

Li, Jianghong et al.

Article — Published Version

Non-linear relationship between maternal work hours and child body weight: Evidence from the Western Australian Pregnancy Cohort (Raine) Study

Social Science & Medicine

Provided in Cooperation with:

WZB Berlin Social Science Center

Suggested Citation: Li, Jianghong et al. (2017) : Non-linear relationship between maternal work hours and child body weight: Evidence from the Western Australian Pregnancy Cohort (Raine) Study, Social Science & Medicine, ISSN 0277-9536, Elsevier, Amsterdam, Vol. 186, pp. 52-60, <https://doi.org/10.1016/j.socscimed.2017.05.046>

This Version is available at:

<https://hdl.handle.net/10419/184856>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 1A. Descriptive statistics for time-variant variables.

	Age 2	Age 3	Age 5	Total Ages 2-5		Age 8	Age 10	Age 14	Total Ages 8-14
Child Overweight Status:									
Overweight or obese	25 (4.9)	143 (11.1)	238 (14.9)	406 (12.0)		277 (18.1)	344 (24.8)	277 (23.5)	898 (21.9)
Normal	485 (95.1)	1,149 (88.9)	1,356 (85.1)	2,990 (88.0)		1,256 (81.9)	1,041 (75.2)	903 (76.5)	3,200 (78.1)
Total	510	1,292	1,594	3,396		1,533	1,385	1,180	4,098
Mother's work hours:					Mother's work hours:				
Not employed	1,088 (68.0)	1,120 (63.7)	889 (51.8)	3,097 (61.1)	Not employed	730 (44.3)	483 (31.1)	310 (22.6)	1,523 (33.3)
1-24 hours	352 (22.0)	411 (23.6)	492 (28.5)	1,255 (24.7)	1-24 hours	512 (31.1)	573 (37.0)	449 (32.8)	1,534 (33.6)
25-34 hours	47 (2.9)	80 (4.5)	140 (8.2)	267 (5.3)	25-34 hours	185 (11.2)	229 (14.8)	261 (19.0)	675 (14.8)
35 or more hours	113 (7.1)	144 (8.2)	197 (11.5)	454 (9.0)	35-40 hours	161 (9.8)	190 (12.3)	254 (18.5)	605 (13.2)
Total	1,600	1,755	1,718	5,083	41 or more	59 (3.6)	76 (4.9)	97 (7.1)	232 (5.1)
					Total	1,647	1,551	1,371	4,569
Father's employment status:					Father's work hours:				
Not employed	246 (14.6)	234 (12.7)	184 (10.4)	664 (12.5)	Not employed	163 (10.3)	119 (7.8)	90 (6.6)	372 (8.3)
Employed	1,443 (85.4)	1,612 (87.3)	1,581 (89.6)	4,636 (87.5)	1 to 34 hours	108 (6.8)	148 (9.7)	111 (8.1)	367 (8.2)
Total	1,689	1,846	1,765	5,300	35 to 44 hours	647 (40.8)	612 (40.3)	584 (42.6)	1,843 (41.2)
					45 to 54 hours	358 (22.6)	394 (25.9)	344 (25.1)	1,096 (24.5)
					55 hours or more	309 (19.5)	246 (16.2)	243 (17.7)	798 (17.8)
					Total	1,585	1,519	1,372	4,476

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 1A continued.

