SAGE Gait Study

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### Data Analysis

#### Data Cleaning

5573 entries were collected from Ghana and 4227 entries from South Africa. The outcome of interest for this study were the normal and rapid gait speeds.

Firstly, only entries with time above 0s for both normal and rapid gait were selected, reducing the number of entries to 4835 for Ghana and 3666 for South Africa. There was a huge gap between the third quartile and the maximum for both gait speeds which strongly suggested data collection errors. Upon further checks, a range of 1.0 to 12.0s was used for the normal gait speed for both Ghana and South Africa. 1.2 to 13.0s and 1.0 to 13.0s was used as the range for the rapid gait speed for Ghana and South Africa respectively and thus, leaving 136 outliers from Ghana and 119 from South Africa, and 86 outliers from Ghana and 58 outliers from South Africa for the normal and rapid gait speeds respectively. Other minor data cleaning and validation processes such as selection of relevant variables, and finding the average blood pressure and pulse reading from a set of three were carried.

The two data sets were then combined yielding a total of 8501 entries.

### Overview of Demographics, Socioeconomic and Health Indices for Sub Saharan Africa (Ghana and South Africa combined)

As shown in the table below, the majority of respondents (~70%) were between the ages of 50 and 80.Median age was 60 for Ghana and 59 for South Africa. The lowest count for the age groupings was for 80 years and above. The majority of respondents from Ghana were male, and from South Africa: female. The majority of respondents did not provide an answer when asked the number of years of (formal) education they had received. For those who did, most had completed between 9 and 12 years of education.

The majority of respondents in Ghana resided in rural areas whereas for South Africa, the opposite was noted. The majority of respondents were “currently married” in both countries, with the next highest proportion widowed. About twice the proportion of respondents who were separated/divorced in South Africa were separated/divorced in Ghana, and almost thrice the proportion of respondents who had never married in Ghana had never married in South Africa. The majority of respondents had low income satisfaction.

The majority of respondents in Ghana were of normal weight whereas the majority from South Africa were obese.The majority of respondents had no history of chronic disease or alcohol use. For tobacco use however, the majority from Ghana had a positive history whereas the majority from South Africa had a negative history.

Preliminary analysis of the gait speeds showed that the data distribution is skewed to the right, and thus the median was used as the measure of central tendency. The normal gait speed was the same in both countries, and South Africa had a slightly higher rapid gait speed.

| Characteristic | Ghana, N = 4 8351 | South Africa, N = 3 6661 |
| --- | --- | --- |
| **Age (in years)** |  |  |
| 18 to 49 | 778 (16%) | 344 (9·4%) |
| 50 to 59 | 1 634 (34%) | 1 494 (41%) |
| 60 to 69 | 1 141 (24%) | 1 077 (29%) |
| 70 to 79 | 908 (19%) | 552 (15%) |
| 80 and above | 372 (7·7%) | 197 (5·4%) |
| Unknown | 2 | 2 |
| **Age** | 60 (52 – 70) | 59 (53 – 68) |
| Unknown | 0 | 2 |
| **Sex** |  |  |
| male | 2 556 (53%) | 1 558 (43%) |
| female | 2 279 (47%) | 2 106 (57%) |
| Unknown | 0 | 2 |
| **Years of Education** |  |  |
| 0 to 6 | 631 (27%) | 822 (36%) |
| 6 to 9 | 291 (12%) | 780 (34%) |
| 9 to 12 | 1 031 (44%) | 442 (19%) |
| 12 to 15 | 276 (12%) | 156 (6·7%) |
| 15 to 20 | 105 (4·5%) | 103 (4·5%) |
| 20 to 30 | 16 (0·7%) | 9 (0·4%) |
| Unknown | 2 485 | 1 354 |
| **Residence** |  |  |
| urban | 1 971 (41%) | 2 430 (66%) |
| rural | 2 864 (59%) | 1 230 (34%) |
| don't know | 0 (0%) | 0 (0%) |
| Unknown | 0 | 6 |
| **Marital Status** |  |  |
| never married | 136 (2·8%) | 569 (16%) |
| currently married | 2 843 (59%) | 1 709 (47%) |
| cohabiting | 62 (1·3%) | 207 (5·6%) |
| separated/divorced | 634 (13%) | 224 (6·1%) |
| widowed | 1 131 (23%) | 893 (24%) |
| don't know | 29 (0·6%) | 62 (1·7%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 0 | 2 |
| **Income Satisfaction** |  |  |
| completely | 66 (1·4%) | 93 (2·6%) |
| mostly | 259 (5·4%) | 342 (9·5%) |
| moderately | 1 145 (24%) | 788 (22%) |
| a little | 2 108 (44%) | 1 260 (35%) |
| not at all | 1 217 (25%) | 1 060 (29%) |
| don't know | 34 (0·7%) | 67 (1·9%) |
| not applicable | 3 (<0·1%) | 0 (0%) |
| Unknown | 3 | 56 |
| **Normal Gait Speed** | 0·77 (0·57 – 0·93) | 0·77 (0·57 – 1·00) |
| **Rapid Gait Speed** | 1·18 (0·93 – 1·38) | 1·05 (0·80 – 1·33) |
| **BMI** |  |  |
| Normal Weight | 2 737 (57%) | 925 (25%) |
| Obese | 487 (10%) | 1 455 (40%) |
| Overweight | 926 (19%) | 1 015 (28%) |
| Underweight | 685 (14%) | 271 (7·4%) |
| **History of Angina** |  |  |
| yes | 161 (3·3%) | 331 (9·1%) |
| no | 4 669 (97%) | 3 294 (91%) |
| don't know | 2 (<0·1%) | 2 (<0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of CLD\*** |  |  |
| yes | 166 (3·4%) | 154 (4·2%) |
| no | 4 664 (97%) | 3 471 (96%) |
| don't know | 2 (<0·1%) | 2 (<0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of Asthma** |  |  |
| yes | 63 (1·3%) | 111 (3·1%) |
| no | 4 767 (99%) | 3 512 (97%) |
| don't know | 2 (<0·1%) | 4 (0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of Arthritis** |  |  |
| yes | 79 (1·6%) | 112 (3·1%) |
| no | 4 751 (98%) | 3 513 (97%) |
| don't know | 2 (<0·1%) | 2 (<0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of Stroke** |  |  |
| yes | 144 (3·0%) | 195 (5·4%) |
| no | 4 684 (97%) | 3 430 (95%) |
| don't know | 4 (<0·1%) | 2 (<0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of DM\*** |  |  |
| yes | 26 (0·5%) | 80 (2·2%) |
| no | 4 804 (99%) | 3 545 (98%) |
| don't know | 2 (<0·1%) | 2 (<0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of RTA\*** |  |  |
| yes | 1 165 (24%) | 1 302 (36%) |
| no | 3 666 (76%) | 2 324 (64%) |
| don't know | 1 (<0·1%) | 6 (0·2%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 34 |
| **History of Depression** |  |  |
| yes | 565 (12%) | 1 049 (29%) |
| no | 4 264 (88%) | 2 572 (71%) |
| don't know | 3 (<0·1%) | 6 (0·2%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of HPT\*** |  |  |
| yes | 201 (4·2%) | 150 (4·1%) |
| no | 4 623 (96%) | 3 464 (96%) |
| don't know | 8 (0·2%) | 13 (0·4%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of Cataracts** |  |  |
| yes | 82 (1·7%) | 52 (1·4%) |
| no | 4 749 (98%) | 3 571 (98%) |
| don't know | 1 (<0·1%) | 4 (0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| **History of Tobacco use** |  |  |
| yes | 2 841 (59%) | 986 (27%) |
| no | 1 990 (41%) | 2 638 (73%) |
| don't know | 1 (<0·1%) | 7 (0·2%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 35 |
| **History of Alcohol use** |  |  |
| yes | 527 (11%) | 737 (20%) |
| no | 4 302 (89%) | 2 889 (80%) |
| don't know | 3 (<0·1%) | 1 (<0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| Unknown | 3 | 39 |
| 1n (%); Median (IQR) | | |

