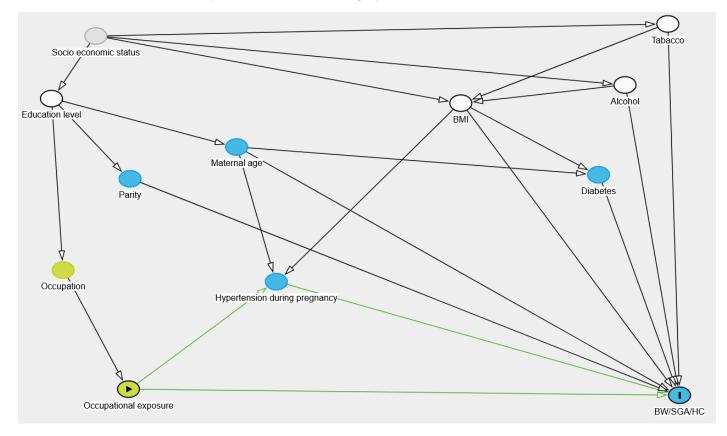
Profiles of maternal occupational exposome during pregnancy and association with intrauterine growth: analysis of the French Longitudinal Study of Children – ELFE study

APPENDICES

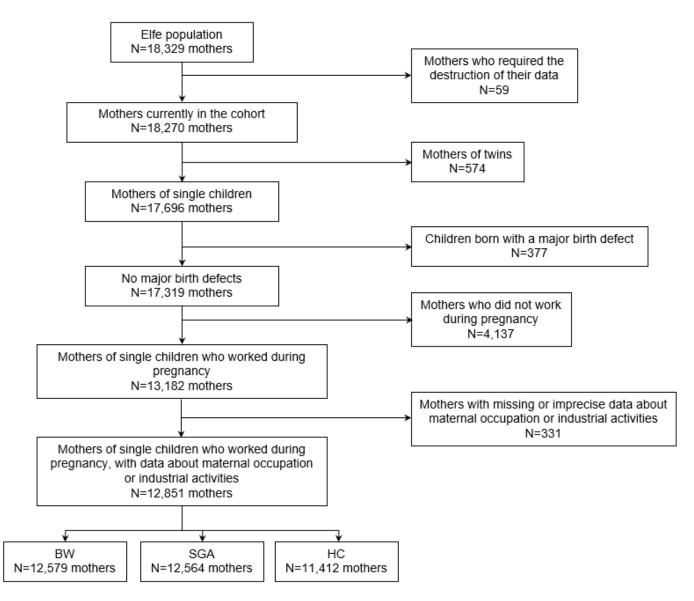
Appendix A. Directed acyclic graph representing the causal assumptions used for covariate selection. The DAG was created with DAGitty version 3.1 (http://dagitty.net/).



Legend:

- exposure
- outcome
- encestor of exposure
- ancestor of outcome
- ancestor of exposure and outcome
- O adjusted variable
- unobserved (latent)
- other variable
- causal path
- biasing path

Appendix B. Flow chart. ELFE study, France.



BW: birthweight

SGA: small for gestational age

HC: head circumference

Appendix C. Description of women excluded and included in the study.