	Age 2	Age 3	Age 5	Total Ages 2-5		Age 8	Age 10	Age 14	Total Ages 8-14
Number of siblings:					Number of siblings living in the home:				
0	373 (24.4)	305 (17.9)	219 (12.3)	897 (17.9)	0	229 (13.5)	317 (19.9)	494 (35.9)	1,040 (22.3)
1	801 (52.3)	903 (52.9)	885 (49.8)	2,589 (51.6)	1	787 (46.5)	713 (44.7)	540 (39.3)	2,040 (43.7)
2 or more	358 (23.4)	499 (29.2)	672 (37.8)	1,529 (30.5)	2 or more	678 (40.0)	567 (35.5)	341 (24.8)	1,586 (34.0)
Total	1,532	1,707	1,776	5,015	Total	1,694	1,597	1,375	4,666
Family income:					Family income:				
Low income	598 (38.0)	580 (32.8)	286 (17.1)	1,464 (29.2)	Low income (bottom 10%)	172 (11.7)	132 (8.5)	154 (11.4)	458 (10.5)
Medium income	494 (31.4)	559 (31.6)	514 (31.7)	1,567 (31.2)	Lower middle income (next 30%)	447 (30.4)	491 (31.7)	354 (26.3)	1,292 (29.6)
High income	482 (30.6)	631 (35.7)	876 (52.3)	1,989 (39.6)	Higher middle income (next 25%)	349 (23.7)	378 (24.4)	277 (20.6)	1,004 (23.0)
Total	1,574	1,770	1,676	5,020	High income (top 35%)	503 (34.2)	549 (35.4)	561 (41.7)	1,613 (36.9)
					Total	1,471	1,550	1,346	4,367
Child care attendance:					Mother ever treated for mental health problems:				
No	414 (59.0)	334 (29.6)	997 (56.9)	1,745 (48.7)	No	1,377 (82.0)	1,289 (81.4)	1,046 (76.6)	3,712 (80.2)
Yes	288 (41.0)	794 (70.4)	754 (43.1)	1,836 (51.3)	Yes	303 (18.0)	295 (18.6)	320 (23.4)	918 (19.8)
Total	702	1,128	1,751	3,581	Total	1,680	1,584	1,366	4,630

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 1A continued.

	Age 2	Age 3	Age 5	Total Ages 2-5	Age 8	Age 10	Age 14	Total Ages 8-14
Mother's occupation								
No job (student, housework, etc.) (ref.)	1,050 (63.7)	1,076 (59.3)	858 (49.4)	2,984 (57.4)	686 (41.1)	469 (29.9)	316 (23.2)	1,471 (32.0)
Managers and professionals	159 (9.7)	209 (11.5)	250 (14.4)	618 (11.9)	287 (17.2)	317 (20.2)	294 (21.6)	898 (19.5)
Para-professionals and trades workers	141 (8.6)	140 (7.7)	152 (8.8)	433 (8.3)	157 (9.4)	175 (11.2)	149 (10.9)	481 (10.4)
Clerical workers	147 (8.9)	195 (10.7)	228 (13.1)	570 (11.0)	257 (15.4)	326 (20.8)	319 (23.4)	902 (19.6)
Sales workers	104 (6.3)	123 (6.8)	159 (9.2)	386 (7.4)	172 (10.3)	176 (11.2)	184 (13.5)	532 (11.6)
Operators and labourers	47 (2.9)	73 (4.0)	91 (5.2)	211 (4.1)	111 (6.7)	106 (6.8)	102 (7.5)	319 (6.9)
Total	1,648	1,816	1,738	5,202	1,670	1,569	1,364	4,603

S-Table 1B. Descriptive statistics for time-invariant variables.

	Age 2	Age 3	Age 5	Total Ages 2-5	Age 8	Age 10	Age 14	Total Ages 8-14
Mother's ethnicity:								
Caucasian	1,537 (89.9)	1,677 (89.3)	1,598 (89.1)	4,812 (89.4)	1,515 (89.4)	1,436 (89.9)	1,251 (90.5)	4,202 (89.9)
Other	173 (10.1)	201 (10.7)	196 (10.9)	570 (10.6)	179 (10.6)	161 (10.1)	132 (9.5)	472 (10.1)
Total	1,710	1,878	1,794	5,382	1,694	1,597	1,383	4,674

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 1B continued.