### In-country Differences

#### Ghana Data

Focusing on Ghana,the median age was 60 for females and 58 for males. The majority of males were “currently married” whereas the majority of females were widowed. Males had a slightly higher normal gait speed than females (0.09 difference). With rapid gait speed, the gender difference increased to 0.2. The majority of males had a history of tobacco use whereas majority of females had no history.

| Characteristic | male, N = 2 5561 | female, N = 2 2791 | p-value2 |
| --- | --- | --- | --- |
| **Age (in years)** |  |  | <0·001 |
| 18 to 49 | 430 (17%) | 348 (15%) |  |
| 50 to 59 | 916 (36%) | 718 (32%) |  |
| 60 to 69 | 625 (24%) | 516 (23%) |  |
| 70 to 79 | 402 (16%) | 506 (22%) |  |
| 80 and above | 183 (7·2%) | 189 (8·3%) |  |
| Unknown | 0 | 2 |  |
| **Age** | 58 (52 – 68) | 60 (52 – 70) | <0·001 |
| **Years of Education** |  |  | <0·001 |
| 0 to 6 | 320 (22%) | 311 (35%) |  |
| 6 to 9 | 158 (11%) | 133 (15%) |  |
| 9 to 12 | 693 (47%) | 338 (38%) |  |
| 12 to 15 | 205 (14%) | 71 (8·0%) |  |
| 15 to 20 | 76 (5·2%) | 29 (3·3%) |  |
| 20 to 30 | 15 (1·0%) | 1 (0·1%) |  |
| Unknown | 1 089 | 1 396 |  |
| **Residence** |  |  | <0·001 |
| urban | 933 (37%) | 1 038 (46%) |  |
| rural | 1 623 (63%) | 1 241 (54%) |  |
| don't know | 0 (0%) | 0 (0%) |  |
| **Marital Status** |  |  |  |
| never married | 72 (2·8%) | 64 (2·8%) |  |
| currently married | 2 106 (82%) | 737 (32%) |  |
| cohabiting | 31 (1·2%) | 31 (1·4%) |  |
| separated/divorced | 192 (7·5%) | 442 (19%) |  |
| widowed | 141 (5·5%) | 990 (43%) |  |
| don't know | 14 (0·5%) | 15 (0·7%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| **Income Satisfaction** |  |  |  |
| completely | 42 (1·6%) | 24 (1·1%) |  |
| mostly | 143 (5·6%) | 116 (5·1%) |  |
| moderately | 658 (26%) | 487 (21%) |  |
| a little | 1 101 (43%) | 1 007 (44%) |  |
| not at all | 589 (23%) | 628 (28%) |  |
| don't know | 19 (0·7%) | 15 (0·7%) |  |
| not applicable | 2 (<0·1%) | 1 (<0·1%) |  |
| Unknown | 2 | 1 |  |
| **Normal Gait Speed** | 0·79 (0·62 – 0·98) | 0·70 (0·55 – 0·87) | <0·001 |
| **Rapid Gait Speed** | 1·25 (1·00 – 1·48) | 1·05 (0·80 – 1·29) | <0·001 |
| **BMI** |  |  | <0·001 |
| Normal Weight | 1 609 (63%) | 1 128 (49%) |  |
| Obese | 156 (6·1%) | 331 (15%) |  |
| Overweight | 429 (17%) | 497 (22%) |  |
| Underweight | 362 (14%) | 323 (14%) |  |
| **History of RTA\*** |  |  | <0·001 |
| yes | 1 003 (39%) | 162 (7·1%) |  |
| no | 1 550 (61%) | 2 116 (93%) |  |
| don't know | 1 (<0·1%) | 0 (0%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Arthritis** |  |  | 0·91 |
| yes | 43 (1·7%) | 36 (1·6%) |  |
| no | 2 510 (98%) | 2 241 (98%) |  |
| don't know | 1 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Stroke** |  |  | <0·001 |
| yes | 54 (2·1%) | 90 (4·0%) |  |
| no | 2 498 (98%) | 2 186 (96%) |  |
| don't know | 2 (<0·1%) | 2 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Angina** |  |  | 0·057 |
| yes | 72 (2·8%) | 89 (3·9%) |  |
| no | 2 481 (97%) | 2 188 (96%) |  |
| don't know | 1 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of DM\*** |  |  | 0·85 |
| yes | 15 (0·6%) | 11 (0·5%) |  |
| no | 2 538 (99%) | 2 266 (99%) |  |
| don't know | 1 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of CLD\*** |  |  | 0·16 |
| yes | 77 (3·0%) | 89 (3·9%) |  |
| no | 2 476 (97%) | 2 188 (96%) |  |
| don't know | 1 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Asthma** |  |  | <0·001 |
| yes | 19 (0·7%) | 44 (1·9%) |  |
| no | 2 534 (99%) | 2 233 (98%) |  |
| don't know | 1 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Depression** |  |  | <0·001 |
| yes | 217 (8·5%) | 348 (15%) |  |
| no | 2 336 (91%) | 1 928 (85%) |  |
| don't know | 1 (<0·1%) | 2 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of HPT\*** |  |  | 0·23 |
| yes | 95 (3·7%) | 106 (4·7%) |  |
| no | 2 454 (96%) | 2 169 (95%) |  |
| don't know | 5 (0·2%) | 3 (0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Cataracts** |  |  | 0·32 |
| yes | 39 (1·5%) | 43 (1·9%) |  |
| no | 2 515 (98%) | 2 234 (98%) |  |
| don't know | 0 (0%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Tobacco use** |  |  | <0·001 |
| yes | 1 756 (69%) | 1 085 (48%) |  |
| no | 797 (31%) | 1 193 (52%) |  |
| don't know | 1 (<0·1%) | 0 (0%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| **History of Alcohol use** |  |  | <0·001 |
| yes | 208 (8·1%) | 319 (14%) |  |
| no | 2 344 (92%) | 1 958 (86%) |  |
| don't know | 2 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 2 | 1 |  |
| 1n (%); Median (IQR) | | | |
| 2Pearson's Chi-squared test; Wilcoxon rank sum test; Fisher's exact test | | | |

