**Supplemental materials**

Table Sample counts for self-reported PA measures

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Full model sample | | PA met | | PA not met | |
| categories | Unweighted N | Weighted %age | Unweighted N | Weighted %age | Unweighted N | Weighted %age |
| **Self-reported PA** |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |
| *Guidelines met* | 9921 | 56.30 | 9921 | 100.00 | 0 | 0.00 |
| *Guidelines not met* | 8526 | 43.70 | 0 | 0.00 | 8526 | 100.00 |
| Recreational (sports + exercise |  |  |  |  |  |  |
| *Guidelines met* | 3260 | 19.94 | 3260 | 100.00 | 0 | 0.00 |
| *Guidelines not met* | 15178 | 80.06 | 6657 | 45.41 | 8521 | 54.59 |
| Walking |  |  |  |  |  |  |
| *Guidelines met* | 3767 | 21.71 | 3767 | 100.00 | 0 | 0.00 |
| *Guidelines not met* | 14624 | 78.29 | 6138 | 44.29 | 8486 | 55.71 |
| Non-recreational |  |  |  |  |  |  |
| *Guidelines met* | 5191 | 28.23 | 5191 | 100.00 | 0 | 0.00 |
| *Guidelines not met* | 13255 | 71.77 | 4730 | 39.11 | 8525 | 60.89 |
| **Environmental variables** |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |
| *80 - 100 %* | 1191 | 6.08 | 676 | 58.75 | 515 | 41.25 |
| *60 - <80 %* | 2298 | 11.86 | 1266 | 57.23 | 1032 | 42.77 |
| *40 - <60 %* | 3177 | 16.72 | 1725 | 56.78 | 1452 | 43.22 |
| *20 - <40 %* | 5554 | 30.08 | 2848 | 54.04 | 2706 | 45.96 |
| *0 - <20 % (ref)* | 6227 | 35.27 | 3406 | 57.25 | 2821 | 42.75 |
| Freshwater coverage |  |  |  |  |  |  |
| *>5 - 100 %* | 493 | 2.63 | 268 | 56.83 | 225 | 43.17 |
| *>1 - 5 %* | 1194 | 6.33 | 665 | 56.68 | 529 | 43.32 |
| *>0 - 1 %* | 989 | 5.21 | 518 | 55.92 | 471 | 44.08 |
| *0% (ref)* | 15771 | 85.82 | 8470 | 56.27 | 7301 | 43.73 |
| Coastal proximity |  |  |  |  |  |  |
| *0 - 5 km* | 3299 | 17.11 | 1804 | 57.05 | 1495 | 42.95 |
| *5 - 20 km* | 2777 | 14.03 | 1525 | 57.92 | 1252 | 42.08 |
| *>20 km (ref)* | 12371 | 68.86 | 6592 | 55.78 | 5779 | 44.22 |
| **LSOA level covariates** |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |
| *Least deprived* | 3585 | 18.54 | 2110 | 60.76 | 1475 | 39.24 |
| *2nd least deprived* | 3191 | 17.17 | 1831 | 60.28 | 1360 | 39.72 |
| *Medium deprived* | 3536 | 19.40 | 1914 | 56.46 | 1622 | 43.54 |
| *2nd most deprived* | 4008 | 22.24 | 2097 | 55.23 | 1911 | 44.77 |
| *Most deprived (ref)* | 4127 | 22.65 | 1969 | 50.52 | 2158 | 49.48 |
| **Household level covariates** |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |
| *Highest Quintile* | 2922 | 16.15 | 1939 | 67.97 | 983 | 32.03 |
| *Second highest Quintile* | 2976 | 16.51 | 1868 | 64.13 | 1108 | 35.87 |
| *Middle Quintile* | 2851 | 15.23 | 1594 | 57.74 | 1257 | 42.26 |
| *Second lowest Quintile* | 2969 | 15.27 | 1425 | 50.19 | 1544 | 49.81 |
| *Lowest Quintile (ref)* | 2926 | 15.46 | 1315 | 47.85 | 1611 | 52.15 |
| *Missing data* | 3803 | 21.38 | 1780 | 50.87 | 2023 | 49.13 |
| Children in household |  |  |  |  |  |  |
| *>=1* | 5550 | 30.43 | 3476 | 62.90 | 2074 | 37.10 |