| | | Populat | ion | | | |
|----------------------------------|-----------------|------------|------------------|------------|--|--|
| | Exclue N=5,4 | | Includ N=12,8 | | | |
| | N (%) | Mean (SD*) | N (%) | Mean (SD*) | | |
| Socio economic | | | | | | |
| Maternal age (years) | | 29.6 (5.7) | | 31.1 (4.7) | | |
| Unknown | 146 | | 52 | | | |
| Mother's nationality | | | | | | |
| French | 4,373 (82.7) | | 12,161 (95.5) | | | |
| Foreign | 915 (17.3) | | 571 (4.5) | | | |
| Stateless | 2 (0.0) | | 4 (0.0) | | | |
| Unknown | 188 | | 115 | | | |
| Maternal eduction level # | | | | | | |
| Low | 648 (12.2) | | 249 (1.9) | | | |
| High school | 2,628 (49.3) | | 3,692 (28.8) | | | |
| University | 2,056 (38.6) | | 8,863 (69.2) | | | |
| Unknown | 2,000 (00.0) | | 47 | | | |
| In a relationship | 4,761 (89.7) | | 12,287 (96.5) | | | |
| Unknown | 4,701 (03.7) | | 12,207 (90.3) | | | |
| Marital statut | 109 | | 120 | | | |
| Celibate | 2,288 (43.8) | | 4,474 (35.6) | | | |
| Partner | | | | | | |
| | 389 (7.4) | | 2,221 (17.7) | | | |
| Married | 2,470 (47.3) | | 5,733 (45.7) | | | |
| Divorced | 73 (1.4) | | 116 (0.9) | | | |
| Widow | 6 (0.1) | | 13 (0.1) | | | |
| Unknown | 252 | | 294 | | | |
| Monthly household income (euros) | | | | | | |
| < 2500 | 2,085 (49.9) | | 2,289 (18.9) | | | |
| 2500 - 4000 | 1,394 (33.3) | | 6,713 (55.5) | | | |
| > 4000 | 703 (16.8) | | 3,095 (25.6) | | | |
| Unknown | 1,296 | | 754 | | | |
| Before pregnancy | | | | | | |
| Body mass index (kg/m²) | | | | | | |
| <18.5 | 475 (9.1) | | 932 (7.4) | | | |
| [18.5-25.0] | 3,020 (57.8) | | 8,604 (67.9) | | | |
| [25.0-30.0[| 738 (14.1) | | 2,085 (16.5) | | | |
| >30 | 994 (19.0) | | 1,052 (8.3) | | | |
| Unknown | 251 | | 178 | | | |
| Diabetes (type 1 or 2) | 51 (1.0) | | 115 (0.9) | | | |
| Unknown | 262 | | 371 | | | |
| Chronic high blood pressure | 130 (2.5) | | 284 (2.3) | | | |
| Unknown | 235 | | 268 | | | |
| During pregnancy | | | | | | |
| Parity | | | | | | |
| Primiparous | 2,089 (39.3) | | 6,153 (48.3) | | | |
| Multiparous | 3,221 (60.7) | | 6,587 (51.7) | | | |
| Unknown | 168 | | 0,587 (51.7) | | | |
| Number of deliveries | 100 | 1.8 (1.1) | 111 | 1.4 (0.7) | | |
| | 0 500 | 1.0 (1.1) | 6,857 | 1.4 (0.7) | | |
| Unknown | 2,523 | | | | | |
| Hypertensive disorders | 211 (4.0) | | 405 (3.2) | | | |
| Unknown | 268 | | 360 | | | |
| Preeclampsia | 108 (2.1) | | 149 (1.2) | | | |
| | | | | | | |

| | | Populat | ion | |
|--|-----------------|-----------------|-----------------|-----------------|
| | Exclue N=5,4 | | Incluc N=12, | |
| | N (%) | Mean (SD*) | N (%) | Mean (SD*) |
| Unknown | 268 | | 360 | |
| Smoking | 1,345 (25.5) | | 2,279 (17.9) | |
| Unknown | 197 | | 136 | |
| Alcohol consumption | | | | |
| No | 3,375 (85.7) | | 9,024 (81.3) | |
| < 1 glass per month | 434 (11.0) | | 1,637 (14.7) | |
| ≥ 1 glass per month | 127 (3.2) | | 440 (4.0) | |
| Unknown | 1,542 | | 1,750 | |
| Hospitalization | 1,112 (21.1) | | 1,857 (14.6) | |
| Unknown | 207 | | 130 | |
| Childbirth | | | | |
| Gestational age (weeks of gestation) | | 38.9 (1.7) | | 39.3 (1.4) |
| Unknown | 192 | | 200 | |
| Mode of delivery | | | | |
| Caesarean | 1,186 (22.7) | | 2,141 (17.1) | |
| Vaginal delivery | 4,031 (77.3) | | 10,376 (82.9) | |
| Unknown | 261 | | 334 | |
| Infant's sex | | | | |
| Female | 2,492 (46.9) | | 6,283 (49.3) | |
| Male | 2,822 (53.1) | | 6,458 (50.7) | |
| Unknown | 164 | | 110 | |
| Birthweight (in grams) | | 3,237.3 (554.2) | | 3,338.8 (471.3) |
| Unknown | 229 | | 272 | |
| Small for gestational age ^{&} | 878 (16.7) | | 1,084 (8.6) | |
| Severe small for gestational age * | 453 (8.6) | | 407 (3.2) | |
| Unknown | 234 | | 287 | |
| Head circumference (in centimetres) | | 34.3 (1.5) | | 34.4 (1.4) |
| Unknown | 796 | | 1,439 | . , |

*SD: standard deviation

[#]Lower defined as never attended school, primary and middle school; High school defined as certificate of vocational aptitude, professional qualifications, high school; University defined as higher education ⁸Small for gestational age defined as a birthweight under the 10th percentile for gestational age and sex, by using the WHO curves. Severe small for gestational age, was defined as a birthweight under the third percentile for gestational age and sex.