#### South Africa Data

Focusing on South Africa,the median age was 60 for females and 59 for males. The majority of males were “currently married” whereas the majority of females were widowed. Males had a slightly higher normal gait speed than females (0.10 difference). With rapid gait speed, the gender difference increased to 0.18.

| Characteristic | male, N = 1 5581 | female, N = 2 1061 | p-value2 |
| --- | --- | --- | --- |
| **Age (in years)** |  |  | 0·074 |
| 18 to 49 | 145 (9·3%) | 199 (9·4%) |  |
| 50 to 59 | 664 (43%) | 830 (39%) |  |
| 60 to 69 | 463 (30%) | 614 (29%) |  |
| 70 to 79 | 207 (13%) | 345 (16%) |  |
| 80 and above | 79 (5·1%) | 118 (5·6%) |  |
| **Age** | 59 (53 – 67) | 60 (53 – 68) | 0·083 |
| **Years of Education** |  |  |  |
| 0 to 6 | 326 (35%) | 496 (36%) |  |
| 6 to 9 | 303 (32%) | 477 (35%) |  |
| 9 to 12 | 184 (20%) | 257 (19%) |  |
| 12 to 15 | 67 (7·1%) | 89 (6·5%) |  |
| 15 to 20 | 51 (5·4%) | 52 (3·8%) |  |
| 20 to 30 | 7 (0·7%) | 2 (0·1%) |  |
| Unknown | 620 | 733 |  |
| **Residence** |  |  | 0·50 |
| urban | 1 024 (66%) | 1 406 (67%) |  |
| rural | 533 (34%) | 697 (33%) |  |
| don't know | 0 (0%) | 0 (0%) |  |
| Unknown | 1 | 3 |  |
| **Marital Status** |  |  |  |
| never married | 173 (11%) | 396 (19%) |  |
| currently married | 1 028 (66%) | 681 (32%) |  |
| cohabiting | 121 (7·8%) | 86 (4·1%) |  |
| separated/divorced | 75 (4·8%) | 149 (7·1%) |  |
| widowed | 141 (9·1%) | 752 (36%) |  |
| don't know | 20 (1·3%) | 42 (2·0%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| **Income Satisfaction** |  |  |  |
| completely | 49 (3·2%) | 44 (2·1%) |  |
| mostly | 180 (12%) | 162 (7·8%) |  |
| moderately | 334 (22%) | 454 (22%) |  |
| a little | 509 (33%) | 751 (36%) |  |
| not at all | 427 (28%) | 631 (30%) |  |
| don't know | 35 (2·3%) | 32 (1·5%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 24 | 32 |  |
| **Normal Gait Speed** | 0·80 (0·58 – 1·00) | 0·70 (0·56 – 1·00) | <0·001 |
| **Rapid Gait Speed** | 1·18 (0·80 – 1·54) | 1·00 (0·77 – 1·33) | <0·001 |
| **BMI** |  |  | <0·001 |
| Normal Weight | 483 (31%) | 442 (21%) |  |
| Obese | 494 (32%) | 961 (46%) |  |
| Overweight | 449 (29%) | 564 (27%) |  |
| Underweight | 132 (8·5%) | 139 (6·6%) |  |
| **History of RTA\*** |  |  | <0·001 |
| yes | 682 (44%) | 619 (30%) |  |
| no | 856 (56%) | 1 467 (70%) |  |
| don't know | 3 (0·2%) | 3 (0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 17 | 17 |  |
| **History of Arthritis** |  |  | 0·18 |
| yes | 43 (2·8%) | 68 (3·3%) |  |
| no | 1 493 (97%) | 2 019 (97%) |  |
| don't know | 2 (0·1%) | 0 (0%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of Stroke** |  |  | 0·014 |
| yes | 65 (4·2%) | 130 (6·2%) |  |
| no | 1 472 (96%) | 1 956 (94%) |  |
| don't know | 1 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of Angina** |  |  | 0·005 |
| yes | 118 (7·7%) | 213 (10%) |  |
| no | 1 418 (92%) | 1 874 (90%) |  |
| don't know | 2 (0·1%) | 0 (0%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of DM\*** |  |  | 0·27 |
| yes | 32 (2·1%) | 48 (2·3%) |  |
| no | 1 504 (98%) | 2 039 (98%) |  |
| don't know | 2 (0·1%) | 0 (0%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of CLD\*** |  |  | >0·99 |
| yes | 65 (4·2%) | 89 (4·3%) |  |
| no | 1 472 (96%) | 1 997 (96%) |  |
| don't know | 1 (<0·1%) | 1 (<0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of Asthma** |  |  | 0·005 |
| yes | 32 (2·1%) | 79 (3·8%) |  |
| no | 1 505 (98%) | 2 005 (96%) |  |
| don't know | 1 (<0·1%) | 3 (0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of Depression** |  |  | <0·001 |
| yes | 358 (23%) | 691 (33%) |  |
| no | 1 177 (77%) | 1 393 (67%) |  |
| don't know | 3 (0·2%) | 3 (0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of HPT\*** |  |  | 0·50 |
| yes | 57 (3·7%) | 93 (4·5%) |  |
| no | 1 476 (96%) | 1 986 (95%) |  |
| don't know | 5 (0·3%) | 8 (0·4%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of Cataracts** |  |  | 0·11 |
| yes | 29 (1·9%) | 23 (1·1%) |  |
| no | 1 508 (98%) | 2 061 (99%) |  |
| don't know | 1 (<0·1%) | 3 (0·1%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| **History of Tobacco use** |  |  | <0·001 |
| yes | 582 (38%) | 403 (19%) |  |
| no | 956 (62%) | 1 681 (81%) |  |
| don't know | 3 (0·2%) | 4 (0·2%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 17 | 18 |  |
| **History of Alcohol use** |  |  | <0·001 |
| yes | 223 (14%) | 513 (25%) |  |
| no | 1 314 (85%) | 1 574 (75%) |  |
| don't know | 1 (<0·1%) | 0 (0%) |  |
| not applicable | 0 (0%) | 0 (0%) |  |
| Unknown | 20 | 19 |  |
| 1n (%); Median (IQR) | | | |
| 2Pearson's Chi-squared test; Wilcoxon rank sum test; Fisher's exact test | | | |

