

BHAPC Model Results: Fixed Effects and Variance Components

| Effect | Est | 90% CI |
|-----------------------|----------|----------------------|
| --- Fixed Effects --- | | |
| Age (linear) | −0.0318 | [−0.0345, −0.0292] |
| Age (quadratic) | 1.60e−04 | [0.000143, 0.000178] |
| Log weight | −0.0170 | [−0.0206, −0.0134] |
| --- Variance --- | | |
| Period variance | 0.0035 | (0.3%) |
| Cohort variance | 0.0221 | (2.1%) |
| Residual variance | 1.0456 | (97.6%) |
| Total variance | 1.0712 | (100%) |

| Effect | Est | 90% CI |
|-----------------------|----------|----------------------|
| --- Fixed Effects --- | | |
| Age (linear) | −0.0367 | [−0.0391, −0.0343] |
| Age (quadratic) | 1.98e−04 | [0.000179, 0.000218] |
| Log weight | 0.2072 | [0.2018, 0.2126] |
| --- Variance --- | | |
| Period variance | 0.0025 | (0.3%) |
| Cohort variance | 0.0162 | (1.7%) |
| Residual variance | 0.9274 | (98%) |
| Total variance | 0.9460 | (100%) |

| Effect | Est | 90% CI |
|-----------------------|-----------|--------------------|
| --- Fixed Effects --- | | |
| Age (linear) | −0.0213 | [−0.0229, −0.0197] |
| Age (quadratic) | 2.00e−05 | [6e−06, 3.5e−05] |
| Log weight | −4.00e−04 | [−0.0011, 3e−04] |
| --- Variance --- | | |
| Period variance | 6.00e−04 | (0.1%) |
| Cohort variance | 0.0042 | (0.4%) |
| Residual variance | 1.0412 | (99.5%) |
| Total variance | 1.0459 | (100%) |

| Effect | Est | 90% CI |
|-----------------------|-----------|--------------------|
| --- Fixed Effects --- | | |
| Age (linear) | −0.0147 | [−0.0166, −0.0127] |
| Age (quadratic) | −7.10e−05 | [−9e−05, −5.2e−05] |
| Log weight | −0.0121 | [−0.0169, −0.0073] |
| --- Variance --- | | |
| Period variance | 4.00e−04 | (0%) |
| Cohort variance | 0.0047 | (0.4%) |
| Residual variance | 1.0555 | (99.5%) |
| Total variance | 1.0605 | (100%) |

| Effect | Est | 90% CI |
|-----------------------|----------|----------------------|
| --- Fixed Effects --- | | |
| Age (linear) | −0.0269 | [−0.0302, −0.0237] |
| Age (quadratic) | 1.59e−04 | [0.000128, 0.000192] |
| Log weight | 0.0144 | [0.012, 0.0167] |
| --- Variance --- | | |
| Period variance | 0.0165 | (1.5%) |
| Cohort variance | 0.0028 | (0.3%) |
| Residual variance | 1.0535 | (98.2%) |
| Total variance | 1.0728 | (100%) |

| Effect | Est | 90% CI |
|-----------------------|----------|--------------------|
| --- Fixed Effects --- | | |
| Age (linear) | −0.0171 | [−0.0191, −0.015] |
| Age (quadratic) | 6.80e−05 | [4.8e−05, 8.6e−05] |
| Log weight | 0.0394 | [0.028, 0.0508] |
| --- Variance --- | | |
| Period variance | 9.00e−04 | (0.1%) |
| Cohort variance | 0.0157 | (2.3%) |
| Residual variance | 0.6516 | (97.5%) |
| Total variance | 0.6682 | (100%) |

*GSS uses 4-point SRH scale (1–4); other surveys use 5-point scale (1–5)