Breastfeeding Structural

Contents

1 Participant Characteristics

	Full Sample	Boys	Girsl
Total(*N*)	149	73	76
Age (*Mean [range], yrs*)	9.0 [7.1 - 12.0]	9.0 [7.1 - 12.0]	9.0 [7.1 - 11.8]
BMI (*Mean [range]*)	17.8 [13.8 - 31.9]	17.7 [13.9 - 31.9]	17.9 [13.8 - 25.9]
Percent of CDC 85th %tile (*Mean [range]*)	94.0 [70.1 - 168.8]	94.7 [72.7 - 168.8]	93.4 [70.1 - 131.1]
BMI %tile (*Mean [range]*)	59.9 [5 - 99]	59.3 [5 - 99]	60.5 [6.1 - 98]
Race(*N*)			
Black/AA	7	5	2
White	136	64	72
Other/Mixed	6	4	2
Ethnicity(*N*)			
Hispanic/Latino	6	3	3
Not H/L	120	59	61
NA	1	1	0
SES(*N*)			
>$100,000	49	26	23
$50,000-$100,000	69	30	39
<$50,000	28	16	12
NA	0	0	0
Maternal Education(*N*)			
$> BA$	50	22	28
BA	54	30	24
$Associates/Technical$	18	7	11
$HighSchool$	15	8	7
$Other/NA$	0	0	0
$< HighSchoolDiploma/GED$	0	0	0
Paternal Education(*N*)			
$> BA$	57	28	29
BA	38	22	16
$Associates/Technical$	15	5	10
$HighSchool$	23	9	14
$Other/NA$	1	1	0
$< HighSchoolDiploma/GED$	1	1	0
BreastFed 3cat(*N*)			
$> 6months$	54	24	30
$4 - 6months$	55	29	26
$0 - 3months$	40	20	20

2 3.1 Descriptive

3 3.2 Path Analyses

3.1 3.2.1 Path Model for Left Hippocampus (Figure 1B).

Table 1: Fit Statistics for Model: BF -> SR (L Hipp Med) -> p85th BMI

	x
chisq	3.647
df	3.000
pvalue	0.302
baseline.chisq	139.160
baseline.df	30.000
baseline.pvalue	0.000
cfi	0.994
tli	0.941
logl	1.781
bic2	47.807
rmsea	0.041
rmsea.ci.lower	0.000
rmsea.ci.upper	0.158
rmsea.pvalue	0.439
srmr	0.012

Table 2: Parameters for Model: BF -> SR (L Hipp Med) -> p85th BMI

lhs	op	rhs	est	se	z	pvalue
cebq_SR	~	mEducation_dummy	-0.030	0.056	-0.528	0.597
cebq_SR	~	income_dummy	0.233	0.082	2.849	0.004
cebq_SR	~	cPreMat_dummy	-0.182	0.153	-1.187	0.235
cebq_SR	~	BreastFed_3cat_dummy	0.012	0.065	0.186	0.853
cebq_SR	~	TIV	0.000	0.001	-0.436	0.663
cebq_SR	~	IQR	0.142	0.391	0.362	0.717
cebq_SR	~	Study_dummy	0.020	0.037	0.544	0.586
cebq_SR	~	cAge_yr	-0.019	0.044	-0.436	0.663
cebq_SR	~	sex_dummy	0.107	0.114	0.936	0.349
cebq_SR	~	lHip_21	-0.178	0.292	-0.609	0.542
lHip_21	~	TIV	0.001	0.000	9.276	0.000
lHip_21	~	IQR	0.071	0.117	0.607	0.544
lHip_21	~	Study_dummy	-0.012	0.011	-1.077	0.282
lHip_21	~	cAge_yr	0.038	0.013	3.036	0.002
lHip_21	~	sex_dummy	-0.008	0.034	-0.250	0.803
lHip_21	~	cPreMat_dummy	-0.038	0.046	-0.820	0.412
lHip_21	~	BreastFed_3cat_dummy	0.038	0.019	2.015	0.044
cdc_p85th	~	TIV	0.000	0.000	2.113	0.035
cdc_p85th	~	IQR	-0.017	0.098	-0.169	0.866
cdc_p85th	~	Study_dummy	-0.002	0.009	-0.220	0.826
cdc_p85th	~	cAge_yr	0.017	0.011	1.556	0.120
cdc_p85th	~	sex_dummy	-0.004	0.029	-0.157	0.876
cdc_p85th	~	lHip_21	-0.143	0.072	-1.981	0.048
cdc_p85th	~	mEducation_dummy	-0.051	0.014	-3.660	0.000
cdc_p85th	~	income_dummy	0.020	0.021	0.938	0.348
cdc_p85th	~	cPreMat_dummy	-0.038	0.039	-0.992	0.321
cdc_p85th	~	cebq_SR	-0.046	0.022	-2.119	0.034
cebq_SR	~~	cebq_SR	0.326	0.040	8.093	0.000
lHip_21	~~	lHip_21	0.029	0.004	8.093	0.000
cdc_p85th	~~	cdc_p85th	0.021	0.003	8.093	0.000
mEducation_dummy	~~	mEducation_dummy	1.061	0.000	NA	NA
mEducation_dummy	~~	income_dummy	0.346	0.000	NA	NA
mEducation_dummy	~~	cPreMat_dummy	0.011	0.000	NA	NA
mEducation_dummy	~~	BreastFed_3cat_dummy	-0.005	0.000	NA	NA
mEducation_dummy	~~	TIV	19.152	0.000	NA	NA

```
    Welch Two Sample t-test

data:  lHip_21 by BreastFed_3cat
t = -2.2487, df = 81.543, p-value = 0.02723
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.22310028 -0.01364641
sample estimates:
mean in group 0-3mo mean in group 4-6mo
           2.865345            2.983718


    Welch Two Sample t-test

data:  lHip_21 by BreastFed_3cat
t = -1.0931, df = 103.96, p-value = 0.2769
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.14392165  0.04163658
sample estimates:
 mean in group >6mo mean in group 4-6mo
           2.932576            2.983718


    Welch Two Sample t-test

data:  lHip_21 by BreastFed_3cat
t = 1.2874, df = 80.56, p-value = 0.2016
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.03668236  0.17114399
sample estimates:
 mean in group >6mo mean in group 0-3mo
           2.932576            2.865345

    >6mo    0-3mo    4-6mo
2.932576 2.865345 2.983718
```