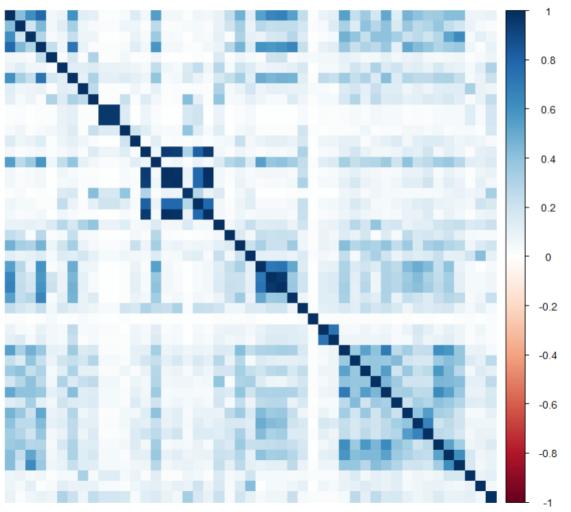
Appendix D. Occupations of mothers during pregnancy. ELFE study, France, n=12,851.

Table 1. Occupations of mothers during pregnancy. ELFE study, France, n=12,851.

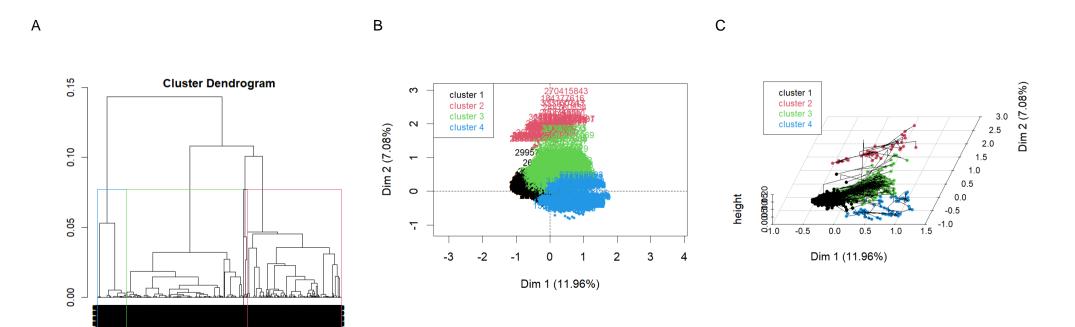
| | N=12,851 n (%) |
|---|-------------------|
| Professional, technical, and related workers | 5,289 (41.2) |
| Medical, dental, veterinarians, pharmacists | 678 (5.3) |
| Nurses, midwives, medical x ray technicians | 897 (7.0) |
| Architects, engineers, and related technicians | 377 (2.9) |
| Statisticians, mathematicians, systems analysts | 33 (0.3) |
| Teachers | 1,402 (10.9) |
| Preschool, primary, specialized | 884 (6.9) |
| Secondary, higher education | 497 (3.9) |
| Unknown | 21 (0.2) |
| Social workers | 500 (3.9) |
| Chemists, biologists, and related workers | 183 (1.4) |
| Jurists, journalists, and related workers | 655 (5.1) |
| Other professional and technical workers | 564 (4.4) |
| Managerial workers | 457 (3.6) |
| Clerical and related workers | 3,063 (23.9) |
| Stenographers, typists | 515 (4.0) |
| Bookkeepers, cashiers | 870 (6.8) |
| Computing machine operators | 48 (0.4) |
| Other clerical and related workers | 1,630 (12.7) |
| Sales workers | 1,415 (11.1) |
| Technical saleswomen, commercial travellers | 205 (1.6) |
| Saleswomen, shop assistants | 688 (5.4) |
| Other sales workers | 522 (4.1) |
| Service workers | 2,132 (16.6) |
| Cleaners and helpers | 718 (5.6) |
| Nurses' aides | 493 (3.8) |
| Hairdressers, beauticians | 228 (1.8) |
| Other service workers | 693 (5.4) |
| Agricultural workers | 99 (0.8) |
| Production workers | 396 (3.1) |
| Textile workers | 33 (0.3) |
| Food and beverage processors | 128 (1.0) |
| Electronic or metal processors | 20 (0.2) |
| Material handlers and related equipment operators | 57 (0.4) |
| Other production workers | 158 (1.2) |