### Comparison of Median Gait Speed Across Demographic Variables

The table below shows the median gait speed with the end-points of the interquartile range in brackets. there is a statistically significant decrease in normal gait speed with increasing age, with a 0.21 decrease in ages 80 and above compared to ages 49 and below. There is no apparent association between years of education and gait speed. Respondents in rural areas had a slightly higher gait speed than those in urban areas (0.02) difference, which was not statistically significant. Having a partner (“currently married”or “cohabiting”) was associated with a slightly higher gait speed though this association was not statistically significant. Having low income satisfaction was associated with lower gait speed though this association was not statistically significant. Generally, having no history of chronic disease was associated with higher gait speed, with the exception of Diabetes Mellitus, Injury fromRoad Traffic Accidents and Cataracts. A history of alcohol use was associated with a statistically significant lower gait speed. On the other hand, a history of tobacco use was associated with an insignificant increase in gait speed.

|  | Ghana | South Africa |
| --- | --- | --- |
| Characteristic | N = 4 8351 | N = 3 6661 |
| **Age (in years)** |  |  |
| 18 to 49 | 0·83 (0·67, 1·03) | 0·89 (0·67, 1·18) |
| 50 to 59 | 0·79 (0·62, 0·95) | 0·80 (0·57, 1·00) |
| 60 to 69 | 0·73 (0·56, 0·91) | 0·75 (0·57, 1·00) |
| 70 to 79 | 0·67 (0·50, 0·82) | 0·67 (0·50, 0·89) |
| 80 and above | 0·65 (0·48, 0·79) | 0·67 (0·44, 0·85) |
| Unknown | 2 | 2 |
| **Years of Education** |  |  |
| 0 to 6 | 0·74 (0·57, 0·93) | 0·77 (0·57, 1·00) |
| 6 to 9 | 0·79 (0·63, 0·94) | 0·75 (0·56, 0·98) |
| 9 to 12 | 0·79 (0·62, 0·95) | 0·85 (0·67, 1·14) |
| 12 to 15 | 0·78 (0·63, 0·96) | 0·80 (0·57, 1·03) |
| 15 to 20 | 0·80 (0·67, 1·03) | 0·57 (0·44, 0·97) |
| 20 to 30 | 0·71 (0·59, 0·82) | 0·59 (0·49, 1·00) |
| Unknown | 2 485 | 1 354 |
| **Residence** |  |  |
| urban | 0·75 (0·57, 0·91) | 0·75 (0·57, 1·00) |
| rural | 0·77 (0·58, 0·95) | 0·80 (0·57, 1·00) |
| don't know | NA (NA, NA) | NA (NA, NA) |
| Unknown |  | 6 |
| **Sex** |  |  |
| male | 0·79 (0·62, 0·98) | 0·80 (0·58, 1·00) |
| female | 0·70 (0·55, 0·87) | 0·70 (0·56, 1·00) |
| Unknown |  | 2 |
| **Income Satisfaction** |  |  |
| completely | 0·80 (0·69, 0·98) | 1·00 (0·80, 1·33) |
| mostly | 0·79 (0·62, 0·95) | 0·80 (0·57, 1·00) |
| moderately | 0·75 (0·58, 0·93) | 0·74 (0·55, 1·00) |
| a little | 0·77 (0·57, 0·93) | 0·75 (0·57, 1·00) |
| not at all | 0·75 (0·56, 0·91) | 0·73 (0·56, 1·00) |
| don't know | 0·93 (0·61, 0·97) | 0·89 (0·67, 1·33) |
| not applicable | 0·70 (0·57, 0·76) | NA (NA, NA) |
| Unknown | 3 | 56 |
| **Marital Status** |  |  |
| never married | 0·82 (0·67, 1·00) | 0·75 (0·57, 1·00) |
| currently married | 0·79 (0·62, 0·95) | 0·80 (0·57, 1·00) |
| cohabiting | 0·79 (0·66, 0·95) | 0·80 (0·63, 1·00) |
| separated/divorced | 0·68 (0·56, 0·85) | 0·73 (0·57, 1·00) |
| widowed | 0·67 (0·50, 0·83) | 0·67 (0·52, 0·89) |
| don't know | 0·85 (0·65, 1·00) | 0·85 (0·55, 1·00) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown |  | 2 |
| 1 Normal Gait Speed: Median (IQR) | | |

