**Twin Research and Human Genetics**

Differences in Religiousness in Opposite-Sex and Same-Sex Twins in a Secular Society

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SUPPLEMENTARY TABLE S1

Responders vs Non-Responders Among Opposite-Sex and Same-Sex Twins

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Females** | **Males** | **All** |
|  | Opposite-sex | Same-sex | Opposite-sex | Same-sex | Total |
| **The web-based questionnaire** |  |  |  |  |  |
| **Responders**  |  |  |  |  |  |
| N (%) | 500 (55.9) | 1,647 (60.4) | 444 (49.6) | 1,095 (50.0) | 3686 (55.0) |
| Mean (SD) age  | 29.0 (6.4) | 30.0 (6.0) | 29.3 (6.2) | 29.5 (6.2) | 29.6 (6.2) |
| **Non-responders**  |  |  |  |  |  |
| N (%) | 395 (44.1) | 1,078 (39.6) | 451 (50.4) | 1,097 (50.1) | 3021 (45.0) |
| Mean (SD) age | 27.3 (6.4) | 28.4 (6.4) | 27.2 (6.5) | 26.9 (6.1) | 27.6 (6.3) |
| **Section about beliefs and existential values** |
| **Responders** |  |  |  |  |  |
| N (%) | 408 (85.4) | 1,385 (87.1) | 350 (83.9) | 857 (82.6) | 3,000 (85.1) |
| Mean (SD) age | 29.3 (6.3) | 30.0 (6.0) | 29.2 (6.2) | 30.1 (6.2) | 29.8 (6.1) |
| **Non-responders** |  |  |  |  |  |
| N (%) | 70 (14.6) | 206 (13.0) | 67 (16.1) | 181 (17.4) | 524 (14.9) |
| Mean (SD) age | 27.2 (6.7) | 30.1 (6.4) | 30.3 (6.3) | 27.9 (5.8) | 29.0 (6.3) |
| **The RCOPE questions** |  |  |  |  |  |
| **Have experienced a crisis** |  |  |  |  |  |
| N (%) | 290 (75.3) | 929 (71.9) | 208 (62.5) | 473 (58.5) | 1900 (67.4) |
| Mean (SD) age | 29.5 (6.3) | 30.5 (5.8) | 29.5 (6.1) | 30.9 (6.1) | 30.4 (6.0) |
| **Have not experienced a crisis** |  |  |  |  |  |
| N (%) | 95 (24.7) | 363 (28.1) | 125 (37.5) | 335 (41.5) | 918 (32.6) |
| Mean (SD) age | 29.4 (6.1) | 29.2 (6.1) | 29.2 (6.2) | 29.2 (6.2) | 292 (6.1) |

SUPPLEMENTARY TABLE S2

Association of Membership of the Danish National Evangelical Lutheran Church With Age at Participation and Parental Education of the Main Provider in Childhood Among Danish Female and Male Twins

|  |  |  |
| --- | --- | --- |
| Characteristics | Females | Males |
| **Age at participation** | Crude ORs (95% CIs) | Crude ORs (95% CIs) |
|  (ref. 20-25 years) | - | - |
|  26-30 | 1.17 (0.73-1.88) | 0.86 (0.55-1.33) |
|  30-35 | 1.44 (0.90-2.28) | 1.11 (0.72-1.72) |
|  36-40 | 1.55 (0.98-2.44) | 1.42 (0.92-2.18) |
| **Parental education** |  |  |
|  Basic school (ref) | - | -  |
|  Vocational school, Secondary education, and Short higher education | 1.04 (0.61-1.79) | 0.91 (0.52-1.61) |
|  Medium higher education and Bachelor's degree | 0.39 (0.22-0.70)\* | 0.61 (0.34-1.12) |
|  Higher academic or professional degree | 0.45 (0.24-0.82)\* | 0.51 (0.27-0.95) |