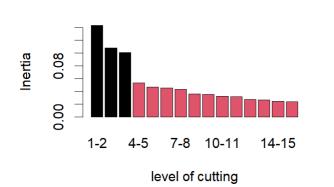
Cytomegalovirus, parvovirus B19 Airborne germs Hepatitis A, E Hepatitis B, C, human immunodeficiency virus Chlorinated solvents Endocrine disruptor Oxygenated solvents Pesticides Petroleum solvents Arsenic Benzo(a)pyrene Cadmium Carbon monoxide Chromium Detergents Iron Nickel

Cytomegalovirus, parvovirus B19 Airborne germs Hepatitis A, E Hepatitis B, C, human immunodeficiency virus Chlorinated solvents Endocrine disruptor Oxygenated solvents Pesticides Petroleum solvents Arsenic Benzo(a)pyrene Cadmium Carbon monoxide Chromium Detergents Iron Nickel Polycyclic aromatic hydrocarbons Lead Welding fumes Ultrafine particles Night work Interruption of tasks Work outdoors Non-thermal intermediate frequency Thermal intermediate frequency (E fields) Thermal intermediate frequency (H fields) Radiofrequency (E fields) Radiofrequency (H fields) To kneel or squat Arms in the air above the shoulders Standing To use of a computer screen or control panel To lean forward or sideways To repeat the same actions Decision Demands Job strain Intensity of physical effort Load handling > 4kg Carrying loads 10-25 kg To drive construction machinery To drive a vehicle To use vibrating tools



Appendix F. Dendrogram (A), projection of the profiles on the factorial plane (B), hierarchical tree on the factorial plane (C), inertia gain (D). ELFE study, France, n=12,851.





D

| Characteristics | Low exposure, stress at work N = 6,602 n (%/% ^{\$}) | Strenuous, high organization, low decision N = 199 n (%*/%\$) | Postural constraints, psychosocial factor N = 4,460 n (% /% ^{\$}) | Postural and strength constraints, chemical, and biological factors N = 1,590 n (%/% ^{\$}) | Overall N = 12,851 n (%) |
|---|--|--|--|--|--|
| | | Before pregnancy | | | |
| Maternal education level | | | | | |
| Low | 38 (0.6 / 15.3) | 2 (1.0 / 0.8) | 190 (4.3 / 76.3) | 19 (1.2 / 7.6) | 249 (1.9) |
| High school | 945 (14.3 / 25.5) | 99 (49.7 / 2.7) | 2,243 (50.3 / 60.6) | 415 (26.1 / 11.2) | 3,702 (28.8) |
| University | 5,619 (85.1 / 63.1) | 98 (49.2 / 1.1) | 2,027 (45.4 / 22.8) | 1,156 (72.7 / 13.0) | 8,900 (69.3) |
| | | During pregnancy | | | |
| Stopping the professional activity | | | | | |