### Comparison of Mean Gait Speed Across Health-Related variables

|  | Ghana | South Africa |
| --- | --- | --- |
| Characteristic | N = 4 8351 | N = 3 6661 |
| **BMI** |  |  |
| Normal Weight | 0·78 (0·59, 0·95) | 0·80 (0·59, 1·00) |
| Obese | 0·70 (0·54, 0·85) | 0·67 (0·51, 0·93) |
| Overweight | 0·75 (0·57, 0·93) | 0·80 (0·59, 1·00) |
| Underweight | 0·73 (0·56, 0·89) | 0·80 (0·62, 1·00) |
| **History of RTA\*** |  |  |
| yes | 0·79 (0·62, 0·95) | 0·80 (0·57, 1·00) |
| no | 0·75 (0·57, 0·91) | 0·74 (0·56, 1·00) |
| don't know | 0·89 (0·89, 0·89) | 0·80 (0·60, 1·02) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 34 |
| **History of Arthritis** |  |  |
| yes | 0·58 (0·44, 0·79) | 0·67 (0·47, 0·85) |
| no | 0·77 (0·57, 0·93) | 0·78 (0·57, 1·00) |
| don't know | 0·94 (0·94, 0·95) | 0·65 (0·58, 0·73) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of Stroke** |  |  |
| yes | 0·68 (0·51, 0·80) | 0·80 (0·50, 1·00) |
| no | 0·77 (0·57, 0·93) | 0·77 (0·57, 1·00) |
| don't know | 0·87 (0·74, 0·94) | 0·73 (0·70, 0·77) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of Angina** |  |  |
| yes | 0·74 (0·52, 0·85) | 0·67 (0·50, 0·85) |
| no | 0·77 (0·57, 0·93) | 0·80 (0·57, 1·00) |
| don't know | 0·94 (0·94, 0·95) | 0·90 (0·85, 0·95) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of DM\*** |  |  |
| yes | 0·79 (0·57, 0·92) | 0·80 (0·57, 1·00) |
| no | 0·77 (0·57, 0·93) | 0·77 (0·57, 1·00) |
| don't know | 0·94 (0·94, 0·95) | 0·72 (0·68, 0·76) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of CLD\*** |  |  |
| yes | 0·67 (0·50, 0·80) | 0·80 (0·57, 1·00) |
| no | 0·77 (0·57, 0·93) | 0·77 (0·57, 1·00) |
| don't know | 0·94 (0·94, 0·95) | 0·87 (0·83, 0·90) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of Asthma** |  |  |
| yes | 0·60 (0·46, 0·79) | 0·80 (0·59, 1·00) |
| no | 0·77 (0·57, 0·93) | 0·77 (0·57, 1·00) |
| don't know | 0·94 (0·94, 0·95) | 0·80 (0·72, 0·85) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of Depression** |  |  |
| yes | 0·70 (0·53, 0·85) | 0·67 (0·50, 0·85) |
| no | 0·77 (0·58, 0·93) | 0·80 (0·57, 1·00) |
| don't know | 0·93 (0·72, 0·94) | 0·68 (0·64, 0·77) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of HPT\*** |  |  |
| yes | 0·67 (0·51, 0·80) | 0·78 (0·57, 0·93) |
| no | 0·77 (0·57, 0·93) | 0·77 (0·57, 1·00) |
| don't know | 0·94 (0·75, 1·04) | 0·67 (0·50, 0·80) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of Cataracts** |  |  |
| yes | 0·73 (0·55, 0·92) | 0·80 (0·65, 1·13) |
| no | 0·77 (0·57, 0·93) | 0·77 (0·57, 1·00) |
| don't know | 0·93 (0·93, 0·93) | 0·73 (0·64, 0·79) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| **History of Tobacco use** |  |  |
| yes | 0·77 (0·60, 0·95) | 0·80 (0·62, 1·00) |
| no | 0·75 (0·56, 0·91) | 0·74 (0·56, 1·00) |
| don't know | 1·25 (1·25, 1·25) | 0·57 (0·57, 0·70) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 35 |
| **History of Alcohol use** |  |  |
| yes | 0·62 (0·49, 0·78) | 0·67 (0·51, 0·85) |
| no | 0·78 (0·59, 0·95) | 0·80 (0·57, 1·00) |
| don't know | 0·95 (0·84, 1·02) | 0·80 (0·80, 0·80) |
| not applicable | NA (NA, NA) | NA (NA, NA) |
| Unknown | 3 | 39 |
| 1 Normal Gait Speed: Median (IQR) | | |

#### Combined Linear Regressions Table

| Characteristic | N | Beta | 95% CI1 | p-value |
| --- | --- | --- | --- | --- |
| **Age (in years)** | 8 497 |  |  |  |
| 18 to 49 |  | — | — |  |
| 50 to 59 |  | -0·07 | -0·10 to -0·05 | <0·001 |
| 60 to 69 |  | -0·13 | -0·16 to -0·10 | <0·001 |
| 70 to 79 |  | -0·19 | -0·22 to -0·15 | <0·001 |
| 80 and above |  | -0·21 | -0·25 to -0·17 | <0·001 |
| **Sex** | 8 499 |  |  |  |
| male |  | — | — |  |
| female |  | -0·08 | -0·09 to -0·06 | <0·001 |
| **Years of Education** | 4 662 |  |  |  |
| 0 to 6 |  | — | — |  |
| 6 to 9 |  | -0·01 | -0·04 to 0·02 | 0·58 |
| 9 to 12 |  | 0·05 | 0·02 to 0·08 | 0·002 |
| 12 to 15 |  | 0·04 | -0·01 to 0·08 | 0·087 |
| 15 to 20 |  | 0·03 | -0·03 to 0·09 | 0·33 |
| 20 to 30 |  | -0·09 | -0·26 to 0·07 | 0·26 |
| **Residence** | 8 495 |  |  |  |
| urban |  | — | — |  |
| rural |  | 0·02 | 0·00 to 0·04 | 0·014 |
| **Marital Status** | 8 499 |  |  |  |
| never married |  | — | — |  |
| currently married |  | 0·02 | -0·02 to 0·05 | 0·35 |
| cohabiting |  | 0·07 | 0·01 to 0·12 | 0·022 |
| separated/divorced |  | -0·04 | -0·08 to 0·00 | 0·058 |
| widowed |  | -0·09 | -0·12 to -0·05 | <0·001 |
| don't know |  | 0·10 | 0·01 to 0·19 | 0·027 |
| **Income Satisfaction** | 8 442 |  |  |  |
| completely |  | — | — |  |
| mostly |  | -0·14 | -0·21 to -0·07 | <0·001 |
| moderately |  | -0·21 | -0·28 to -0·14 | <0·001 |
| a little |  | -0·23 | -0·30 to -0·17 | <0·001 |
| not at all |  | -0·23 | -0·30 to -0·17 | <0·001 |
| don't know |  | -0·06 | -0·16 to 0·04 | 0·25 |
| not applicable |  | -0·38 | -0·84 to 0·08 | 0·10 |
| **BMI** | 8 501 |  |  |  |
| Normal Weight |  | — | — |  |
| Obese |  | -0·05 | -0·07 to -0·03 | <0·001 |
| Overweight |  | 0·02 | 0·00 to 0·04 | 0·088 |
| Underweight |  | -0·03 | -0·06 to 0·00 | 0·065 |
| **History of Angina** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·06 | 0·02 to 0·10 | 0·002 |
| don't know |  | 0·16 | -0·24 to 0·56 | 0·44 |
| **History of CLD\*** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·03 | -0·01 to 0·08 | 0·14 |
| don't know |  | 0·12 | -0·28 to 0·52 | 0·56 |
| **History of Asthma** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·04 | -0·02 to 0·10 | 0·24 |
| don't know |  | 0·04 | -0·29 to 0·37 | 0·80 |
| **History of Arthritis** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·14 | 0·08 to 0·20 | <0·001 |
| don't know |  | 0·11 | -0·29 to 0·51 | 0·58 |
| **History of Stroke** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·04 | -0·01 to 0·08 | 0·10 |
| don't know |  | 0·00 | -0·33 to 0·32 | 0·99 |
| **History of DM\*** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | -0·05 | -0·13 to 0·03 | 0·20 |
| don't know |  | -0·04 | -0·44 to 0·37 | 0·86 |
| **History of RTA\*** | 8 464 |  |  |  |
| yes |  | — | — |  |
| no |  | -0·03 | -0·05 to -0·01 | <0·001 |
| don't know |  | 0·10 | -0·20 to 0·40 | 0·52 |
| **History of Depression** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·06 | 0·04 to 0·08 | <0·001 |
| don't know |  | -0·03 | -0·29 to 0·24 | 0·83 |
| **History of HPT\*** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·05 | 0·01 to 0·10 | 0·018 |
| don't know |  | 0·00 | -0·18 to 0·18 | 0·98 |
| **History of Cataracts** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | -0·02 | -0·09 to 0·05 | 0·65 |
| don't know |  | -0·09 | -0·45 to 0·27 | 0·63 |
| **History of Tobacco use** | 8 463 |  |  |  |
| yes |  | — | — |  |
| no |  | -0·03 | -0·05 to -0·01 | 0·002 |
| don't know |  | -0·09 | -0·37 to 0·19 | 0·52 |
| **History of Alcohol use** | 8 459 |  |  |  |
| yes |  | — | — |  |
| no |  | 0·12 | 0·09 to 0·14 | <0·001 |
| don't know |  | 0·17 | -0·22 to 0·57 | 0·40 |
| **Country of Residence** | 8 501 |  |  |  |
| Ghana |  | — | — |  |
| South Africa |  | 0·05 | 0·03 to 0·07 | <0·001 |
| 1CI = Confidence Interval | | | | |