Table 3: Fit Statistics for Model: BF -> SR (L Hipp Med) -> p85th BMI

	x
chisq	0.937
df	1.000
pvalue	0.333
baseline.chisq	139.160
baseline.df	30.000
baseline.pvalue	0.000
cfi	1.000
tli	1.017
logl	3.136
bic2	48.521
rmsea	0.000
rmsea.ci.lower	0.000
rmsea.ci.upper	0.228
rmsea.pvalue	0.408
srmr	0.008

Table 4: Parameters for Model: BF -> SR (L Hipp Med) -> p85th BMI

lhs	op	rhs	est	se	z	pvalue
cebq_SR	~	mEducation_dummy	-0.030	0.056	-0.524	0.600
cebq_SR	~	income_dummy	0.233	0.082	2.830	0.005
cebq_SR	~	cPreMat_dummy	-0.182	0.153	-1.188	0.235
cebq_SR	~	BreastFed_3cat_dummy	0.012	0.065	0.186	0.852
cebq_SR	~	TIV	0.000	0.001	-0.433	0.665
cebq_SR	~	IQR	0.142	0.391	0.362	0.717
cebq_SR	~	Study_dummy	0.020	0.037	0.544	0.586
cebq_SR	~	cAge_yr	-0.019	0.044	-0.436	0.663
cebq_SR	~	sex_dummy	0.107	0.114	0.936	0.349
cebq_SR	~	lHip_21	-0.178	0.295	-0.603	0.546
lHip_21	~	mEducation_dummy	-0.025	0.017	-1.481	0.139
lHip_21	~	income_dummy	0.032	0.024	1.329	0.184
lHip_21	~	TIV	0.001	0.000	9.237	0.000
lHip_21	~	IQR	0.082	0.116	0.711	0.477
lHip_21	~	Study_dummy	-0.011	0.011	-1.041	0.298
lHip_21	~	cAge_yr	0.038	0.013	3.054	0.002
lHip_21	~	sex_dummy	-0.005	0.034	-0.145	0.884
lHip_21	~	cPreMat_dummy	-0.035	0.045	-0.778	0.436
lHip_21	~	BreastFed_3cat_dummy	0.034	0.019	1.762	0.078
cdc_p85th	~	TIV	0.000	0.000	2.098	0.036
cdc_p85th	~	IQR	-0.017	0.098	-0.169	0.866
cdc_p85th	~	Study_dummy	-0.002	0.009	-0.220	0.826
cdc_p85th	~	cAge_yr	0.017	0.011	1.554	0.120
cdc_p85th	~	sex_dummy	-0.004	0.029	-0.157	0.876
cdc_p85th	~	lHip_21	-0.143	0.073	-1.955	0.051
cdc_p85th	~	mEducation_dummy	-0.051	0.014	-3.624	0.000
cdc_p85th	~	income_dummy	0.020	0.021	0.929	0.353
cdc_p85th	~	cPreMat_dummy	-0.038	0.039	-0.992	0.321
cdc_p85th	~	cebq_SR	-0.046	0.022	-2.119	0.034
cebq_SR	~~	cebq_SR	0.326	0.040	8.093	0.000
lHip_21	~~	lHip_21	0.029	0.004	8.093	0.000
cdc_p85th	~~	cdc_p85th	0.021	0.003	8.093	0.000
mEducation_dummy	~~	mEducation_dummy	1.061	0.000	NA	NA
mEducation_dummy	~~	income_dummy	0.346	0.000	NA	NA
mEducation_dummy	~~	cPreMat_dummy	0.011	0.000	NA	NA