| *None (ref)* | 12897 | 69.57 | 6445 | 53.40 | 6452 | 46.60 |
| Access to a car/van |  |  |  |  |  |  |
| *No* | 4117 | 21.66 | 1788 | 47.47 | 2329 | 52.53 |
| *Yes (ref)* | 14316 | 78.27 | 8128 | 58.76 | 6188 | 41.24 |
| *Missing data* | 14 | 0.07 | 5 | 36.47 | 9 | 63.53 |
| **Individual level covariates** |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| *75+* | 1948 | 8.54 | 340 | 17.58 | 1608 | 82.42 |
| *55 - 74* | 5131 | 23.17 | 2330 | 45.57 | 2801 | 54.43 |
| *35 - 54* | 6325 | 34.88 | 3923 | 62.67 | 2402 | 37.33 |
| *16 - 34 (ref)* | 5043 | 33.41 | 3328 | 66.98 | 1715 | 33.02 |
| Sex |  |  |  |  |  |  |
| *Male* | 8215 | 48.94 | 4839 | 62.12 | 3376 | 37.88 |
| *Female (ref)* | 10232 | 51.06 | 5082 | 50.72 | 5150 | 49.28 |
| Highest qualification |  |  |  |  |  |  |
| *Higher ed/Degree* | 5726 | 32.15 | 3698 | 66.14 | 2028 | 33.86 |
| *NVQ3/A level* | 2777 | 16.69 | 1776 | 65.42 | 1001 | 34.58 |
| *NVQ1/NVQ2/GCSE* | 4715 | 25.78 | 2624 | 57.51 | 2091 | 42.49 |
| *Foreign/other/none (ref)* | 5156 | 24.92 | 1793 | 36.46 | 3363 | 63.54 |
| *Missing data* | 73 | 0.46 | 30 | 43.87 | 43 | 56.13 |
| Economic activity |  |  |  |  |  |  |
| *ILO unemployed* | 557 | 3.47 | 346 | 62.34 | 211 | 37.66 |
| *Retired/other inactive* | 6852 | 31.33 | 2324 | 34.18 | 4528 | 65.82 |
| *In work/student (ref)* | 10977 | 64.83 | 7224 | 66.70 | 3753 | 33.30 |
| *Missing data* | 61 | 0.38 | 27 | 49.85 | 34 | 50.15 |
| Relationship status |  |  |  |  |  |  |
| *Living with partner* | 11345 | 60.50 | 6338 | 57.64 | 5007 | 42.36 |
| *Widowed/separated/divorced* | 3245 | 14.84 | 1204 | 38.27 | 2041 | 61.73 |
| *Single (ref)* | 3854 | 24.64 | 2377 | 63.85 | 1477 | 36.15 |
| *Missing data* | 3 | 0.01 | 2 | 66.30 | 1 | 33.70 |
| Longstanding illness presence |  |  |  |  |  |  |
| *No longstanding illness* | 10368 | 59.73 | 6623 | 65.29 | 3745 | 34.71 |
| *Non-limiting longstanding illness* | 3447 | 17.64 | 1933 | 57.55 | 1514 | 42.45 |
| *Limiting longstanding illness (ref)* | 4617 | 22.55 | 1359 | 31.55 | 3258 | 68.45 |
| *Missing data* | 15 | 0.08 | 6 | 36.26 | 9 | 63.74 |
| BMI |  |  |  |  |  |  |
| *Obese* | 3983 | 20.80 | 1821 | 48.21 | 2162 | 51.79 |
| *Overweight* | 5741 | 30.64 | 3346 | 60.45 | 2395 | 39.55 |
| *Underweight* | 260 | 1.65 | 132 | 56.18 | 128 | 43.82 |
| *Normal weight (ref)* | 5483 | 31.33 | 3412 | 64.11 | 2071 | 35.89 |
| *Missing data* | 2980 | 15.57 | 1210 | 43.20 | 1770 | 56.80 |
| Cigarette smoking status |  |  |  |  |  |  |
| *Never smoked at all* | 8741 | 48.49 | 4851 | 57.75 | 3890 | 42.25 |
| *Used to smoke* | 5579 | 28.30 | 2831 | 53.54 | 2748 | 46.46 |
| *Current smoker (ref)* | 3977 | 22.14 | 2173 | 57.09 | 1804 | 42.91 |
| *Missing data* | 150 | 1.07 | 66 | 46.80 | 84 | 53.20 |
| Year |  |  |  |  |  |  |
| *2012* | 6455 | 35.26 | 3454 | 56.32 | 3001 | 43.68 |
| *2008 (ref)* | 11992 | 64.74 | 6467 | 56.28 | 5525 | 43.72 |