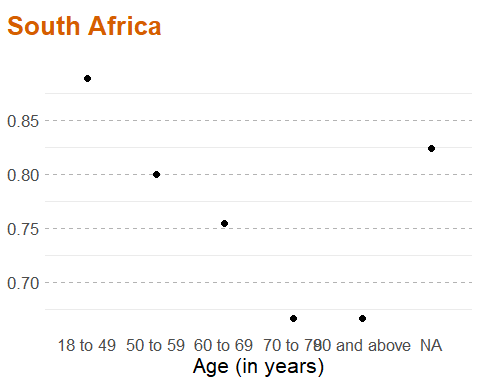
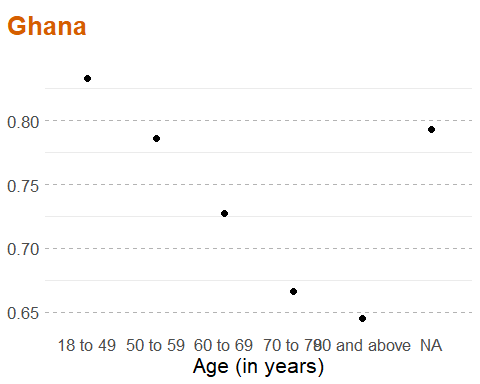
### Association of WHODAS variables and gait speed

The WHODAS variables are a series of questions that start with the following preamble: “Overall in the last 30 days, how much difficulty…”, followed by various parameters/tasks. As expected, generally, there is a statistically significant decrease in gait speed, as the respondents’ level of difficulty in accomplishing the task increases. The tables below gives a breakdown of the variables:

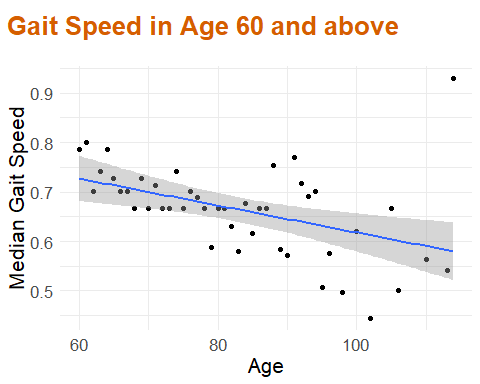
| Characteristic | Ghana, N = 4 8351 | South Africa, N = 3 6661 |
| --- | --- | --- |
| **in sitting for long periods?** |  |  |
| none | 2 224 (46%) | 2 264 (62%) |
| mild | 1 393 (29%) | 759 (21%) |
| moderate | 916 (19%) | 513 (14%) |
| severe | 289 (6·0%) | 118 (3·2%) |
| extreme | 8 (0·2%) | 7 (0·2%) |
| don't know | 5 (0·1%) | 5 (0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| **in taking care of your household  responsibilities?** |  |  |
| none | 2 743 (57%) | 2 459 (67%) |
| mild | 1 132 (23%) | 545 (15%) |
| moderate | 714 (15%) | 460 (13%) |
| severe | 167 (3·5%) | 152 (4·1%) |
| extreme | 50 (1·0%) | 35 (1·0%) |
| don't know | 15 (0·3%) | 9 (0·2%) |
| not applicable | 14 (0·3%) | 6 (0·2%) |
| **did you have in learning a new task?** |  |  |
| none | 2 280 (47%) | 1 855 (51%) |
| mild | 1 298 (27%) | 709 (19%) |
| moderate | 980 (20%) | 805 (22%) |
| severe | 239 (4·9%) | 244 (6·7%) |
| extreme | 35 (0·7%) | 45 (1·2%) |
| don't know | 3 (<0·1%) | 8 (0·2%) |
| not applicable | 0 (0%) | 0 (0%) |
| **in joining in community activities?** |  |  |
| none | 2 733 (57%) | 2 563 (70%) |
| mild | 872 (18%) | 464 (13%) |
| moderate | 710 (15%) | 410 (11%) |
| severe | 308 (6·4%) | 144 (3·9%) |
| extreme | 159 (3·3%) | 52 (1·4%) |
| don't know | 11 (0·2%) | 15 (0·4%) |
| not applicable | 42 (0·9%) | 18 (0·5%) |
| **concentrating on doing something for  10 minutes?** |  |  |
| none | 3 076 (64%) | 2 220 (61%) |
| mild | 1 135 (23%) | 629 (17%) |
| moderate | 501 (10%) | 645 (18%) |
| severe | 91 (1·9%) | 142 (3·9%) |
| extreme | 16 (0·3%) | 21 (0·6%) |
| don't know | 12 (0·2%) | 9 (0·2%) |
| not applicable | 4 (<0·1%) | 0 (0%) |
| **in walking a long distance such as a  kilometer?** |  |  |
| none | 2 158 (45%) | 1 893 (52%) |
| mild | 986 (20%) | 507 (14%) |
| moderate | 927 (19%) | 650 (18%) |
| severe | 485 (10%) | 461 (13%) |
| extreme | 256 (5·3%) | 145 (4·0%) |
| don't know | 5 (0·1%) | 10 (0·3%) |
| not applicable | 18 (0·4%) | 0 (0%) |
| **in bathing/washing your whole body?** |  |  |
| none | 4 057 (84%) | 3 279 (89%) |
| mild | 488 (10%) | 226 (6·2%) |
| moderate | 221 (4·6%) | 111 (3·0%) |
| severe | 47 (1·0%) | 32 (0·9%) |
| extreme | 8 (0·2%) | 11 (0·3%) |
| don't know | 9 (0·2%) | 7 (0·2%) |
| not applicable | 5 (0·1%) | 0 (0%) |
| **in getting dressed?** |  |  |
| none | 4 066 (84%) | 3 327 (91%) |
| mild | 458 (9·5%) | 187 (5·1%) |
| moderate | 260 (5·4%) | 117 (3·2%) |
| severe | 31 (0·6%) | 24 (0·7%) |
| extreme | 11 (0·2%) | 4 (0·1%) |
| don't know | 5 (0·1%) | 7 (0·2%) |
| not applicable | 4 (<0·1%) | 0 (0%) |
| **with dealing with strangers?** |  |  |
| none | 3 289 (68%) | 2 524 (69%) |
| mild | 717 (15%) | 474 (13%) |
| moderate | 572 (12%) | 458 (12%) |
| severe | 212 (4·4%) | 170 (4·6%) |
| extreme | 36 (0·7%) | 31 (0·8%) |
| don't know | 9 (0·2%) | 9 (0·2%) |
| not applicable | 0 (0%) | 0 (0%) |
| **with making new friendships or  maintaining current friendships?** |  |  |
| none | 3 247 (67%) | 2 727 (74%) |
| mild | 804 (17%) | 460 (13%) |
| moderate | 537 (11%) | 332 (9·1%) |
| severe | 193 (4·0%) | 122 (3·3%) |
| extreme | 47 (1·0%) | 19 (0·5%) |
| don't know | 7 (0·1%) | 6 (0·2%) |
| not applicable | 0 (0%) | 0 (0%) |
| 1n (%) | | |

| Characteristic | N | Beta | 95% CI1 | p-value |
| --- | --- | --- | --- | --- |
| **in sitting for long periods?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·12 | -0·14 to -0·10 | <0·001 |
| moderate |  | -0·15 | -0·18 to -0·13 | <0·001 |
| severe |  | -0·16 | -0·20 to -0·11 | <0·001 |
| extreme |  | -0·01 | -0·22 to 0·19 | 0·90 |
| don't know |  | -0·21 | -0·45 to 0·04 | 0·10 |
| **in taking care of your household  responsibilities?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·10 | -0·12 to -0·08 | <0·001 |
| moderate |  | -0·13 | -0·15 to -0·10 | <0·001 |
| severe |  | -0·13 | -0·18 to -0·09 | <0·001 |
| extreme |  | -0·18 | -0·26 to -0·09 | <0·001 |
| don't know |  | -0·05 | -0·21 to 0·11 | 0·56 |
| not applicable |  | -0·20 | -0·37 to -0·02 | 0·029 |
| **did you have in learning a new task?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·12 | -0·14 to -0·10 | <0·001 |
| moderate |  | -0·16 | -0·18 to -0·14 | <0·001 |
| severe |  | -0·17 | -0·21 to -0·14 | <0·001 |
| extreme |  | -0·18 | -0·27 to -0·09 | <0·001 |
| don't know |  | 0·09 | -0·15 to 0·33 | 0·46 |
| **in joining in community activities?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·08 | -0·11 to -0·06 | <0·001 |
| moderate |  | -0·14 | -0·17 to -0·11 | <0·001 |
| severe |  | -0·15 | -0·19 to -0·11 | <0·001 |
| extreme |  | -0·14 | -0·20 to -0·09 | <0·001 |
| don't know |  | -0·25 | -0·41 to -0·10 | 0·001 |
| not applicable |  | -0·15 | -0·25 to -0·05 | 0·004 |
| **concentrating on doing something for  10 minutes?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·07 | -0·09 to -0·05 | <0·001 |
| moderate |  | -0·10 | -0·13 to -0·08 | <0·001 |
| severe |  | -0·09 | -0·15 to -0·04 | <0·001 |
| extreme |  | -0·25 | -0·38 to -0·12 | <0·001 |
| don't know |  | -0·15 | -0·32 to 0·03 | 0·095 |
| not applicable |  | -0·17 | -0·56 to 0·23 | 0·41 |
| **in walking a long distance such as a  kilometer?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·08 | -0·10 to -0·06 | <0·001 |
| moderate |  | -0·16 | -0·18 to -0·13 | <0·001 |
| severe |  | -0·20 | -0·23 to -0·17 | <0·001 |
| extreme |  | -0·19 | -0·23 to -0·15 | <0·001 |
| don't know |  | -0·25 | -0·46 to -0·05 | 0·014 |
| not applicable |  | -0·34 | -0·53 to -0·16 | <0·001 |
| **in bathing/washing your whole body?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·01 | -0·04 to 0·02 | 0·67 |
| moderate |  | -0·02 | -0·06 to 0·03 | 0·41 |
| severe |  | -0·15 | -0·24 to -0·06 | 0·001 |
| extreme |  | -0·17 | -0·35 to 0·02 | 0·074 |
| don't know |  | 0·03 | -0·16 to 0·23 | 0·73 |
| not applicable |  | -0·19 | -0·55 to 0·16 | 0·29 |
| **in getting dressed?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·01 | -0·04 to 0·02 | 0·64 |
| moderate |  | -0·03 | -0·07 to 0·01 | 0·21 |
| severe |  | -0·20 | -0·31 to -0·09 | <0·001 |
| extreme |  | 0·26 | 0·06 to 0·47 | 0·012 |
| don't know |  | 0·06 | -0·17 to 0·29 | 0·61 |
| not applicable |  | -0·22 | -0·62 to 0·18 | 0·28 |
| **with dealing with strangers?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·05 | -0·08 to -0·03 | <0·001 |
| moderate |  | -0·06 | -0·09 to -0·03 | <0·001 |
| severe |  | -0·13 | -0·17 to -0·09 | <0·001 |
| extreme |  | -0·10 | -0·20 to 0·00 | 0·047 |
| don't know |  | 0·19 | 0·00 to 0·37 | 0·050 |
| **with making new friendships or  maintaining current friendships?** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·04 | -0·07 to -0·02 | <0·001 |
| moderate |  | -0·07 | -0·10 to -0·04 | <0·001 |
| severe |  | -0·11 | -0·16 to -0·06 | <0·001 |
| extreme |  | -0·08 | -0·18 to 0·02 | 0·12 |
| don't know |  | -0·05 | -0·27 to 0·17 | 0·65 |
| 1CI = Confidence Interval | | | | |