3.2 3.2.2 Path Model for Right Hippocampus (Figure 1C).

Table 5: Fit Statistics for Model: BF -> SR (R Hipp Med) -> p85th BMI

	x
chisq	2.722
df	3.000
pvalue	0.437
baseline.chisq	123.876
baseline.df	30.000
baseline.pvalue	0.000
cfi	1.000
tli	1.030
logl	-22.594
bic2	96.556
rmsea	0.000
rmsea.ci.lower	0.000
rmsea.ci.upper	0.142
rmsea.pvalue	0.571
srmr	0.012

```
    Welch Two Sample t-test

data:  rHip_22 by BreastFed_3cat
t = -2.1699, df = 83.953, p-value = 0.03284
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.25074294 -0.01092919
sample estimates:
mean in group 0-3mo mean in group 4-6mo
           3.180627            3.311463


    Welch Two Sample t-test

data:  rHip_22 by BreastFed_3cat
t = -0.42339, df = 103.51, p-value = 0.6729
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.12985583  0.08416378
sample estimates:
 mean in group >6mo mean in group 4-6mo
           3.288617            3.311463


    Welch Two Sample t-test

data:  rHip_22 by BreastFed_3cat
t = 1.8426, df = 80.697, p-value = 0.06906
alternative hypothesis: true difference in means is not equal to 0
```

Table 6: Parameters for Model: BF -> SR (R Hipp Med) -> p85th BMI

lhs	op	rhs	est	se	z	pvalue
cebq_SR	~	mEducation_dummy	-0.027	0.056	-0.479	0.632
cebq_SR	~	income_dummy	0.233	0.082	2.841	0.004
cebq_SR	~	cPreMat_dummy	-0.181	0.153	-1.181	0.238
cebq_SR	~	BreastFed_3cat_dummy	0.013	0.066	0.202	0.840
cebq_SR	~	TIV	0.000	0.001	-0.513	0.608
cebq_SR	~	IQR	0.139	0.391	0.355	0.722
cebq_SR	~	Study_dummy	0.020	0.037	0.538	0.591
cebq_SR	~	cAge_yr	-0.021	0.043	-0.481	0.630
cebq_SR	~	sex_dummy	0.106	0.114	0.929	0.353
cebq_SR	~	rHip_22	-0.142	0.245	-0.577	0.564
rHip_22	~	TIV	0.002	0.000	8.442	0.000
rHip_22	~	IQR	0.079	0.139	0.566	0.571
rHip_22	~	Study_dummy	-0.017	0.013	-1.326	0.185
rHip_22	~	cAge_yr	0.035	0.015	2.356	0.018
rHip_22	~	sex_dummy	-0.012	0.040	-0.286	0.775
rHip_22	~	cPreMat_dummy	-0.036	0.055	-0.666	0.505
rHip_22	~	BreastFed_3cat_dummy	0.055	0.023	2.425	0.015
cdc_p85th	~	TIV	0.000	0.000	1.400	0.162
cdc_p85th	~	IQR	-0.024	0.099	-0.238	0.812
cdc_p85th	~	Study_dummy	-0.001	0.010	-0.140	0.889
cdc_p85th	~	cAge_yr	0.014	0.011	1.244	0.214
cdc_p85th	~	sex_dummy	-0.005	0.029	-0.172	0.864
cdc_p85th	~	rHip_22	-0.053	0.061	-0.876	0.381
cdc_p85th	~	mEducation_dummy	-0.048	0.014	-3.398	0.001
cdc_p85th	~	income_dummy	0.016	0.021	0.765	0.444
cdc_p85th	~	cPreMat_dummy	-0.035	0.039	-0.896	0.370
cdc_p85th	~	cebq_SR	-0.045	0.022	-2.038	0.042
cebq_SR	~~	cebq_SR	0.326	0.040	8.093	0.000
rHip_22	~~	rHip_22	0.041	0.005	8.093	0.000
cdc_p85th	~~	cdc_p85th	0.021	0.003	8.093	0.000
mEducation_dummy	~~	mEducation_dummy	1.061	0.000	NA	NA
mEducation_dummy	~~	income_dummy	0.346	0.000	NA	NA
mEducation_dummy	~~	cPreMat_dummy	0.011	0.000	NA	NA
mEducation_dummy	~~	BreastFed_3cat_dummy	-0.005	0.000	NA	NA
mEducation_dummy	~~	TIV	19.152	0.000	NA	NA

```
95 percent confidence interval:
 -0.008626495  0.224606571
sample estimates:
 mean in group >6mo mean in group 0-3mo
           3.288617            3.180627

    >6mo    0-3mo    4-6mo
3.288617 3.180627 3.311463
```