| First trimester | 450 (7.0 / 35.1) | 37 (19.5 / 2.9) | 599 (13.8 / 46.7) | 197 (12.6 / 15.4) | 1,283 (10.2) |
| Second trimester | 1,628 (25.2 / 40.0) | 51 (26.8 / 1.3) | 1,626 (37.5 / 39.9) | 769 (49.4 / 18.9) | 4,074 (32.5) |
| Third trimester | 4,370 (67.8 / 60.9) | 102 (53.7 / 1.4) | 2,115 (48.7 / 29.5) | 592 (38.0 / 8.2) | 7,179 (57.3) |
| Unknown | 154 | 9 | 120 | 32 | 315 |
| Duration of work (weeks) | 29.1 (7.0) | 26.4 (10.1) | 25.8 (8.5) | 24.8 (7.7) | 27.4 (7.9) |
| Unknown | 178 | 7 | 151 | 40 | 376 |
| Workplace adjustments | 627 (10.8 / 37.7) | 27 (18.9 / 1.6) | 771 (21.1 / 46.4) | 238 (16.8 / 14.3) | 1,663 (15.1) |
| Unknown | 788 | 56 | 811 | 173 | 1,828 |
| | | Childbirth | | | |
| Maternal age (years) | 31.9 (4.3) | 31.6 (5.0) | 30.0 (5.0) | 30.6 (4.6) | 31.1 (4.7) |
| < 27 | 799 (12.2 / 32.4) | 42 (21.1 / 1.7) | 1,272 (28.6 / 51.6) | 351 (22.2 / 14.2) | 2,464 (19.3) |
| [27 ; 30[| 1,408 (21.4 / 48.6) | 45 (22.6 / 1.6) | 1,029 (23.1 / 35.5) | 415 (26.2 / 14.3) | 2,897 (22.6) |
| [30 ; 34[| 2,369 (36.0 / 58.6) | 48 (24.1 / 1.2) | 1,165 (26.2 / 28.8) | 461 (29.1 / 11.4) | 4,043 (31.6 |
| ≥ 34 | 1,997 (30.4 / 58.8) | 64 (32.2 / 1.9) | 979 (22.0 / 28.8) | 355 (22.4 / 10.5) | 3,395 (26.5 |
| Unknown | 29 | 0 | 15 | 8 | 52 |
| | | Occupations | | | |
| Professional, technical, and related workers | | | | | |
| Medical, dental, veterinarians, pharmacists | 171 (2.6 / 25.2) | 0 (0.0 / 0.0) | 281 (6.3 / 41.4) | 226 (14.2 / 33.3) | 678 (5.3) |
| Nurses, midwives, medical x ray technicians | 3 (0.0 / 0.3) | 0 (0.0 / 0.0) | 24 (0.5 / 2.7) | 870 (54.7 / 97.0) | 897 (7.0) |
| Architects, engineers, and related technicians | 366 (5.5 / 97.1) | 1 (0.5 / 0.3) | 10 (0.2 / 2.7) | 0 (0.0 / 0.0) | 377 (2.9 |
| Statisticians, mathematicians, systems analysts | 25 (0.4 / 75.8) | 0 (0.0 / 0.0) | 8 (0.2 / 24.2) | 0 (0.0 / 0.0) | 33 (0.3 |
| Teachers | | | | | |
| Pre-school, primary and specific | 132 (2.0 / 14.9) | 1 (0.5 / 0.1) | 751 (16.8 / 85.0) | 0 (0.0 / 0.0) | 884 (6.9 |
| Secondary and higher | 365 (5.5 / 73.4) | 7 (3.5 / 1.4) | 125 (2.8 / 25.2) | 0 (0.0 / 0.0) | 497 (3.9) |
| Unknown | 18 (0.3 / 85.7) | 0 (0.0 / 0.0) | 3 (0.1 / 14.3) | 0 (0.0 / 0.0) | 21 (0.2) |
| Social workers | 264 (4.0 / 52.8) | | 236 (5.3 / 47.2) | 0 (0.0 / 0.0) | 500 (3.9) |

