

Table 1: Sociodemographic characteristics of the families involved in the study, compared to those of families included in the NASCITA Cohort but excluded from this study.

| Variable | | Assessable | Not assessable | p-value |
|--------------------------------|--------|--------------|----------------|---------|
| Total | | 2.731 | 2.323 | |
| Geographical area of residence | North | 1.266 (46.4) | 1.074 (46.2) | 0.0096* |
| | Centre | 491 (18.0) | 489 (21.1) | |
| | South | 974 (35.7) | 760 (32.7) | |
| Setting | Urban | 1.037 (38.0) | 958 (41.3) | 0.0171* |
| | Rural | 1.693 (62.0) | 1.363 (58.7) | |
| Maternal age at delivery | <30 | 654 (24.5) | 562 (24.8) | 0.6973 |
| | 30-34 | 972 (36.4) | 797 (35.2) | |
| | 35+ | 1.046 (39.1) | 904 (39.9) | |
| Paternal age at delivery | <30 | 370 (14.0) | 296 (13.1) | 0.5771 |
| | 30-34 | 714 (27.0) | 598 (26.5) | |
| | 35+ | 1.565 (59.1) | 1.363 (60.4) | |
| Employed mother | Yes | 1.929 (71.1) | 1.567 (68.0) | 0.0198* |
| | No | 785 (28.9) | 736 (32.0) | |
| Employed father | Yes | 2.600 (96.4) | 2.196 (95.9) | 0.3478 |
| | No | 98 (3.6) | 95 (4.1) | |
| Both parents employed | Yes | 49 (1.8) | 54 (2.4) | 0.1777 |
| | No | 2.643 (98.2) | 2.228 (97.6) | |
| Single mother | Yes | 32 (1.2) | 39 (1.7) | 0.1276 |
| | No | 2.697 (98.8) | 2.284 (98.3) | |
| Single father | Yes | 24 (0.9) | 32 (1.4) | 0.0918 |
| | No | 2.696 (99.1) | 2.283 (98.6) | |

| | | | | |
|---|------|---------------|--------------|---------|
| Maternal educational level | Low | 395 (14.6) | 396 (17.3) | 0.0104* |
| | High | 2.308 (85.4) | 1.897 (82.7) | |
| Paternal educational level | Low | 621 (23.2) | 534 (23.6) | 0.7616 |
| | High | 2.057 (76.8) | 1.733 (76.4) | |
| Only child | Yes | 1.482 (54.3) | 1.228 (52.9) | 0.3221 |
| | No | 1.246 (45.7) | 1.092 (47.1) | |
| Maternal psychiatric condition during pregnancy | Yes | 22 (0.8) | 11 (0.5) | 0.1441 |
| | No | 2.709 (99.2) | 2.312 (99.5) | |
| Any psychiatric disorder in maternal family | Yes | 26 (1.0) | 18 (0.8) | 0.4992 |
| | No | 2.705 (99.0) | 2.305 (99.2) | |
| Paternal psychiatric condition | Yes | - | 2 (0.1) | 0.2112 |
| | No | 2.731 (100.0) | 2.321 (99.9) | |
| Any psychiatric disorder in paternal family | Yes | 27 (1.0) | 14 (0.6) | 0.1274 |
| | No | 2.704 (99.0) | 2.309 (99.4) | |

Table 2 – Association between paternal and neonatal characteristics and paternal postnatal depression.

| Variable | | Paternal postnatal depression | | OR (95% CI) | p-value |
|--------------------------------|---------------|--|----------------------------------|---------------------|---------|
| | | <i>Likely depressed father</i> (N=18) | <i>Not depressed</i> (N=2090) | | |
| Geographical area of residence | <i>North</i> | 12 (66.7) | 887 | 2.77 (0.89-8.62) | 0.07 |
| | <i>Centre</i> | 2 (11.1) | 384 | 1.07 (0.19-5.85) | 0.94 |
| | <i>South</i> | 4 (22.2) | 819 | 1 | |
| Setting | <i>Urban</i> | 3 (16.7) | 827 | 0.31 | 0.06 |

| | | | | | |
|--|---------------------|-----------|-------------|----------------------|------------|
| | | | | (0.09-1.06) | |
| | <i>Rural</i> | 15 (83.3) | 1262 | 1 | |
| Paternal age at delivery | <30 | 2 (11.1) | 280 (13.8) | 1.01 (0.18-5.52) | 0.99 |
| | 30-34 | 4 (22.2) | 563 (27.7) | 1 | |
| | ≥35 | 12 (66.7) | 1201 (58.6) | 1.42 (0.46-4.42) | 0.54 |
| Educational level** | <i>Low</i> | 4 (22.2) | 478 (23.2) | 0.95 (0.31-2.89) | 0.92 |
| | <i>High</i> | 14 (77.8) | 1585 (76.8) | 1 | |
| Employment status | <i>Employed</i> | 16 (88.9) | 2001 (96.4) | 0.30 (0.07-1.33) | 0.11 |
| | <i>Unemployed</i> | 2 (11.1) | 75 (3.6) | 1 | |
| Marital status | <i>Single</i> | - | 8 | | - |
| | <i>With partner</i> | 18 (100) | 2082 (99.6) | | 1 |
| Father smoker | <i>Yes</i> | 5 (27.8) | 514 (24.7) | 1.17 (0.42-3.31) | 0.76 |
| | <i>No</i> | 13 (72.2) | 1569 (75.3) | 1 | |
| Paternal chronic conditions | <i>Yes</i> | 4 (22.2) | 274 (13.1) | 1.89 (0.62-5.79) | 0.26 |
| | <i>No</i> | 14 (77.8) | 1816 (86.9) | 1 | |
| First time fathers | <i>Yes</i> | 11 (61.1) | 1133 (54.3) | 1.32 (0.51-3.43) | 0.56 |
| | <i>No</i> | 7 (38.9) | 954 (45.7) | 1 | |
| Newborn gender | <i>Male</i> | 9 (50) | 1077 (51.5) | 1 | 0.90 |
| | <i>Female</i> | 9 (50) | 1013 (48.5) | 1.06 (0.42-2.69) | |
| Preterm birth (37 weeks) | <i>Yes</i> | - | 126 (6) | - | 0.30 |
| | <i>No</i> | 18 (100) | 1963 (94) | 1 | |
| Child hospitalized in the NICU for at least 7 days | <i>Yes</i> | 1 (5.6) | 38 (1.8) | 3.16 (0.41-24.34) | 0.27 |
| | <i>No</i> | 17 (94.4) | 2040 (98.2) | 1 | |
| Child sleeping disorders at second visit | <i>Yes</i> | 7 (38.9) | 160 (7.7) | 7.64 (2.92-19.97) | < 0.0001 * |

| | | | | | |
|---|-----|-----------|-------------|----------------------|------------|
| (2-3 months after childbirth) | No | 11 (61.1) | 1920 (92.3) | 1 | |
| Child sleeping disorders at third visit (5-7 months after childbirth) | Yes | 7 (38.9) | 309 (14.8) | 3.66 (1.41-9.50) | 0.007* |
| | No | 11 (61.1) | 1775 (85.2) | 1 | |
| Depressed mother | Yes | 12 (75) | 62 (3.4) | 85.53 (26.83-272.69) | < 0.0001 * |
| | No | 4 (25) | 1768 (96.6) | | |

* *p*-value of chi-square for trend test. **Educational level: low: no schooling or primary versus high: secondary school or university.