Table Unadjusted and adjusted model results predicting meeting PA guidelines through all self-reported activity

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.07 | 0.07 | 1.00 | 0.318 | 1.08 | 0.93 - 1.25 | 0.12 | 0.08 | 1.51 | 0.131 | 1.13 | 0.96 - 1.33 |
| *60 - <80 %* | 0.00 | 0.06 | 0.00 | 0.997 | 1.00 | 0.90 - 1.12 | 0.03 | 0.06 | 0.48 | 0.630 | 1.03 | 0.91 - 1.16 |
| *40 - <60 %* | -0.02 | 0.05 | -0.36 | 0.721 | 0.98 | 0.89 - 1.09 | 0.04 | 0.06 | 0.75 | 0.454 | 1.04 | 0.94 - 1.16 |
| *20 - <40 %* | **-0.13** | **0.04** | **-3.01** | **0.003** | **0.88** | **0.81 - 0.96** | -0.07 | 0.05 | -1.57 | 0.116 | 0.93 | 0.85 - 1.02 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.01 | 0.11 | 0.12 | 0.905 | 1.01 | 0.81 - 1.26 | 0.05 | 0.12 | 0.42 | 0.677 | 1.05 | 0.84 - 1.32 |
| *>1 - 5 %* | 0.00 | 0.07 | -0.01 | 0.992 | 1.00 | 0.87 - 1.15 | -0.03 | 0.08 | -0.32 | 0.751 | 0.97 | 0.83 - 1.14 |
| *>0 - 1 %* | -0.05 | 0.08 | -0.64 | 0.524 | 0.95 | 0.81 - 1.12 | -0.09 | 0.09 | -1.05 | 0.293 | 0.91 | 0.77 - 1.08 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | 0.05 | 0.04 | 1.15 | 0.249 | 1.05 | 0.96 - 1.15 | **0.23** | **0.05** | **4.75** | **<0.001** | **1.26** | **1.15 - 1.39** |
| *5 - 20 km* | 0.09 | 0.05 | 1.82 | 0.068 | 1.10 | 0.99 - 1.21 | **0.14** | **0.05** | **2.54** | **0.011** | **1.15** | **1.03 - 1.27** |
| *>20 km (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* |  |  |  |  |  |  | **0.32** | **0.06** | **5.00** | **<0.001** | **1.38** | **1.21 - 1.56** |
| *2nd least deprived* |  |  |  |  |  |  | **0.31** | **0.06** | **5.03** | **<0.001** | **1.37** | **1.21 - 1.55** |
| *Medium deprived* |  |  |  |  |  |  | **0.12** | **0.06** | **2.07** | **0.039** | **1.13** | **1.01 - 1.27** |
| *2nd most deprived* |  |  |  |  |  |  | 0.11 | 0.06 | 1.87 | 0.061 | 1.11 | 1.00 - 1.24 |
| *Most deprived (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* |  |  |  |  |  |  | 0.12 | 0.07 | 1.62 | 0.104 | 1.13 | 0.98 - 1.30 |
| *Second highest Quintile* |  |  |  |  |  |  | 0.01 | 0.07 | 0.16 | 0.870 | 1.01 | 0.88 - 1.16 |
| *Middle Quintile* |  |  |  |  |  |  | 0.03 | 0.07 | 0.37 | 0.710 | 1.03 | 0.89 - 1.18 |
| *Second lowest Quintile* |  |  |  |  |  |  | 0.00 | 0.07 | -0.07 | 0.942 | 1.00 | 0.87 - 1.13 |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -0.08 | 0.07 | -1.16 | 0.246 | 0.93 | 0.82 - 1.05 |
| Children in household |  |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.01 | 0.05 | -0.15 | 0.884 | 0.99 | 0.91 - 1.09 |
| *None (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | 0.09 | 0.05 | 1.84 | 0.066 | 1.10 | 0.99 - 1.22 |
| *Yes (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -0.84 | 0.61 | -1.38 | 0.167 | 0.43 | 0.13 - 1.42 |
| **Individual level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.36** | **0.09** | **-14.36** | **<0.001** | **0.26** | **0.21 - 0.31** |
| *55 - 74* |  |  |  |  |  |  | **-0.39** | **0.06** | **-6.03** | **<0.001** | **0.68** | **0.60 - 0.77** |
