	0	0	0.4	1.4	2.1	6.1	3.6	3.3
		SEM	0	0	0	0.3	0.8	1.9	4.8	1.5	1.4
Fingering	FT	\bar{X}	0.1	0.3	0.7	1.7	2.2	4.1	2.0	2.4	1.5
		SEM	0.1	0.3	0.2	0.4	0.4	0.5	1.0	0.4	0.1
	PT no BI	\bar{X}	0.1	0.6	1.1	2.4	3.5	3.1	2.1	2.4	2.3
		SEM	0.1	0.5	0.3	0.6	0.7	0.9	0.7	0.6	0.8
	PTBI	\bar{X}	0	0	0.6	0.9	2.1	2.0	0.7	1.4	2.7
		SEM	0	0	0.3	0.4	0.7	1.1	0.5	0.7	1.7
Manipulation	FT	\bar{X}	0	0	0.1	0.3	1.3	1.2	2.7	4.1	6.4
		SEM	0	0	0.1	0.1	0.3	0.3	0.6	0.7	1.1
	PT no BI	\bar{X}	0	0	0.2	0.2	1.3	1.7	2.1	3.0	4.9
		SEM	0	0	0.2	0.2	0.3	0.5	0.6	0.7	1.2
	PTBI	\bar{X}	0	0	0	0.7	0.9	0.2	2.4	1.4	2.1
		SEM	0	0	0	0.6	0.5	0.1	1.7	0.4	1.0

^a Values are reported as percentages. Holding values are percentages of the potential assessment time. Unless otherwise specified, other values are normalized by the total holding time at each visit. FT=full-term, PT no BI=preterm without significant brain injury, PTBI=preterm with significant brain injury.

^b Values are reported as counts per minute.

Impaired Object Exploration Behaviors in Infants Born Preterm

eTable 3.

Analyses of Whether Infants Born at Various Terms Exhibited Behaviors Differently With Objects Expected to Elicit Different Levels of Behavior^a

Behavior	Group	Statistic	Corrected Age (mo)									
			0	1.5	3	4	6	9	12	18	24	
Overall behavioral performance	FT	t_{21}	4.88	5.55	6.39	6.66	7.48	6.67	5.12	4.72	5.01	
		P	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
		r	.73	.77	.81	.82	.85	.82	.75	.72	.74	
		CI lower	6.30	5.26	4.64	4.30	3.57	2.80	2.43	2.83	3.65	
		CI upper	7.88	6.83	6.22	5.87	5.15	4.37	4.01	4.40	5.23	
	PT no BI	t_{21}	6.45	6.72	7.17	7.49	7.98	8.44	8.40	6.88	5.09	
		P	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	
		r	.82	.83	.85	.85	.87	.88	.88	.83	.74	
		CI lower	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.15	0.14	
		CI upper	0.31	0.32	0.31	0.31	0.31	0.30	0.30	0.29	0.28	
	PTBI	t_5	ns	ns	ns	ns	ns	ns	ns	ns	ns	
		P										
		r										
		CI lower										
		CI upper										
	Combination behaviors: duration	FT	t_{21}	ns	ns	2.92	3.32	3.83	4.54	5.34	6.08	5.3
			P			.003	.001	.0004	.0001	<.0001	<.0001	<.0001
r					.54	.59	.64	.70	.77	.80	.77	
CI lower					0.03	0.03	0.01	0.01	0.01	0.01	0.01	
CI upper					0.06	0.06	0.05	0.04	0.04	0.04	0.04	
PT no BI		t_{21}	ns	ns	ns	ns	ns	3.62	3.29	2.38	ns	
		P						.0008	.002	.01		
		r						.62	.58	.46		
		CI lower						0.13	0.20	0.32		
		CI upper						0.38	0.45	0.57		
PTBI		t_5	ns	ns	ns	ns	ns	ns	ns	ns	ns	
		P										
		r										
		CI lower										
		CI upper										
Combination behaviors: variability		FT	t_{21}	ns	ns	ns	2.21	2.87	3.76	4.29	4.65	4.52
			P				.01	.004	.0005	.0001	<.0001	.0001
	r					.43	.53	.63	.68	.71	.70	
	CI lower					0.01	0.06	0.14	0.21	0.37	0.52	
	CI upper					0.40	0.46	0.54	0.61	0.76	0.92	
	PT no BI	t_{21}	ns	ns	ns	ns	2.47	3.62	3.29	ns	ns	
		P					.01	.0007	.001			
		r					.47	.62	.58			
		CI lower					0.06	0.03	0.03			
		CI upper					0.20	0.18	0.17			
	PTBI	t_5	ns	ns	ns	ns	ns	ns	ns	ns	ns	
		P										
		r										
		CI lower										
		CI upper										

(Continued)

