

Supplementary Material

Associations Between Parity and Cognition: Race/Ethnic Differences

<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Latinas (ref.)								
NLW	1.21	0.006	0.59	0.009	1.53	0.002	8.92	<0.001
NLB	0.03	0.948	-0.10	0.674	-2.06	<0.001	-0.70	0.635
Parity	0.06	0.673	-0.01	0.910	0.19	0.173	-0.25	0.531
Parity quadratic	0.01	0.844	0.00	0.812	-0.09	0.009	-0.18	0.076
Observations	780		780		776		746	
R ² / R ² adjusted	0.251 / 0.233		0.183 / 0.164		0.309 / 0.293		0.511 / 0.499	

Supplemental Model Sets 1: Main effect examination of the non-linear relationships between parity (quadratic), race, and cognitive outcomes

NLW, Non-Latino White; NLB, Non-Latino Black

All models were adjusted for: age at cognitive testing, age at first pregnancy, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history. Bold values denote statistical significance at the $p < 0.05$ level.

Non-Latino White								
<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Parity	-0.01	0.952	-0.07	0.447	0.15	0.480	0.62	0.297
Parity quadratic	0.04	0.531	0.03	0.320	-0.15	0.017	-0.40	0.030
Observations	431		431		428		421	
R ² / R ² adjusted	0.226 / 0.196		0.190 / 0.159		0.324 / 0.297		0.428 / 0.405	

Latina								
<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Parity	-0.04	0.861	-0.06	0.604	0.31	0.267	-1.59	0.053
Parity quadratic	0.03	0.531	0.01	0.788	-0.16	0.014	-0.03	0.886
Observations	179		178		177		162	
R ² / R ² adjusted	0.416 / 0.359		0.294 / 0.224		0.277 / 0.204		0.639 / 0.600	

Non-Latino Black								
<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Parity	0.25	0.456	0.10	0.503	0.06	0.851	-1.05	0.209
Parity quadratic	-0.06	0.507	-0.02	0.697	-0.01	0.916	0.11	0.669
Observations	170		171		171		163	
R ² / R ² adjusted	0.183 / 0.097		0.219 / 0.137		0.214 / 0.133		0.447 / 0.387	

Supplemental Model Sets 2: Non-linear associations between parity (quadratic) and cognition stratified by Race/ethnicity

All models were adjusted for: age at cognitive testing, age at first pregnancy, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history.

Bold values denote statistical significance at the $p < 0.05$ level.

<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Parity	0.15	0.535	0.03	0.840	0.25	0.416	-1.15	0.165
Parity quadratic	0.01	0.858	0.00	0.908	-0.15	0.037	-0.14	0.479
MESA Acculturation total score	0.28	0.388	0.18	0.308	0.29	0.469	1.27	0.224
Cog tests taken in English (Ref.)								
Cog tests taken in Spanish	-1.81	0.044	-0.49	0.315	0.66	0.552	-6.96	0.017
Observations	171		170		169		156	
R ² / R ² adjusted	0.445 / 0.379		0.299 / 0.215		0.250 / 0.160		0.671 / 0.628	

Supplemental Model Sets 3: Examination of the effect of acculturation and preferred language during cognitive testing in the association between parity (quadratic) and cognitive outcomes among Latinas

All models were adjusted for: age at cognitive testing, age at first pregnancy, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history.
 Bold values denote statistical significance at the p < 0.05 level.

<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Latinas (ref.)								
NLW	1.13	0.007	0.51	0.015	1.51	0.001	8.89	<0.001
NLB	-0.03	0.947	-0.15	0.525	-2.06	<0.001	-1.15	0.416
Parity	0.06	0.450	-0.03	0.453	0.00	0.986	-0.50	0.052
Observations	856		856		853		823	
R ² / R ² adjusted	0.249 / 0.235		0.196 / 0.180		0.297 / 0.283		0.515 / 0.505	

Supplemental Model Sets 4: Main effect examination of the non-linear relationships between parity, race, and cognitive outcomes among parous and nulliparous women

NLW, Non-Latino White; NLB, Non-Latino Black

All models were adjusted for: age at cognitive testing, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history. Bold values denote statistical significance at the $p < 0.05$ level.

<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Latinas (ref.)								
NLW	1.12	0.008	0.51	0.016	1.51	0.001	8.88	<0.001
NLB	-0.06	0.893	-0.15	0.505	-2.05	<0.001	-1.30	0.358
Parity	-0.06	0.653	-0.07	0.341	-0.01	0.950	-1.11	0.014
Latina by Parity (ref.)								
NLW by Parity	0.17	0.340	0.04	0.669	-0.04	0.834	1.04	0.069
NLB by Parity	0.21	0.316	0.08	0.463	0.11	0.630	0.62	0.336
Observations	856		856		853		823	
R ² / R ² adjusted	0.251 / 0.234		0.196 / 0.179		0.297 / 0.282		0.517 / 0.506	

Supplemental Model Sets 5: Race-by-parity interactions in the association between parity and cognitive outcomes among parous and nulliparous women

NLW, Non-Latino White; NLB, Non-Latino Black

All models were adjusted for: age at cognitive testing, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history.

Bold values denote statistical significance at the $p < 0.05$ level.