Appendix G. Occupational profiles characteristics of women during pregnancy. ELFE study, France, n=12,851.

| Characteristics | Low exposure, stress at work N = 6,602 n (% [*] /% ^{\$}) | Strenuous, high organization, low decision N = 199 n (%*/%\$) | Postural constraints, psychosocial factor N = 4,460 n (% [*] /% ^{\$}) | Postural and strength constraints, chemical, and biological factors N = 1,590 n (% /% ^{\$}) | Overall N = 12,851 n (%) |
|---|--|--|---|---|--|
| Chemists, biologists, and related workers | 63 (1.0 / 34.4) | 1 (0.5 / 0.5) | 119 (2.7 / 65.0) | 0 (0.0 / 0.0) | 183 (1.4) |
| Jurists, journalists, and related workers | 655 (9.9 / 100.0) | 0 (0.0 / 0.0) | 0 (0.0 / 0.0) | 0 (0.0 / 0.0) | 655 (5.1) |
| Other professional and technical workers | 428 (6.5 / 75.9) | 5 (2.5 / 0.9) | 130 (2.9 / 23.0) | 1 (0.1 / 0.2) | 564 (4.4) |
| Managerial workers | 451 (6.8 / 98.7) | 1 (0.5 / 0.1) | 5 (0.1 / 1.1) | 0 (0.0 / 0.0) | 457 (3.6) |
| Clerical and related workers | | | | | |
| Stenographers, typists | 515 (7.8 / 100.0) | 0 (0.0 / 0.0) | 0 (0.0 / 0.0) | 0 (0.0 / 0.0) | 515 (4.0) |
| Bookkeepers, cashiers | 667 (10.1 / 76.7) | 0 (0.0 / 0.0) | 203 (4.6 / 23.3) | 0 (0.0 / 0.0) | 870 (6.8) |
| Computing machine operators | 25 (0.4 / 52.1) | 0 (0.0 / 0.0) | 23 (0.5 / 47.9) | 0 (0.0 / 0.0) | 48 (0.4) |
| Other clerical and related workers | 1,456 (22.1 / 89.3) | 0 (0.0 / 0.0) | 174 (3.9 / 10.7) | 0 (0.0 / 0.0) | 1,630 (12.7) |
| Sales workers | | | | | |
| Technical saleswomen, commercial travalers | 188 (2.8 / 91.7) | 2 (1.0 / 1.0) | 15 (0.3 / 7.3) | 0 (0.0 / 0.0) | 205 (1.6) |
| Saleswomen, shop assistants | 143 (2.2 / 20.8) | 3 (1.5 / 0.4) | 542 (12.2 / 78.8) | 0 (0.0 / 0.0) | 688 (5.4) |
| Other sales workers | 305 (4.6 / 58.4) | 153 (76.9 / 29.3) | 64 (1.4 / 12.3) | 0 (0.0 / 0.0) | 522 (4.1) |
| Service workers | | | | | |
| Cleaners and helpers | 4 (0.1 / 0.6) | 0 (0.0 / 0.0) | 714 (16.0 / 99.4) | 0 (0.0 / 0.0) | 718 (5.6) |
| Nurses' aides | 0 (0.0 / 0.0) | 0 (0.0 / 0.0) | 0 (0.0 / 0.0) | 493 (31.0 / 100.0) | 493 (3.8) |
| Hairdressers, beauticians | 41 (0.6 / 18.0) | 0 (0.0 / 0.0) | 187 (4.2 / 82.0) | 0 (0.0 / 0.0) | 228 (1.8) |
| Other service workers | 159 (2.4 / 22.9) | 1 (0.5 / 0.1) | 533 (12.0 / 76.9) | 0 (0.0 / 0.0) | 693 (5.4) |
| Agricultural workers | 3 (0.0 / 3.0) | 0 (0.0 / 0.0) | 96 (2.2 / 97.0) | 0 (0.0 / 0.0) | 99 (0.8) |
| Production workers | | | | | |
| Textile workers | 5 (0.1 / 15.2) | 0 (0.0 / 0.0) | 28 (0.6 / 84.8) | 0 (0.0 / 0.0) | 33 (0.3) |
| Food and beverage processors | 65 (1.0 / 50.8) | 3 (1.5 / 2.3) | 60 (1.3 / 46.9) | 0 (0.0 / 0.0) | 128 (1.0) |
| Electronic or metal processors | 9 (0.1 / 45.0) | 3 (1.5 / 15.0) | 8 (0.2 / 40.0) | 0 (0.0 / 0.0) | 20 (0.2) |
| Material handlers and related equipment operators | 5 (0.1 / 8.8) | 0 (0.0 / 0.0) | 52 (1.2 / 91.2) | 0 (0.0 / 0.0) | 57 (0.4) |
| Other production workers | 71 (1.1 / 44.9) | 18 (9.0 / 11.4) | 69 (1.5 / 43.7) | 0 (0.0 / 0.0) | 158 (1.2) |

*% in column ^{\$}% in line [&]Small for gestational age defined as a birthweight under the 10th percentile for gestational age and sex, by using the OMS curves. Severe small for gestational age, was defined as a birthweight under the third percentile for gestational age and sex.

Appendix H. Sensitive analysis with adjustment on mode of delivery for the head circumference. ELFE study, France, n=11,412.

| | Crude β | P-value | aβ | P-value |
|---|----------------------------|---------|------------------------|---------|
| | (95% Cl ^{&}) | | (95% CI) | |
| Low exposure, stress at work | ref | | ref | |
| Arduousness, high organization, low decision | -0.130 (-0.340 ; 0.079) | 0.222 | -0.11 (-0.321 ; 0.097) | 0.293 |
| Postural constraints, psychosocial factor | -0.065 (-0.122 ; -0.008) | 0.023 | -0.03 (-0.094 ; 0.020) | 0.207 |
| Postural and strength constraints, chemical, and biological factors | -0.047 (-0.128 ; 0.034) | 0.255 | -0.01 (-0.091 ; 0.068) | 0.781 |

Table 2. Association between profiles and head circumference. ELFE study, France, n=11,412.

[&]Cl, confidence interval

^{*}Adjusted for tobacco use, alcohol consumption, BMI, gestational age, infant's sex, and mode of delivery

Appendix I. Additional analysis for the severe small for gestational age. ELFE study, France, n=12,579.