	Age 2	Age 3	Age 5	Total Ages 2-5		Age 8	Age 10	Age 14	Total Ages 8-14
Mother's education at pregnancy					Mother's education at year 8				
None (ref.)	757 (45.0)	831 (45.0)	792 (44.8)	2,380 (44.0)	None (ref.)	384 (23.3)	333 (22.8)	266 (21.3)	983 (22.5)
Trade certificate	152 (9.0)	165 (8.9)	158 (8.9)	475 (8.8)	TEE (or equivalent)	297 (18.0)	252 (17.3)	206 (16.5)	755 (17.3)
Professional registration	194 (11.5)	202 (10.9)	193 (10.9)	589 (10.9)	Trade/apprenticeship or other	120 (7.3)	103 (7.1)	99 (7.9)	322 (7.4)
College diploma	299 (17.8)	322 (17.4)	319 (18.0)	940 (17.4)	Certificate from college, TAFE, or Diploma (>12 years)	501 (30.4)	448 (30.7)	397 (31.7)	1,346 (30.9)
University degree	209 (12.4)	240 (13.0)	227 (12.8)	676 (12.5)	University degree	348 (21.1)	324 (22.2)	284 (22.7)	956 (21.9)
Other type	72 (4.3)	88 (4.8)	79 (4.5)	239 (4.4)	Total	1,650	1,460	1,252	4,362
Total	1,683	1,848	1,874	5,405					
Mother's age at pregnancy:									
14-24	390 (22.8)	433 (23.0)	407 (22.7)	1,230 (22.9)		383 (22.6)	359 (22.5)	324 (23.4)	1,066 (22.8)
25-29	561 (32.8)	608 (32.4)	585 (32.6)	1,754 (32.6)		549 (32.4)	520 (32.6)	437 (31.6)	1,506 (32.2)
30-34	505 (29.5)	565 (30.1)	525 (29.3)	1,595 (29.6)		503 (29.7)	472 (29.6)	401 (29.0)	1,376 (29.4)
35 or over	255 (14.9)	273 (14.5)	277 (15.4)	805 (15.0)		259 (15.3)	472 (15.4)	221 (16.0)	726 (15.5)
Total	1,711	1,879	1,794	5,384		1,694	1,597	1,383	4,674

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 1B continued.

	Age 2	Age 3	Age 5	Total Ages 2-5	Age 8	Age 10	Age 14	Total Ages 8-14
Mother overweight/obese before pregnancy:								
No	1,296 (82.9)	1,423 (82.0)	1,356 (82.2)	4,075 (82.4)	1,279 (82.3)	1,217 (82.9)	1,054 (83.3)	3,550 (82.8)
Overweight	186 (11.9)	216 (12.5)	200 (12.1)	602 (12.2)	194 (12.5)	171 (11.7)	147 (11.6)	512 (11.9)
Obese	82 (5.2)	95 (5.5)	94 (5.7)	271 (5.5)	80 (5.2)	79 (5.4)	64 (5.1)	223 (5.2)
Total	1,564	1,734	1,650	4,948	1,553	1,467	1,265	4,285
Mother smokes (18 weeks pregnancy):								
No	1,334 (79.6)	1,472 (79.9)	1,408 (80.1)	4,214 (79.9)	1,321 (79.4)	1,264 (80.6)	1,087 (80.2)	3,672 (80.0)
1-10 cigarettes daily	207 (12.4)	220 (11.9)	211 (12.0)	638 (12.1)	203 (12.2)	187 (11.9)	162 (12.0)	552 (12.0)
11 or more cigarettes daily	134 (9.0)	150 (8.1)	140 (8.0)	424 (8.0)	140 (8.4)	118 (7.5)	107 (7.9)	365 (8.0)
Total	1,675	1,842	1,759	5,276	1,664	1,569	1,356	4,589
Child gender:								
Girl	815 (47.6)	917 (48.8)	865 (48.2)	2,597 (48.2)	827 (48.8)	766 (48.0)	612 (48.6)	2,265 (48.5)
Boy	896 (52.4)	962 (51.2)	929 (51.8)	2,787 (51.8)	867 (51.2)	831 (52.0)	711 (51.4)	2,409 (51.5)
Total	1,711	1,879	1,794	5,384	1,694	1,597	1,383	4,674
Birth weight – Mean (SD):	3317.74 (587.7)	3310.02 (589.0)	3311.81 (595.9)	3313.07 (590.81)	3316.81 (590.6)	3329.74 (590.3)	3317.85 (594.9)	3321.53 (591.7)
Total	1,708	1,875	1,791	5374	1,691	1,594	1,382	4,667
Follow-up:								
Total	1,711	1,879	1,794	5,384	1,694	1,597	1,383	4,674

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H. ODDY, FIONA STANLEY, LINDALL STRAZDINS. NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY. SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S - Table 2. Mothers' work hours and child overweight and obesity: Ages 2 to 5