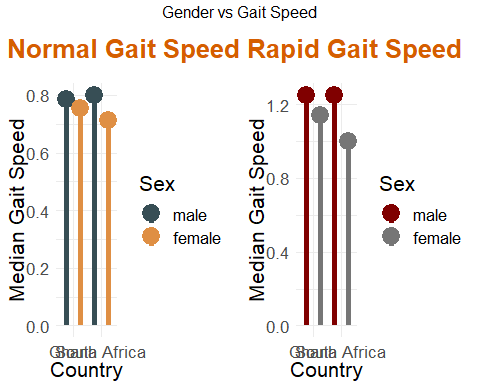
### Trend of Gait Speed With Age

It can be seen clearly in the graphs below that there is a decline in gait speed with increasing age: 

### Zooming In To 60+

The blue line represents the linear regression model with the shaded area representing the 95% confidence interval. 

### Gender vs Normal and Rapid Gait Speed

The results below suggest that the male gender is associated with slightly higher gait speed: 

### Respondents’subjective assessment of pain, health and energy levels

| Characteristic | Ghana, N = 4 8351 | South Africa, N = 3 6661 |
| --- | --- | --- |
| **Health Rating** |  |  |
| very good | 333 (6·9%) | 230 (6·3%) |
| good | 1 920 (40%) | 1 341 (37%) |
| moderate | 1 903 (39%) | 1 593 (43%) |
| bad | 595 (12%) | 447 (12%) |
| very bad | 82 (1·7%) | 51 (1·4%) |
| don't know | 2 (<0·1%) | 4 (0·1%) |
| not applicable | 0 (0%) | 0 (0%) |
| **Difficulty with activities** |  |  |
| none | 1 189 (25%) | 1 597 (44%) |
| mild | 1 175 (24%) | 604 (16%) |
| moderate | 1 854 (38%) | 1 172 (32%) |
| severe | 537 (11%) | 247 (6·7%) |
| extreme | 68 (1·4%) | 20 (0·5%) |
| don't know | 12 (0·2%) | 26 (0·7%) |
| not applicable | 0 (0%) | 0 (0%) |
| **Difficulty due to pain** |  |  |
| none | 391 (11%) | 274 (12%) |
| mild | 1 650 (45%) | 880 (39%) |
| moderate | 1 147 (31%) | 778 (34%) |
| severe | 414 (11%) | 251 (11%) |
| extreme | 10 (0·3%) | 6 (0·3%) |
| don't know | 60 (1·6%) | 85 (3·7%) |
| not applicable | 1 (<0·1%) | 0 (0%) |
| Unknown | 1 162 | 1 392 |
| **Difficulty due to lack of energy** |  |  |
| none | 2 265 (47%) | 2 117 (58%) |
| mild | 1 255 (26%) | 721 (20%) |
| moderate | 1 039 (21%) | 578 (16%) |
| severe | 267 (5·5%) | 229 (6·2%) |
| extreme | 8 (0·2%) | 9 (0·2%) |
| don't know | 1 (<0·1%) | 12 (0·3%) |
| not applicable | 0 (0%) | 0 (0%) |
| 1n (%) | | |

### Association of Pain, Health Rating and Energy Levels with gait speed

There is a statistically significant decrease in gait speed with a poor ranking of respondents’pain levels, health rating and energy levels.

| Characteristic | N | Beta | 95% CI1 | p-value |
| --- | --- | --- | --- | --- |
| **Health Rating** | 8 501 |  |  |  |
| very good |  | — | — |  |
| good |  | -0·11 | -0·15 to -0·07 | <0·001 |
| moderate |  | -0·23 | -0·26 to -0·19 | <0·001 |
| bad |  | -0·23 | -0·27 to -0·18 | <0·001 |
| very bad |  | -0·22 | -0·30 to -0·15 | <0·001 |
| don't know |  | -0·21 | -0·53 to 0·12 | 0·21 |
| **Difficulty due to pain** | 5 947 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·04 | -0·08 to -0·01 | 0·014 |
| moderate |  | -0·05 | -0·09 to -0·02 | 0·002 |
| severe |  | -0·08 | -0·12 to -0·04 | <0·001 |
| extreme |  | -0·11 | -0·30 to 0·09 | 0·29 |
| don't know |  | -0·05 | -0·12 to 0·03 | 0·21 |
| not applicable |  | -0·40 | -1·2 to 0·38 | 0·31 |
| **Difficulty due to lack of energy** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·09 | -0·11 to -0·07 | <0·001 |
| moderate |  | -0·08 | -0·10 to -0·06 | <0·001 |
| severe |  | -0·12 | -0·15 to -0·08 | <0·001 |
| extreme |  | -0·18 | -0·37 to 0·01 | 0·068 |
| don't know |  | -0·06 | -0·28 to 0·16 | 0·56 |
| **Difficulty with activities** | 8 501 |  |  |  |
| none |  | — | — |  |
| mild |  | -0·10 | -0·13 to -0·08 | <0·001 |
| moderate |  | -0·16 | -0·18 to -0·14 | <0·001 |
| severe |  | -0·21 | -0·24 to -0·17 | <0·001 |
| extreme |  | -0·20 | -0·28 to -0·11 | <0·001 |
| don't know |  | -0·09 | -0·22 to 0·04 | 0·17 |
| 1CI = Confidence Interval | | | | |

#### Related Graphs

The figures below are graphical representations of the above parameters. 