Impaired Object Exploration Behaviors in Infants Born Preterm

eTable 3.
Continued

Behavior	Group	Statistic	Corrected Age (mo)									
			0	1.5	3	4	6	9	12	18	24	
Bilateral holding	FT	t_{21}	ns	ns	ns	ns	ns	ns	2.99	3.75	3.60	ns
		P							.003	.0005	.0005	
		r							.55	.63	.62	
		CI lower							0.08	0.15	0.08	
		CI upper							0.38	0.46	0.39	
	PT no BI	t_{21}	ns	ns	ns	ns	ns	ns	ns	2.92	2.90	ns
		P								.004	.004	
		r								.54	.53	
		CI lower								0.01	0.03	
		CI upper								0.36	0.39	
	PTBI	t_5	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
		P										
		r										
		CI lower										
		CI upper										
Touching the body	FT	t_{21}	4.91	5.61	5.68	5.52	4.98	9.29	9.77	6.77	4.10	
		P	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	.0002
		r	.73	.77	.78	.77	.74	.90	.91	.83	.67	
		CI lower	4.12	4.03	3.95	3.87	3.75	3.56	3.37	2.99	2.68	
		CI upper	5.29	5.19	5.11	5.03	4.91	4.72	4.55	4.16	3.85	
	PT no BI	t_{21}	3.97	5.09	6.15	6.05	4.54	2.96	2.54	3.97	4.46	
		P	.0003	<.0001	<.0001	<.0001	.0001	.003	.009	.0003	.0001	
		r	.65	.74	.80	.80	.70	.54	.48	.65	.70	
		CI lower	0.45	0.41	0.32	0.28	0.22	0.17	0.16	0.29	0.60	
		CI upper	0.80	0.76	0.66	0.62	0.57	0.51	0.51	0.64	0.95	
	PTBI	t_5	ns	ns	ns	ns	3.16	ns	ns	ns	ns	
		P					.009					
		r					.82					
		CI lower					-0.20					
		CI upper					0.61					
Looking	FT	t_{21}	ns	ns	ns	ns	ns	3.72	6.25	6.41	2.41	
		P						.0005	<.0001	<.0001	.01	
		r						.63	.81	.81	.47	
		CI lower						0.17	0.38	0.46	0.08	
		CI upper						0.78	0.99	1.06	0.68	
	PT no BI	t_{21}	ns	ns	ns	ns	ns	ns	3.29	5.78	5.91	
		P							.003	<.0001	<.0001	
		r							.58	.78	.79	
		CI lower							0.02	0.36	0.70	
		CI upper							0.41	0.76	1.10	
	PTBI	t_5	ns	ns	ns	ns	ns	ns	ns	3.48	ns	
		P								.007		
		r								.84		
		CI lower								0.20		
		CI upper								0.85		

(Continued)

Impaired Object Exploration Behaviors in Infants Born Preterm

eTable 3.
Continued

Behavior	Group	Statistic	Corrected Age (mo)								
			0	1.5	3	4	6	9	12	18	24
Cyclical movement	FT	t_{21}	ns	ns	2.22	2.30	2.38	2.37	2.20	ns	ns
		P			.01	.01	.01	.01	.01		
		r			.44	.45	.46	.46	.43		
		CI lower			0.55	0.65	0.83	1.08	1.35		
		CI upper			1.24	1.35	1.52	1.78	2.05		
	PT no BI	t_{21}	ns	ns	ns	ns	ns	4.10	3.84	4.26	3.35
		P						.0002	.0004	.0001	.001
		r						.67	.64	.68	.59
		CI lower						1.32	0.74	1.01	0.85
		CI upper						1.82	1.23	1.51	1.34
	PTBI	t_5	ns	ns	ns	ns	ns	ns	2.95	3.50	4.98
		P							.01	.006	.001
		r							.80	.84	.91
		CI lower							0.46	0.75	2.56
		CI upper							1.51	1.80	3.61
Fingering	FT	t_{21}	ns	ns	ns	ns	ns	ns	2.33	ns	ns
		P							.01		
		r							.45		
		CI lower							0.60		
		CI upper							1.05		
	PT no BI	t_{21}	ns	ns	ns	ns	ns	ns	ns	2.32	ns
		P								.01	
		r								.45	
		CI lower								0.51	
		CI upper								0.55	
	PTBI	t_5	ns	ns	ns	ns	ns	ns	ns	ns	5.06
		P									.001
		r									.91
		CI lower									0.90
		CI upper									1.99

^a Findings are reported only when significant (ns=not significant). FT=full-term, PT no BI=preterm without significant brain injury, PTBI=preterm with significant brain injury, r =effect size presented in terms of Pearson r , CI lower and CI upper=bounds of the 95% confidence interval for the difference between the means.