	Imputed Data	
	Random effects Log Odds (Standard Error)	Fixed effects Log Odds (Standard Error)
Mother's work hours		
Not employed	-.14 (.60)	.26 (.41)
1-24 hours (ref.)		
25-34 hours	.48 (.43)	.19 (.66)
35 or more hours	.86* (.37)	.95 (.63)
Father's employment status		
Unemployed (ref.)		
Paid employment	.48 (.39)	-.26 (.83)
Family income		
Low income (ref.)		
Medium income	.10 (.30)	.79 (.55)
High income	.12 (.34)	1.09 (.69)
Siblings		
No siblings (ref.)		
One sibling	-.21 (.32)	-.03 (.65)
Two or more siblings	-.61 (.37)	-.03 (1.01)
Child attending any sort of child care centre or family day care?		
No (ref.)		
Yes	.40 (.25)	
Mother's age at 18 weeks pregnancy		
14-24 (ref.)		
25-29	.23 (.32)	
30-34	-.30 (.35)	
35 or over	-.52 (.42)	
Mother's ethnicity		
Other (ref.)		
Caucasian	.09 (.40)	
Mother's occupation		
No job (not employed, student, housework, etc.) (ref.)		
Managers and professionals	-.66 (.65)	
Para-professionals and trades workers	.09 (.67)	
Clerical workers	-.45 (.62)	
Sales workers	-.26 (.65)	
Operators and labourers	-1.18 (.81)	

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H. ODDY, FIONA STANLEY, LINDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

Mother's education at pregnancy		
None (ref.)		
Trade certificate	.51 (.41)	
Professional registration	-.02 (.44)	
College diploma	-.08 (.35)	
University degree	.45 (.42)	
Other type	.54 (.56)	
Mother overweight/obese before pregnancy		
No (ref.)		
Overweight	1.09** (.35)	
Obese	2.14** (.46)	
Mother smokes (18 week pregnancy)		
No (ref.)		
1-10 cigarettes daily	.07 (.37)	
11 or more cigarettes daily	1.38** (.41)	
Child gender		
Girl (ref.)		
Boy	-.88** (.24)	omitted (no within-group var)
Child birth weight		
	.0014** (.0002)	
Follow-up		
age 2 (ref.)		
age 3	1.55* (.36)	2.07** (.51)
age 5/6	2.36** (.37)	2.67** (.52)
Number of observations	3396	358
Number of groups	1936	165

+: $p < 0.10$; *: $p < 0.05$; **: $p < 0.01$.

Hausman test between Random effects and Fixed effects model: $p = 0.9999$

S - Table 2a. Marginal effects^a for mother's work hours: Ages 2 to 5

	Random effects Marginal Effects ^a (Standard Error)	Fixed effects Marginal Effects ^a (Standard Error)
Mother's work hours		
Not employed	.00 (.01)	.00 (.03)
1-24 hours (ref.)		
25-34 hours	.02 (.02)	.03 (.05)
35 or more hours	.02 (.01)	.05 (.05)
Number of observations	2105	295
Number of groups	1482	135

^a Marginal effects of categorical variables are discrete changes in predicted probabilities, that is, the difference between the predicted probability for the respective category and the predicted probability of the reference category.

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S -Table 3. Mothers' work hours and child overweight and obesity: Ages 2 to 5 by income group^a

	Low income families				High income families			
	Log Odds/ Imputed Data		Marginal Effects ^b / Non-imputed Data		Log Odds/ Imputed Data		Marginal Effects ^b / Non-imputed Data	
	Random Effects (SE)	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects (SE)
Mother's work hours								
Not employed	-.03 (.86)	.36 (.61)	.02 (.01)	.00 (.01)	.23 (.92)	.46 (.82)	.00 (.01)	.10 (.16)
1-24 hours (ref.)								
25-34 hours	.47 (.68)	.41 (1.35)	.02 (.03)	.01 (.02)	.60 (.62)	.81 (1.62)	.01 (.02)	.18 (.22)
35 or more hours	1.62** (.59)	1.34 (1.33)	.05 (.03)	.01 (.01)	.39 (.54)	.80 (.98)	.01 (.01)	.16 (.15)
Number of observations	1854	156	1050	140	1391	98	1058	90
Number of groups	1266	72	842	65	948	45	798	41

+: p < 0.10; *: p < 0.05; **: p < 0.01.

^a All stratified models included the control variables shown in Table 2.

^b Marginal effects of categorical variables are discrete changes in predicted probabilities, that is, the difference between the predicted probability for the respective category and the predicted probability of the reference category.