Table 7: Fit Statistics for Model: BF -> SR (R Hipp Med) -> p85th BMI

	x
chisq	1.203
df	1.000
pvalue	0.273
baseline.chisq	123.876
baseline.df	30.000
baseline.pvalue	0.000
cfi	0.998
tli	0.935
logl	-21.834
bic2	98.462
rmsea	0.039
rmsea.ci.lower	0.000
rmsea.ci.upper	0.239
rmsea.pvalue	0.347
srmr	0.010

Table 8: Parameters for Model: BF -> SR (R Hipp Med) -> p85th BMI

lhs	op	rhs	est	se	z	pvalue
cebq_SR	~	mEducation_dummy	-0.027	0.056	-0.478	0.632
cebq_SR	~	income_dummy	0.233	0.082	2.825	0.005
cebq_SR	~	cPreMat_dummy	-0.181	0.153	-1.181	0.238
cebq_SR	~	BreastFed_3cat_dummy	0.013	0.066	0.202	0.840
cebq_SR	~	TIV	0.000	0.001	-0.514	0.607
cebq_SR	~	IQR	0.139	0.391	0.355	0.722
cebq_SR	~	Study_dummy	0.020	0.037	0.538	0.590
cebq_SR	~	cAge_yr	-0.021	0.043	-0.481	0.631
cebq_SR	~	sex_dummy	0.106	0.114	0.929	0.353
cebq_SR	~	rHip_22	-0.142	0.247	-0.574	0.566
rHip_22	~	mEducation_dummy	-0.011	0.020	-0.571	0.568
rHip_22	~	income_dummy	0.036	0.029	1.236	0.217
rHip_22	~	TIV	0.001	0.000	8.194	0.000
rHip_22	~	IQR	0.084	0.138	0.607	0.544
rHip_22	~	Study_dummy	-0.016	0.013	-1.197	0.231
rHip_22	~	cAge_yr	0.036	0.015	2.400	0.016
rHip_22	~	sex_dummy	-0.012	0.040	-0.290	0.772
rHip_22	~	cPreMat_dummy	-0.036	0.054	-0.671	0.502
rHip_22	~	BreastFed_3cat_dummy	0.050	0.023	2.200	0.028
cdc_p85th	~	TIV	0.000	0.000	1.403	0.161
cdc_p85th	~	IQR	-0.024	0.099	-0.238	0.812
cdc_p85th	~	Study_dummy	-0.001	0.010	-0.140	0.888
cdc_p85th	~	cAge_yr	0.014	0.011	1.242	0.214
cdc_p85th	~	sex_dummy	-0.005	0.029	-0.172	0.864
cdc_p85th	~	rHip_22	-0.053	0.062	-0.868	0.385
cdc_p85th	~	mEducation_dummy	-0.048	0.014	-3.391	0.001
cdc_p85th	~	income_dummy	0.016	0.021	0.758	0.448
cdc_p85th	~	cPreMat_dummy	-0.035	0.039	-0.896	0.370
cdc_p85th	~	cebq_SR	-0.045	0.022	-2.038	0.042
cebq_SR	~~	cebq_SR	0.326	0.040	8.093	0.000
rHip_22	~~	rHip_22	0.041	0.005	8.093	0.000
cdc_p85th	~~	cdc_p85th	0.021	0.003	8.093	0.000
mEducation_dummy	~~	mEducation_dummy	1.061	0.000	NA	NA
mEducation_dummy	~~	income_dummy	0.346	0.000	NA	NA
mEducation_dummy	~~	cPreMat_dummy	0.011	0.000	NA	NA