Non-Latino White									
	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol		
<i>Predictors</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	
Parity	0.10	0.426	-0.05	0.439	-0.01	0.952	-0.23	0.559	
Observations	474		474		471		465		
R ² / R ² adjusted	0.224 / 0.201		0.190 / 0.165		0.295 / 0.274		0.423 / 0.405		
Latina									
	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol		
<i>Predictors</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	
Parity	0.03	0.830	-0.05	0.502	-0.08	0.647	-0.99	0.030	
Observations	193		192		191		177		
R ² / R ² adjusted	0.407 / 0.360		0.298 / 0.243		0.250 / 0.191		0.640 / 0.608		
Non-Latino Black									
	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol		
<i>Predictors</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	
Parity	-0.01	0.950	-0.02	0.849	0.02	0.929	-0.35	0.498	
Observations	189		190		191		181		
R ² / R ² adjusted	0.182 / 0.116		0.243 / 0.182		0.201 / 0.137		0.467 / 0.422		

Supplemental Model Sets 6: Race/ethnicity stratified analysis in the associations between parity with cognition among parous and nulliparous women

All models were adjusted for: age at cognitive testing, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history. Bold values denote statistical significance at the $p < 0.05$ level.

<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Parity	0.15	0.281	0.02	0.828	-0.12	0.490	-0.75	0.106
MESA Acculturation total score	0.36	0.243	0.16	0.348	0.50	0.203	2.07	0.032
Cog tests taken in English (Ref.)								
Cog tests taken in Spanish	-1.61	0.058	-0.60	0.187	-0.12	0.490	-0.75	0.106
Observations	185		184		183		171	
R ² / R ² adjusted	0.436 / 0.382		0.305 / 0.239		0.239 / 0.166		0.675 / 0.641	

Supplemental Model Sets 7: Examination of the effect of acculturation and preferred language during cognitive testing in the association between parity and cognitive outcomes among parous and nulliparous Latinas

All models were adjusted for: age at cognitive testing, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history.

Bold values denote statistical significance at the $p < 0.05$ level.

<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Latinas (ref.)								
NLW	1.13	0.007	0.52	0.014	1.50	0.001	8.86	<0.001
NLB	-0.04	0.932	-0.16	0.487	-2.00	<0.001	-1.03	0.465
Parity	0.04	0.684	-0.07	0.170	0.15	0.176	-0.26	0.376
Parity quadratic	0.01	0.650	0.02	0.163	-0.07	0.010	-0.14	0.094
Observations	856		856		853		823	
R ² / R ² adjusted	0.250 / 0.234		0.197 / 0.181		0.302 / 0.288		0.517 / 0.506	

Supplemental Model Sets 8: Main effect examination of the non-linear relationships between parity (quadratic), race, and cognitive outcomes among parous and nulliparous women

NLW, Non-Latino White; NLB, Non-Latino Black

All models were adjusted for: age at cognitive testing, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history.

Bold values denote statistical significance at the $p < 0.05$ level.

Non-Latino White									
	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol		
<i>Predictors</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	
Parity	0.06	0.674	-0.10	0.136	0.18	0.265	0.01	0.974	
Parity quadratic	0.03	0.528	0.04	0.079	-0.13	0.011	-0.19	0.187	
Observations	474		474		471		465		
R ² / R ² adjusted	0.225 / 0.200		0.196 / 0.169		0.305 / 0.283		0.425 / 0.406		
Latina									
	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol		
<i>Predictors</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	
Parity	-0.01	0.970	-0.06	0.470	0.21	0.272	-0.75	0.147	
Parity quadratic	0.02	0.693	0.01	0.767	-0.14	0.006	-0.13	0.335	
Observations	193		192		191		177		
R ² / R ² adjusted	0.407 / 0.357		0.298 / 0.239		0.282 / 0.221		0.642 / 0.608		
Non-Latino Black									
	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol		
<i>Predictors</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	
Parity	0.03	0.914	-0.04	0.673	-0.01	0.978	-0.39	0.515	
Parity quadratic	-0.02	0.753	0.02	0.620	0.01	0.847	0.03	0.884	
Observations	189		190		191		181		
R ² / R ² adjusted	0.182 / 0.111		0.244 / 0.178		0.201 / 0.132		0.467 / 0.419		

Supplemental Model Sets 9: Non-linear associations between parity (quadratic) and cognition stratified by Race/ethnicity among parous and nulliparous women

All models were adjusted for: age at cognitive testing, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history. Bold values denote statistical significance at the $p < 0.05$ level.

<i>Predictors</i>	CERAD Word Learning		CERAD Delayed Recall		Animal Fluency		Digit Symbol	
	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>	<i>Estimates</i>	<i>p</i>
Parity	0.16	0.361	0.01	0.941	0.15	0.477	-0.31	0.557
Parity quadratic	0.00	0.960	0.00	0.855	-0.12	0.021	-0.22	0.109
MESA Acculturation total score	0.36	0.250	0.16	0.342	0.40	0.295	1.84	0.057
Cog tests taken in English (Ref.)								
Cog tests taken in Spanish	-1.61	0.063	-0.59	0.211	1.28	0.230	-6.15	0.024
Observations	185		184		183		171	
R ² / R ² adjusted	0.436 / 0.378		0.306 / 0.235		0.263 / 0.187		0.680 / 0.645	

Supplemental Model Sets 10: Examination of the effect of acculturation and preferred language during cognitive testing in the association between parity (quadratic) and cognitive outcomes among parous and nulliparous Latinas

All models were adjusted for: age at cognitive testing, age at last menstrual period, BMI, cardiovascular disease (CVD) composite score, poverty income ratio (PIR), depressive symptoms (PHQ), education, history of oral contraceptive use, hypertension history, diabetes history.

Bold values denote statistical significance at the $p < 0.05$ level.