| *35 - 54* |  |  |  |  |  |  | -0.06 | 0.05 | -1.23 | 0.218 | 0.94 | 0.86 - 1.04 |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.35** | **0.03** | **10.1** | **<0.001** | **1.42** | **1.32 - 1.51** |
| *Female (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  |  | **0.46** | **0.05** | **8.72** | **<0.001** | **1.58** | **1.43 - 1.76** |
| *NVQ3/A level* |  |  |  |  |  |  | **0.38** | **0.06** | **6.11** | **<0.001** | **1.46** | **1.30 - 1.65** |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  |  | **0.23** | **0.05** | **4.62** | **<0.001** | **1.26** | **1.14 - 1.40** |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.00 | 0.36 | 0.00 | 0.998 | 1.00 | 0.49 - 2.04 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  |  | 0.00 | 0.11 | 0.01 | 0.989 | 1.00 | 0.81 - 1.24 |
| *Retired/other inactive* |  |  |  |  |  |  | **-0.45** | **0.05** | **-9.67** | **<0.001** | **0.63** | **0.58 - 0.70** |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.36 | 0.41 | 0.88 | 0.378 | 1.43 | 0.65 - 3.16 |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  |  | -0.01 | 0.05 | -0.27 | 0.784 | 0.99 | 0.89 - 1.09 |
| *Widowed/separated/divorced* |  |  |  |  |  |  | -0.11 | 0.06 | -1.71 | 0.087 | 0.89 | 0.79 - 1.02 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.97 | 1.12 | 0.87 | 0.387 | 2.64 | 0.29 - 23.68 |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | **0.85** | **0.05** | **18.58** | **<0.001** | **2.33** | **2.13 - 2.55** |
| *Non-limiting longstanding illness* |  |  |  |  |  |  | **0.78** | **0.05** | **14.34** | **<0.001** | **2.18** | **1.96 - 2.42** |
| *Limiting longstanding illness (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.07 | 0.52 | 0.14 | 0.890 | 1.08 | 0.39 - 3.00 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.40** | **0.05** | **-8.03** | **<0.001** | **0.67** | **0.61 - 0.74** |
| *Overweight* |  |  |  |  |  |  | -0.04 | 0.05 | -0.78 | 0.434 | 0.96 | 0.88 - 1.05 |
| *Underweight* |  |  |  |  |  |  | **-0.29** | **0.15** | **-2.00** | **0.046** | **0.75** | **0.56 - 0.99** |
| *Normal weight (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | **-0.53** | **0.06** | **-9.30** | **<0.001** | **0.59** | **0.53 - 0.66** |
| Cigarette smoking status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* |  |  |  |  |  |  | -0.02 | 0.05 | -0.36 | 0.716 | 0.98 | 0.90 - 1.08 |
| *Used to smoke* |  |  |  |  |  |  | 0.08 | 0.05 | 1.56 | 0.119 | 1.08 | 0.98 - 1.19 |
| *Current smoker (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | **-0.66** | **0.2** | **-3.29** | **0.001** | **0.52** | **0.35 - 0.76** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.03 | 0.04 | -0.87 | 0.383 | 0.97 | 0.89 - 1.04 |
| *2008 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 0.27 |  |  |  |  |  | -0.49 |  |  |  |  |  |
| N | 18447 |  |  |  |  |  | 18447 |  |  |  |  |  |
| Households | 11439 |  |  |  |  |  | 11439 |  |  |  |  |  |