Table 3. Association between maternal occupational profiles and severe small for gestational age. ELFE study, France, n=12,579.

| | Crude OR | P-value | aOR | P-value |
|---|----------------------------|---------|-------------------|---------|
| | (95% Cl ^{&}) | | (95% CI) | |
| Low exposure, stress at work | ref | | ref | |
| Arduousness, high organization, low decision | 0.84 (0.34; 2.08) | 0.713 | 0.92 (0.37; 2.28) | 0.856 |
| Postural constraints, psychosocial factor | 1.21 (0.98; 1.50) | 0.079 | 1.10 (0.87; 1.39) | 0.432 |
| Postural and strength constraints, chemical, and biological factors | 0.99 (0.72; 1.37) | 0.950 | 0.90 (0.63; 1.28) | 0.546 |

[&]CI, confidence interval

*OR: odds ratio; adjusted for BMI, tobacco use, and alcohol consumption

Table 4. Association between profiles and severe small for gestational age, according to the trimester when mothers stopped working during pregnancy. ELFE study, France, n=12,579.

| | Stop | ped during f | irst trimester | | Stopp | ed during se | cond trimester | | Stop | ped during t | hird trimester | |
|---|----------------------------|--------------|----------------------|---------|-----------------------|--------------|----------------------|---------|-----------------------|--------------|----------------------|-------|
| | | N=1,2 | 67 | | | N=4,0 | 24 | | | N=7,0 | 85 | |
| | Crude OR | P- | aOR* | P-value | Crude OR | P-value | aOR* | P-value | Crude OR | P-value | aOR* | P- |
| | (95% CI ^{&}) | value | (95% CI) | | (95% CI) | | (95% CI) | | (95% CI) | | (95% CI) | value |
| Low exposure, stress at work | ref | | ref | | ref | | ref | | ref | | ref | |
| Arduousness, high organization, low decision | 0.59 (0.08 ; 4.52) | 0.610 | 0.81 (0.10; 6.45) | 0.842 | 0.86 (0.21 ; 3.62) | 0.84 | 0.93 (0.22; 3.98) | 0.923 | 0.86 (0.21 ; 3.54) | 0.836 | 0.91 (0.22; 3.79) | 0.899 |
| Postural constraints, psychosocial factor | 1.41 (0.81 ; 2.47) | 0.225 | 1.48 (0.77; 2.85) | 0.245 | 0.79 (0.56 ; 1.12) | 0.186 | 0.69 (0.47; 1.01) | 0.056 | 1.30 (0.94 ; 1.72) | 0.113 | 1.23 (0.87; 1.74) | 0.251 |

| Postural and strength | 0.91 (0.39 ; 2.11) | 0.829 | 0.99 (0.39; 2.49) | 0.978 | 0.73 (0.46 ; 1.15) | 0.176 | 0.70 (0.43; 1.15) | 0.157 | 0.96 (0.53 ; 1.72) | 0.883 | 0.72 (0.36; 1.43) | 0.346 |
|---|--------------------|-------|----------------------|-------|-----------------------|-------|----------------------|-------|-----------------------|-------|----------------------|-------|
| constraints, chemical, and biological | | | | | | | | | | | | |
| factors | einterval | | | | | | | | | | | |

^{*}OR: odds ratio; adjusted for tobacco use, alcohol consumption, and BMI

Appendix J. Sensitivity analysis with adjustment on education level. ELFE study, France, n=12,851.

Table 5. Association between profiles and small for gestational age. ELFE study, France, n=12,579.

| | Crude OR | P-value | aOR | P-value |
|---|----------------------------|---------|-------------------|---------|
| | (95% CI ^{&}) | | (95% CI) | |
| Low exposure, stress at work | ref | | ref | |
| Arduousness, high organization, low decision | 0.84 (0.47; 1.48) | 0.541 | 0.80 (0.44; 1.45) | 0.456 |
| Postural constraints, psychosocial factor | 1.24 (1.08; 1.42) | 0.002 | 1.04 (0.88; 1.22) | 0.653 |
| Postural and strength constraints, chemical, and biological factors | 1.17 (0.97; 1.43) | 0.107 | 1.05 (0.85; 1.30) | 0.636 |
| [*] Cl, confidence interval | | | | |

^{*}OR: odds ratio; adjusted for BMI, tobacco use, alcohol consumption, and education level

Table 6. Association between profiles and severe small for gestational age. ELFE study, France, n=12,579.

| | Crude OR | P-value | aOR | P-value |
|---|----------------------------|---------|-------------------|---------|
| | (95% CI ^{&}) | | (95% CI) | |
| Low exposure, stress at work | ref | | ref | |
| Arduousness, high organization, low decision | 0.84 (0.34; 2.08) | 0.713 | 0.82 (0.33; 2.04) | 0.669 |
| Postural constraints, psychosocial factor | 1.21 (0.98; 1.50) | 0.079 | 0.95 (0.74; 1.23) | 0.721 |
| Postural and strength constraints, chemical, and biological factors | 0.99 (0.72; 1.37) | 0.950 | 0.86 (0.60; 1.23) | 0.417 |