Note: \*p<0.05

SUPPLEMENTARY TABLE S3

Relationship With Co-Twin at Childhood

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Always, often or sometimes | Rare | Never | Crude OR (95% CI) | Adjusteda OR (95% CI) | Adjusteda p-value |
| **Did you share the same room?** |
| OS females | 283 (69.4) | 56 (13.7) | 69 (16.9) |  |  |  |
| SS females | 1134 (82.1) | 136 (9.8) | 112 (8.1) | .50 (.38-.64) | .50 (.39-.65) | <0.001 |
| OS males | 205 (58.6) | 79 (22.6) | 66 (18.9) |  |  |  |
| SS males | 671 (78.4) | 107 (12.5) | 78 (9.1) | .39 (.29-.52) | .38 (.29-.51) | <0.001 |
| **Did you have the same friends?** |
| OS females | 335 (82.1) | 58 (14.2) | 15 (3.7) |  |  |  |
| SS females | 1307 (94.6) | 54 (3.9) | 21 (1.5) | .26 (.18-.38) | .25 (.17-.36) | <0.001 |
| OS males | 265 (75.7) | 71 (20.3) | 14 (4.0) |  |  |  |
| SS males | 811 (94.7) | 33 (3.9) | 12 (1.4) | .17 (.12-.26) | .17 (.11-.26) | <0.001 |
| **Did you wear identical clothes?** |
| OS females | 76 (18.6) | 103 (25.3) | 229 (56.1) |  |  |  |
| SS females | 807 (58.4) | 363 (26.3) | 212 (15.3) | .16 (.12-.22) | .16 (.12-.22) | <0.001 |
| OS males | 29 (8.3) | 88 (25.1) | 233 (66.6) |  |  |  |
| SS males | 460 (53.7) | 262 (30.6) | 134 (15.7) | .08 (.05-.12) | .08 (.05-.12) | <0.001 |
| **Did you go to the same class?** |
| OS females | 362 (88.7) | 9 (2.2) | 37 (9.1) |  |  |  |
| SS females | 1198 (86.7) | 34 (2.5) | 150 (10.9) | 1.21 (.84-1.74) | 1.26 (.87-1.83) | 0.213 |
| OS males | 303 (86.6) | 19 (5.4) | 28 (8.0) |  |  |  |
| SS males | 685 (80.0) | 45 (5.3) | 126 (14.7) | 1.61 (1.12-2.32) | 1.71 (1.17-2.49) | 0.005 |
| **Did you share the same interests?** |
| OS females | 250 (61.3) | 101 (24.8) | 57 (14.0) |  |  |  |
| SS females | 1276 (92.3) | 66 (4.8) | 40 (2.9) | .13 (.10-.18) | .13 (.09-.17) | <0.001 |
| OS males | 175 (50.0) | 113 (32.3) | 62 (17.7) |  |  |  |
| SS males | 770 (90.0) | 70 (8.2) | 16 (1.9) | .11 (.08-.15) | .11 (.08-.15) | <0.001 |
| **Did your parents treat you in the same way?** |
| OS females | 333 (81.6) | 48 (11.8) | 27 (6.6) |  |  |  |
| SS females | 1271 (92.0) | 74 (5.4) | 37 (2.7) | .39 (.28-.54) | .37 (.27-.52) | <0.001 |
| OS males | 309 (88.3) | 26 (7.4) | 15 (4.3) |  |  |  |
| SS males | 803 (93.8) | 36 (4.2) | 17 (2.0) | .50 (.32-.77) | .48 (.31-.75) | 0.001 |

Note: *n* = 3686. Values are numbers (percentages) stratified by sex and co-twin sex as well as crude and adjusted odds ratios (ORs) with 95% confidence intervals (CIs) for opposite-sex (OS) vs same-sex (SS) twins answering ‘always’ or ‘often’ or ‘sometimes’ compared with ‘rare’ or ‘never’.

aAdjusted for age at participation and parental education of the main provider in childhood. All p-values were significant after correcting for multiple testing