



# Quantitative Systems Laboratory

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## PARENTAL STRESS

### Child Care Data Report - 73

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*NICHD Study of Early Child Care*



## Parental Stress

### Separation Anxiety

The "Parental Care" questionnaire was used to assess separation anxiety in mothers at 24 months. This measure is a self-administered questionnaire consisting of 21 items. Item responses are scaled on a five-point Likert scale from 1 = "strongly disagree" to 5 = "strongly disagree". The variable SEPAXM24 represents the imputed sum of all 21 items. Item values range from 21 to 105, with higher values indicating higher levels of maternal separation anxiety.

Standard psychometric analyses for SEPAXM24 are reported in **Table 1**. Cronbach's alpha of .936 indicates that this variable has high internal reliability. The variable has moderate values for both skewness (0.42) and kurtosis (-0.10) and may be used in analyses that assume normality. Significant differences were reported for this variable between site 1 (California) and sites 8 (Western Carolina) and 6 (Virginia), and between site 0 (Arkansas) and sites 1(California), 3 (New Hampshire), 4 (Pennsylvania), 5 (Temple), 7 (Washington), and 9 (Wisconsin).

Correlation coefficients were computed for SEPAXM24 and SEPAXM01, SEPAXM06, and SEPAXM15. Coefficient values for these variables are reported in **Table 2**.

### Mothers' Experiences of Stress

Parenting Stress was assessed at 24 months using the "Parenting Experiences" questionnaire. The 20 items are scaled on a 4-point Likert scale ranging from 1 = "not at all a concern" to 4 = "extreme concern". The variable PAREXM24 is the imputed sum of all 20 questionnaire items.

Standard psychometric analyses for PAREXM24 are reported in **Table 3**. Internal reliability is high (Cronbach's alpha=.799). This variable has moderate values for both skewness (0.42) and kurtosis (-0.14) and may be used in analyses that assume normality. No significant site differences were reported for this variable.

Correlation coefficients were computed for PAREXM24 and PAREXM01, PAREXM06, and PAREXM15. Coefficient values for these variables are reported in **Table 4**.

TABLE 1						
Pod	Family					
Construct	Separation anxiety					
Age	24 months					
Data Form	F15E24					
Variable Definition	SEPAXM24= SEPSUM24= SUM (OF PCR24_01 - PCR24_21); IF NITEMS LT 17 THEN SEPAXM24=.; ELSE SEPAXM24=(21/NITEMS)*SEPSUM24;					
CRONBACH'S ALPHA						
No. of Variables	21					
Raw	.936					
Standardized	.937					
SUMMARY STATISTICS						
Site	N	Mean*	Std. Dev.	Skewness	Kurtosis	Missing
Sample	1115	63.40	13.75	0.42	-0.10	3
Ark - 0	115	68.48 <sup>1,3,4,5,7,8</sup>	13.98	0.19	-0.58	0
Cal - 1	102	57.68 <sup>8,6,0</sup>	9.92	0.26	-0.14	0
Kan - 2	116	62.94	12.44	0.60	-0.14	1
NHmp - 3	105	62.50 <sup>0</sup>	14.01	1.09	1.07	0
Penn - 4	119	62.71 <sup>0</sup>	14.79	0.43	-0.24	2
Temp - 5	117	62.28 <sup>0</sup>	13.33	0.37	-0.19	0
Vir - 6	101	65.87 <sup>1</sup>	15.04	0.04	-0.67	0
Wash - 7	116	62.52 <sup>0</sup>	13.32	0.39	0.33	0
WCar - 8	112	66.68 <sup>1</sup>	13.45	0.29	-0.48	0
Wisc - 9	112	62.05 <sup>0</sup>	14.05	0.16	0.26	0
ANOVA for SITE						
F(9 , 1105 ) = 5.31   p < .0000						

\*Means marked by site number differ significantly according to Tukey HSD.

**Table 2**

Pearson Correlation Coefficients / Prob >  R  under Ho: Rho=0 / Number of Observations				
	SEPAXM01	SEPAXM06	SEPAXM15	SEPAXM24
SEPAXM01	1.00000	0.70953	0.67891	0.65452
Separation Anxiety at 1 month	0.0	0.0001	0.0001	0.0001
	1351	1265	1229	1103
SEPAXM06	0.70953	1.00000	0.75570	0.71090
Separation Anxiety at 6 month	0.0001	0.0	0.0001	0.0001
	1265	1277	1221	1096
SEPAXM15	0.67891	0.75570	1.00000	0.78949
SEPARATION ANXIETY/MOM-15 MO	0.0001	0.0001	0.0	0.0001
	1229	1221	1241	1099
SEPAXM24	0.65452	0.71090	0.78949	1.00000
SEPARATION ANXIETY	0.0001	0.0001	0.0001	0.0
	1103	1096	1099	1115

TABLE 3						
Pod	Family					
Construct	Parental experiences					
Age	24 months					
Data Form	F15I24					
Variable Definition	PAREXM24= PARSUM24= SUM (of F28IQ1 - F28IQ20); IF NITEMS LT 16 THEN PAREXM24=.; ELSE PAREXM24= (20/NITEMS)*PARSUM24;					
CRONBACH'S ALPHA						
No. of Variables	20					
Raw	.799					
Standardized	.819					
SUMMARY STATISTICS						
Site	N	Mean	Std. Dev.	Skewness	Kurtosis	Missing
Sample	1112	34.33	6.59	0.42	-0.14	5
Ark - 0	115	34.89	7.13	0.67	-0.07	0
Cal - 1	100	34.79	6.67	0.38	-0.09	2
Kan - 2	115	34.35	6.67	0.41	-0.37	2
NHmp - 3	104	33.25	7.35	0.80	0.61	0
Penn - 4	120	33.34	5.92	0.08	-0.32	1
Temp - 5	117	34.62	7.00	0.44	-0.24	0
Vir - 6	101	34.71	6.35	0.02	-0.74	0
Wash - 7	116	35.04	5.99	0.17	-0.31	0
WCar - 8	112	34.10	6.24	0.43	0.02	0
Wisc - 9	112	34.20	6.53	0.46	-0.32	0
ANOVA for SITE						
F(9 , 1102 ) = 0.99    p < .4495						

**Table 4**

Pearson Correlation Coefficients / Prob > |R| under Ho: Rho=0 / Number of Observations

	PAREXM15	PAREXM24
PAREXM15	1.00000	0.63056
PARENTING STRESS/MOM-15 MO	0.0	0.0001
	1240	1096
PAREXM24	0.63056	1.00000
PARENTING STRESS/MOM	0.0001	0.0
	1096	1112