| AIC | 25279.59 |  |  |  |  |  | 22173.83 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.13 |  |  |  |  |  | 16 |  |  |  |  |  |

Table Combined adjusted model results for self-reported activity with imputed data for covariates with low counts of missing values – car, marital status and limiting illness.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | results | se | (lower | upper) | Missing data | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.13 | 0.08 | -0.04 | 0.29 | 0% | 1.13 | 0.97 - 1.33 |
| *60 - <80 %* | 0.03 | 0.06 | -0.09 | 0.15 | 0% | 1.03 | 0.91 - 1.16 |
| *40 - <60 %* | 0.04 | 0.06 | -0.07 | 0.15 | 0% | 1.04 | 0.94 - 1.16 |
| *20 - <40 %* | -0.07 | 0.05 | -0.16 | 0.02 | 0% | 0.93 | 0.85 - 1.02 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.05 | 0.12 | -0.18 | 0.27 | 0% | 1.05 | 0.84 - 1.31 |
| *>1 - 5 %* | -0.03 | 0.08 | -0.19 | 0.13 | 0% | 0.97 | 0.83 - 1.14 |
| *>0 - 1 %* | -0.09 | 0.09 | -0.26 | 0.08 | 0% | 0.91 | 0.77 - 1.08 |
| *0% (ref)* |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |
| *0 - 5 km* | **0.23** | **0.05** | **0.14** | **0.33** | **0%** | **1.26** | **1.15 - 1.39** |
| *5 - 20 km* | **0.14** | **0.05** | **0.03** | **0.24** | **0%** | **1.15** | **1.03 - 1.27** |
| *>20 km (ref)* |  |  |  |  |  |  |  |
| **LSOA level covariates** |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |
| *Least deprived* | **0.32** | **0.06** | **0.19** | **0.45** | **0%** | **1.38** | **1.21 - 1.56** |
| *2nd least deprived* | **0.31** | **0.06** | **0.19** | **0.44** | **0%** | **1.37** | **1.21 - 1.55** |
| *Medium deprived* | **0.12** | **0.06** | **0.01** | **0.24** | **0%** | **1.13** | **1.01 - 1.27** |
| *2nd most deprived* | **0.11** | **0.06** | **0.00** | **0.22** | **0%** | **1.11** | **1.00 - 1.24** |
| *Most deprived (ref)* |  |  |  |  |  |  |  |
| **Household level covariates** |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |
| *Highest Quintile* | 0.12 | 0.07 | -0.02 | 0.26 | 0% | 1.13 | 0.98 - 1.30 |
| *Second highest Quintile* | 0.01 | 0.07 | -0.13 | 0.15 | 0% | 1.01 | 0.88 - 1.17 |
| *Middle Quintile* | 0.03 | 0.07 | -0.11 | 0.16 | 0% | 1.03 | 0.90 - 1.18 |
| *Second lowest Quintile* | 0.00 | 0.07 | -0.13 | 0.13 | 0% | 1.00 | 0.88 - 1.13 |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |
| *Missing data* | -0.08 | 0.06 | -0.20 | 0.05 | 0% | 0.93 | 0.82 - 1.05 |
| Children in household |  |  |  |  |  |  |  |
| *>=1* | -0.01 | 0.05 | -0.10 | 0.08 | 0% | 0.99 | 0.90 - 1.09 |
| *None (ref)* |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |
| *No* | 0.09 | 0.05 | -0.01 | 0.19 | 0% | 1.10 | 0.99 - 1.21 |
| *Yes (ref)* |  |  |  |  |  |  |  |
| **Individual level covariates** |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| *75+* | **-1.36** | **0.09** | **-1.55** | **-1.18** | **0%** | **0.26** | **0.21 - 0.31** |
| *55 - 74* | **-0.39** | **0.06** | **-0.52** | **-0.26** | **0%** | **0.68** | **0.60 - 0.77** |