Hausman tests:

Low income families: p = 0.9482

High income families: p = 0.9646

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LINDALL STRAZDINS. NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY. SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 4. Mothers' work hours and child overweight and obesity: Ages 8 to 14

	Imputed Data	
	Random effects Log Odds (Standard Error)	Fixed Effects Log Odds (Standard Error)
Mother's work hours		
Not employed	-.23 (.70)	.30 (.47)
1-24 hours	.67* (.32)	.54 (.42)
25-34 hours	.62+ (.34)	.49 (.41)
35-40 hours (ref.)		
41 or more hours	1.61** (.48)	2.07** (.75)
Father's work hours		
Not working	.33 (.46)	.18 (.60)
1-34 hours	.05 (.37)	.05 (.46)
35-44 hours	.04 (.28)	-.04 (.38)
45-54 hours	-.12 (.28)	-.14 (.35)
55 or more hours (ref.)		
Siblings		
No siblings (ref.)		
One sibling	-.26 (.25)	.39 (.32)
Two or more siblings	-.97** (.31)	.11 (.44)
Family income		
Low income (bottom 10%) (ref.)		
Lower middle income (next 30%)	.23 (.32)	-.01 (.40)
Higher middle income (next 25%)	.49 (.34)	.42 (.45)
High income (top 35%)	.39 (.38)	.20 (.54)
Mother's occupation		
No job (not employed, student, housework, etc.) (ref.)		
Managers and professionals	-.87 (.69)	
Para-professionals and trades workers	-.67 (.73)	
Clerical workers	-.78 (.68)	
Sales workers	-.70 (.71)	
Operators and Labourers	-.37 (.72)	

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

Mother's age at 18 weeks pregnancy		
14-24 (ref.)		
25-29	-.12 (.37)	
30-34	-.14 (.39)	
35 or over	.003 (.465)	
Mother's ethnicity		
Other (ref.)		
Caucasian	-.47 (.44)	
Mother's education at year 8		
None (ref.)		
TEE (or equivalent)	-.14 (.44)	
Trade/apprenticeship or other	-.76 (.61)	
Certificate from college, TAFE, or Diploma (>12 years)	-.30 (.39)	
University degree	-.34 (.47)	
Mother smokes (18 week pregnancy)		
No (ref.)		
1-10 cigarettes daily	1.35* (.41)	
11 or more cigarettes daily	2.12** (.51)	
Mother overweight/obese before pregnancy		
No (ref.)		
Overweight	2.73** (.44)	
Obese	3.89** (.69)	
Mother ever treated for mental health problems		
No (ref.)		
Yes	-.10 (.26)	
Child birth weight	.00074* (.00023)	
Child gender		
Girl (ref.)		
Boy	-.16 (.27)	omitted (no within-group var)
Follow-up age 8 (ref.)		
age 10	1.21** (.19)	1.33** (.21)
age 13/14	.98** (.20)	1.19** (.23)
Number of observations	4013	621
Number of groups	1801	228

+: p < 0.10; *: p < 0.05; **: p < 0.01.

Hausman test: p = 0.0000

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 5. Mothers' work hours and child overweight /obesity: ages 8 to 14 by income group^a

	Low income families				High income families			
	Log Odds/ Imputed Data		Marginal Effects ^b / Non-imputed Data		Log Odds/ Imputed Data		Marginal Effects ^b / Non-imputed Data	
	Random Effects (SE)	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects (SE)
Mother's work hours								
Not employed	.94 (.97)	1.30 (.91)	.04* (.02)	.13+ (.07)	-1.91 (1.26)	.30 (.76)	-.01 (.01)	.12 (.10)
1-24 hours	1.41* (.57)	1.20 (.88)	.04* (.02)	.11 (.07)	.18 (.42)	.56 (.64)	.01 (.01)	.13 (.08)
25-34 hours	1.44* (.61)	1.63+ (.88)	.05* (.02)	.13+ (.08)	.27 (.43)	.31 (.58)	.01 (.01)	.08 (.09)
35-40 hours (ref.)								
41 or more	2.83** (.86)	3.06* (1.42)	.12* (.06)	.17+ (.10)	1.03+ (.60)	2.27+ (1.21)	.05 (.03)	.24** .09
Number of observations	2020	246	1745	227	1993	270	1719	242
Number of groups	1125	98	992	92	1027	103	901	93

+: p < 0.10; *: p < 0.05; **: p < 0.01.