[°]CI, confidence interval

^{*}OR, odds ratio; adjusted for BMI, tobacco use, alcohol consumption, and education level

Table 7. Association between profiles and birthweight. ELFE study, France, n=12,564.

| | Crude ß | P-value | aβ | P-value |
|---|----------------------------|---------|------------------------------|---------|
| | (95% Cl ^{&}) | | (95% CI) | |
| Low exposure, stress at work | ref | | ref | |
| Arduousness, high organization, low decision | -15.802 (-82.205; 51.294) | 0.656 | -21.856 (-83.634; 39.922) | 0.488 |
| Postural constraints, psychosocial factor | -5.686 (-23,795; 12.423) | 0.538 | 20.142 (1.983; 38.299) | 0.029 |
| Postural and strength constraints, chemical, and biological factors | -14.342 (-40.384; 11.700) | 0.280 | 6.153 (-17.371; 29.677) | 0.608 |

^{*}CI, confidence interval

^{*}Adjusted for BMI, tobacco use, alcohol consumption, gestational age at birth, infant's sex, and education level

Table 8. Association between profiles and head circumference. ELFE study, France, n=11,412.

| | Crude β | P-value | aβ | P-value | |
|------------------------------|----------------------------|---------|----------|---------|--|
| | (95% Cl ^{&}) | | (95% CI) | | |
| Low exposure, stress at work | ref | | ref | | |

| Arduousness, high organization, low decision | -0.130 (-0.340; 0.079) | 0.222 | -0.110 (-0.321; 0.100) | 0.306 |
|---|-------------------------|-------|------------------------|-------|
| Postural constraints, psychosocial factor | -0.065 (-0.122; -0.008) | 0.023 | -0.022 (-0.084; 0.039) | 0.479 |
| Postural and strength constraints, chemical, and biological factors | -0.047 (-0.128; 0.034) | 0.255 | -0.015 (-0.095; 0.064) | 0.711 |

[&]CI, confidence interval

* Adjusted for BMI, tobacco use, alcohol consumption, gestational age at birth, infant's sex, and education level

Appendix K. Sensitivity analysis excluding gestational diabetes and gestational hypertension. ELFE study, France, n=11,036.

| | Small for gestational age | | | Birthweight | | | Head circumference | | | | | |
|---|-------------------------------|-------------|-------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|----------------------------|-------------|
| | Crude OR | P- value | aOR (95% | P- value | Crude β (95% | P- value | aβ [#] (95% | P- value | Crude β (95% | P- value | aβ [#] (95% | P- value |
| | (95% Cl ^{&}) | Value | CI) | Value | CI) | Value | CI) | Value | CI) | Value | CI) | Value |
| Low exposure, stress at work | re | əf | re | f | ref | | ref | f | rei | f | re | f |
| Strenuous, high organization, low decision | 0.89 (0.48, 1.66) | 0.72 | 0.91 (0.44, 1.66) | 0.8 | -21.59 (-93.94, 50.74) | 0.55 | -28.65 (-95.51, 38.19) | 0.40 | -0.20 (- 0.42, 0.02) | 0.08 | -0.19 (- 0.42, 0.03) | 0.08 |
| Postural contraints, psychosocial factors | 1.33 (1.15, 1.54) | <0.001 | 1.22 (1.04, 1.44) | 0.01 | -18.05 (-37.34, 1.22) | 0.06 | 10.38 (- 8.76, 29.53) | 0.28 | -0.09 (- 0.15, - 0.03) | 0.001 | -0.05 (- 0.11, 0.01) | 0.13 |
| Postural and strength constraints, chemical, and biological factors | 1.16 (0.94, 1.44) | 0.164 | 1.08 (0.85, 1.35) | 0.5 | -23.28 (-50.97, 4.40) | 0.09 | 0.68 (- 24.26, 25.64) | 0.95 | -0.05 (- 0.14, 0.03) | 0.20 | -0.02 (- 0.10, 0.06) | 0.63 |

^{*}CI: confidence interval OR: odds ratio; adjusted for BMI, tobacco use, and alcohol consumption [#]Adjusted for BMI, tobacco use, alcohol consumption, gestational age at birth, and infant's sex