| *35 - 54* | -0.06 | 0.05 | -0.16 | 0.04 | 0% | 0.94 | 0.86 - 1.04 |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| *Male* | **0.35** | **0.03** | **0.28** | **0.42** | **0%** | **1.42** | **1.32 - 1.51** |
| *Female (ref)* |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |
| *Higher ed/Degree* | **0.46** | **0.05** | **0.36** | **0.56** | **0%** | **1.58** | **1.43 - 1.76** |
| *NVQ3/A level* | **0.38** | **0.06** | **0.26** | **0.50** | **0%** | **1.46** | **1.29 - 1.65** |
| *NVQ1/NVQ2/GCSE* | **0.23** | **0.05** | **0.13** | **0.33** | **0%** | **1.26** | **1.14 - 1.39** |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |
| *Missing data* | -0.01 | 0.36 | -0.72 | 0.71 | 0% | 0.99 | 0.49 - 2.02 |
| Economic activity |  |  |  |  |  |  |  |
| *ILO unemployed* | 0.00 | 0.11 | -0.21 | 0.21 | 0% | 1.00 | 0.81 - 1.24 |
| *Retired/other inactive* | **-0.45** | **0.05** | **-0.55** | **-0.36** | **0%** | **0.64** | **0.58 - 0.70** |
| *In work/student (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 0.34 | 0.40 | -0.45 | 1.13 | 0% | 1.41 | 0.64 - 3.11 |
| Relationship status |  |  |  |  |  |  |  |
| *Living with partner* | -0.02 | 0.05 | -0.12 | 0.09 | 0% | 0.98 | 0.89 - 1.09 |
| *Widowed/separated/divorced* | -0.11 | 0.06 | -0.24 | 0.02 | 0% | 0.89 | 0.79 - 1.02 |
| *Single (ref)* |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |
| *No longstanding illness* | **0.84** | **0.05** | **0.75** | **0.93** | **0%** | **2.32** | **2.13 - 2.54** |
| *Non-limiting longstanding illness* | **0.78** | **0.05** | **0.67** | **0.88** | **0%** | **2.18** | **1.96 - 2.42** |
| *Limiting longstanding illness (ref)* |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |
| *Obese* | **-0.40** | **0.05** | **-0.50** | **-0.30** | **0%** | **0.67** | **0.61 - 0.74** |
| *Overweight* | -0.03 | 0.05 | -0.12 | 0.05 | 0% | 0.97 | 0.88 - 1.06 |
| *Underweight* | **-0.29** | **0.15** | **-0.58** | **0.00** | **0%** | **0.75** | **0.56 - 1.00** |
| *Normal weight (ref)* |  |  |  |  |  |  |  |
| *Missing data* | **-0.53** | **0.06** | **-0.64** | **-0.42** | **0%** | **0.59** | **0.53 - 0.66** |
| Cigarette smoking status |  |  |  |  |  |  |  |
| *Never smoked at all* | 0.08 | 0.05 | -0.02 | 0.18 | 0% | 1.08 | 0.98 - 1.19 |
| *Used to smoke* | -0.02 | 0.05 | -0.11 | 0.08 | 0% | 0.98 | 0.90 - 1.08 |
| *Current smoker (ref)* |  |  |  |  |  |  |  |
| *Missing data* | **-0.67** | **0.20** | **-1.07** | **-0.28** | **0%** | **0.51** | **0.34 - 0.76** |
| Year |  |  |  |  |  |  |  |
| *2012* | -0.03 | 0.04 | -0.11 | 0.04 | 0% | 0.97 | 0.89 - 1.04 |
| *2008 (ref)* |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Intercept | -0.49 |  |  |  |  |  |  |
| N | 18447 |  |  |  |  |  |  |
| Households | 11439 |  |  |  |  |  |  |
| AIC (min, max) | 22170 | 22174 |  |  |  |  |  |
| Average Cox & Snell *pseudo-R2*(%) | 15.99 |  |  |  |  |  |  |

Table Unadjusted and adjusted model results predicting meeting PA guidelines through sports and exercise