^a All stratified models included the control variables shown in Table 4.

^b Marginal effects of categorical variables are discrete changes in predicted probabilities, that is, the difference between the predicted probability for the respective category and the predicted probability of the reference category.

Hausman tests:

Low income families: p = 0.6565

High income families: p = 0.1692

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H. ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 6. Mothers' work hours in FE and RE models: Ages 8 to 14.^a

Low and medium income families stratified by paternal working hours. Random Effects Regression.

	FWH < 45 hours		FWH ≥ 45 hours	
	Random effects		Random effects	
	Log Odds Imputed Data (SE)	Marginal Effects ^b Non-imputed Data (SE)	Log Odds Imputed Data (SE)	Marginal Effects ^b Non-imputed Data (SE)
Mother's work hours				
Not employed	1.71 (1.41)	.02 (.02)	0.02 (2.16)	.10** (.04)
1-24 hours	1.26 (.77)	.02 (.01)	3.74** (1.37)	.14** (.04)
25-34 hours	1.98* (.79)	.05+ (.02)	2.45+ (1.42)	.05 (.04)
35-40 hours (ref.)				
41 or more hours	2.97* (1.45)	.08 (.07)	5.10** (1.70)	.21* (.09)
Number of observations	1329	1184	628	561
Number of groups	851	773	458	406

+: p < 0.10; *: p < 0.05; **: p < 0.01.

^a All stratified models included the control variables shown in Table 4.

^b Marginal effects of categorical variables are discrete changes in predicted probabilities, that is, the difference between the predicted probability for the respective category and the predicted probability of the reference category.

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 7. Mother's work hours and child overweight and obesity: Ages 2 to 5 by maternal university education or not^a

	No Maternal Uni Education		Maternal University Education	
	Log Odds/Imputed Data		Log Odds/Imputed Data	
	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects	Random Effects (SE)
Mother's work hours				
Not employed	.21 (.44)	-.07 (.64)	model does not converge	-1.09 (1.79)
1-24 hours (ref.)				
25-34 hours	.20 (.71)	.35 (.47)		1.80 (1.26)
35 or more hours	.86 (.67)	.94* (.41)		.83 (1.08)
Number of observations	311	2955		441
Number of groups	144	1700		236

+: p < 0.10; *: p < 0.05; **: p < 0.01.

^a All stratified models included the control variables shown in Table 2.

Hausman tests:

No maternal uni education: Prob>chi2 = 1.0000

Maternal uni education: too few cases

SUPPLEMENTARY TABLES

ARTICLE: JIANGHONG LI, PLAMEN AKALIYSKI, JAKOB SCHÄFER, GARTH KENDALL, WENDY H.ODDY, FIONA STANLEY, LYNDALL STRAZDINS. **NON-LINEAR RELATIONSHIP BETWEEN MATERNAL WORK HOURS AND CHILD BODY WEIGHT: EVIDENCE FROM THE WESTERN AUSTRALIAN PREGNANCY COHORT (RAINE) STUDY.** SOCIAL SCIENCE & MEDICINE 2017, 186:52-60.

S-Table 8. Mother's work hours and child overweight and obesity: Ages 8 to 14 by maternal university education or not^a

	No Maternal Uni Education		Maternal University Education	
	Log Odds/Imputed Data		Log Odds/Imputed Data	
	Fixed Effects (SE)	Random Effects (SE)	Fixed Effects (SE)	Random Effects (SE)
Mother's work hours				
Not employed	.40 (.58)	-.82 (.86)	2.38 (1.46)	.88 (1.51)
1-24 hours	.76 (.52)	.71+ (.38)	1.03 (1.13)	.46 (.72)
25-34 hours	.94+ (.52)	.81* (.40)	.31 (.97)	.04 (.74)
35-40 hours (ref.)				
41 or more hours	2.24* (.94)	1.60** (.58)	5.32** (1.99)	2.20* (.96)
Number of observations	496	2955	117	852
Number of groups	182	1303	42	353

+: p < 0.10; *: p < 0.05; **: p < 0.01.

^a All stratified models included the control variables shown in Table 4.

Hausman tests:

No maternal uni education: Hausman test fails

Maternal uni education: Prob>chi2 = 0.6846