Twin Research and Human Genetics

Height, Age at First Birth and Lifetime Reproductive Success: A Prospective Cohort Study of Finnish Male and Female Twins

Karri Silventoinen, Samuli Helle, Jessica Nisén, Pekka Martikainen, and Jaakko Kaprio

Supplementary Table S1

Odds Ratios of Height Quintiles for 1–2 and 3 Children or More Compared to Childlessness in Multinominal Logistic Regression Model in the Whole Data Set.

Model 1 Model 2 Model 3

OR 95% CI OR 95% CI OR 95% CI

Men

1–2 children

Shortest quintile 0.68 0.54–0.85 0.72 0.57–0.90 0.80 0.62–1.03

2. quintile 0.86 0.67–1.09 0.87 0.68–1.11 0.90 0.68–1.17

3. quintile 1.00 1.00 1.00

4. quintile 0.82 0.65–1.04 0.83 0.65–1.05 0.87 0.67–1.12

Tallest quintile 0.86 0.67–1.10 0.82 0.64–1.06 0.84 0.64–1.11

*p* value of trend 0.07 0.28 0.69

3 children or more

Shortest quintile 0.71 0.54–0.93 0.76 0.57–1.01 0.81 0.57–1.14

2. quintile 0.90 0.68–1.19 0.91 0.68–1.20 0.89 0.63–1.27

3. quintile 1.00 1.00 1.00

4. quintile 0.91 0.69–1.20 0.90 0.68–1.19 0.80 0.56–1.12

Tallest quintile 1.04 0.78–1.38 0.98 0.74–1.32 0.95 0.66–1.37

*p* value of trend 0.01 0.09 0.30

Women

1–2 children

Shortest quintile 0.84 0.66–1.06 0.81 0.64–1.03 1.04 0.77–1.39

2. quintile 0.97 0.76–1.23 0.96 0.76–1.23 0.84 0.62–1.14

3. quintile 1.00 1.00 1.00

4. quintile 0.79 0.61–1.01 0.79 0.62–1.02 0.89 0.65–1.22

Tallest quintile 0.76 0.60–0.96 0.79 0.62–1.11 0.89 0.65–1.22

*p* value of trend 0.19 0.46 0.34

3 children or more

Shortest quintile 1.03 0.79–1.36 1.01 0.77–1.32 0.83 0.65–1.07

2. quintile 0.84 0.63–1.12 0.84 0.63–1.13 0.96 0.74–1.24

3. quintile 1.00 1.00 1.00

4. quintile 0.89 0.67–1.19 0.91 0.68–1.21 0.78 0.60–1.03

Tallest quintile 0.86 0.65–1.14 0.90 0.68–1.19 0.78 0.60–1.01

*p* value of trend 0.32 0.59 0.43

Note: Model 1 = adjusted for birth year and zygosity; Model 2 = additionally adjusted for education; Model 3 = additionally adjusted for marital history.

Supplementary Table S2

Pair Wise Odds Ratios of Height Quintiles in Pairs Discordant for Height for Having Any Children in Conditional Logistic Regression Model in the Whole Data Set

Model 1 Model 2 Model 3

OR 95% CI OR 95% CI OR 95% CI

Men

Shortest quintile 0.62 0.41–0.94 0.62 0.41–0.95 0.62 0.41–0.95

2. quintile 0.65 0.44–0.96 0.65 0.44–0.97 0.65 0.44–0.97

3. quintile 1.00 1.00 1.00

4. quintile 0.74 0.50–1.10 0.74 0.50–1.10 0.74 0.49–1.11

Tallest quintile 0.69 0.44–1.07 0.69 0.44–1.07 0.65 0.41–1.03

*p* value of trend 0.43 0.57 0.42

Women

Shortest quintile 0.85 0.55–1.33 0.86 0.55–1.35 0.90 0.52–1.55

2nd quintile 0.97 0.65–1.43 0.95 0.63–1.41 1.10 0.68–1.79

3rd quintile 1.00 1.00 1.00

4th quintile 0.76 0.50–1.34 0.76 0.50–1.14 0.82 0.50–1.34

Tallest quintile 0.76 0.47–1.21 0.76 0.47–1.21 0.85 0.48–1.51

*p* value of trend 0.48 0.48 0.62

Note: Model 1 = adjusted for birth year and zygosity; Model 2 = additionally adjusted for education; Model 3 = additionally adjusted for marital history.

Supplementary Table S3

Odds Ratios in Logistic Regression Model and Pair Wise Odds Ratios in Pairs Discordant for Height in Conditional Logistic Regression Model of Height Quintiles for Partnership History in the Whole Data Set

All study cohort Pair wise associations

Model 1 Model 2 Model 1 Model 2

OR 95% CI OR 95% CI OR 95% CI OR 95% CI

Men

Shortest quintile 0.71 0.58–0.87 0.74 0.60–0.90 0.74 0.50–1.09 0.80 0.54–1.20

2nd quintile 0.88 0.72–1.08 0.89 0.72–1.10 0.85 0.60–1.21 0.88 0.61–1.27

3rd quintile 1.00 1.00 1.00 1.00

4th quintile 0.85 0.69–1.03 0.86 0.71–1.06 0.96 0.67–1.38 1.02 0.70–1.48

Tallest quintile 0.91 0.74–1.13 0.91 0.73–1.13 0.96 0.64–1.45 0.99 0.65–1.51

*p* value of trend 0.08 0.08 0.21 0.29

Women

Shortest quintile 0.95 0.78–1.15 0.92 0.76–1.13 0.90 0.61–1.34 0.91 0.61–1.35

2nd quintile 0.93 0.77–1.14 0.94 0.77–1.15 0.90 0.63–1.29 0.92 0.64–1.32

3rd quintile 1.00 1.00 1.00 1.00

4th quintile 0.93 0.76–1.15 0.95 0.77–1.18 0.96 0.67–1.38 0.95 0.66–1.36

Tallest quintile 0.88 0.72–1.08 0.93 0.75–1.14 0.96 0.64–1.43 0.95 0.64–1.42

*p* value of trend 0.57 0.91 0.74 0.84

Note: Model 1 = adjusted for birth year and zygosity; Model 2 = additionally adjusted for education.