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.07 | 0.10 | -0.68 | 0.494 | 0.93 | 0.77 - 1.14 | 0.03 | 0.11 | 0.26 | 0.798 | 1.03 | 0.84 - 1.26 |
| *60 - <80 %* | -0.08 | 0.07 | -1.08 | 0.279 | 0.92 | 0.80 - 1.07 | 0.03 | 0.08 | 0.36 | 0.718 | 1.03 | 0.88 - 1.20 |
| *40 - <60 %* | -0.08 | 0.07 | -1.13 | 0.260 | 0.93 | 0.81 - 1.06 | 0.03 | 0.07 | 0.36 | 0.720 | 1.03 | 0.89 - 1.18 |
| *20 - <40 %* | -0.10 | 0.06 | -1.78 | 0.075 | 0.90 | 0.80 - 1.01 | -0.01 | 0.06 | -0.20 | 0.842 | 0.99 | 0.88 - 1.11 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.24 | 0.14 | 1.72 | 0.086 | 1.28 | 0.97 - 1.69 | 0.24 | 0.15 | 1.64 | 0.101 | 1.27 | 0.95 - 1.69 |
| *>1 - 5 %* | 0.06 | 0.09 | 0.71 | 0.477 | 1.06 | 0.90 - 1.26 | 0.01 | 0.10 | 0.12 | 0.906 | 1.01 | 0.83 - 1.24 |
| *>0 - 1 %* | 0.00 | 0.11 | 0.02 | 0.984 | 1.00 | 0.81 - 1.24 | -0.06 | 0.11 | -0.54 | 0.592 | 0.94 | 0.76 - 1.17 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | **-0.16** | **0.06** | **-2.59** | **0.009** | **0.85** | **0.75 - 0.96** | 0.00 | 0.07 | 0.06 | 0.950 | 1.00 | 0.88 - 1.15 |
| *5 - 20 km* | 0.05 | 0.07 | 0.78 | 0.438 | 1.05 | 0.93 - 1.20 | 0.06 | 0.07 | 0.89 | 0.375 | 1.06 | 0.93 - 1.21 |
| *>20 km (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* |  |  |  |  |  | - | **0.18** | **0.08** | **2.19** | **0.028** | **1.19** | **1.02 - 1.40** |
| *2nd least deprived* |  |  |  |  |  | - | **0.27** | **0.08** | **3.32** | **0.001** | **1.31** | **1.12 - 1.54** |
| *Medium deprived* |  |  |  |  |  | - | 0.06 | 0.08 | 0.73 | 0.468 | 1.06 | 0.91 - 1.23 |
| *2nd most deprived* |  |  |  |  |  | - | 0.01 | 0.07 | 0.07 | 0.945 | 1.01 | 0.87 - 1.16 |
| *Most deprived (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* |  |  |  |  |  | - | **0.41** | **0.09** | **4.34** | **<0.001** | **1.50** | **1.25 - 1.80** |
| *Second highest Quintile* |  |  |  |  |  | - | 0.17 | 0.09 | 1.81 | 0.070 | 1.18 | 0.99 - 1.42 |
| *Middle Quintile* |  |  |  |  |  | - | 0.12 | 0.09 | 1.26 | 0.206 | 1.13 | 0.94 - 1.36 |
| *Second lowest Quintile* |  |  |  |  |  | - | 0.05 | 0.09 | 0.58 | 0.562 | 1.05 | 0.88 - 1.26 |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | 0.11 | 0.09 | 1.24 | 0.214 | 1.12 | 0.94 - 1.34 |
| Children in household |  |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  | - | 0.07 | 0.05 | 1.20 | 0.231 | 1.07 | 0.96 - 1.19 |
| *None (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  | - | -0.07 | 0.07 | -0.99 | 0.324 | 0.93 | 0.81 - 1.07 |
| *Yes (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | -0.57 | 0.88 | -0.65 | 0.514 | 0.56 | 0.10 - 3.15 |
| **Individual level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  | - | **-1.75** | **0.17** | **-10.56** | **<0.001** | **0.17** | **0.13 - 0.24** |
| *55 - 74* |  |  |  |  |  | - | **-0.89** | **0.08** | **-10.88** | **<0.001** | **0.41** | **0.35 - 0.48** |
| *35 - 54* |  |  |  |  |  | - | **-0.48** | **0.06** | **-8.53** | **<0.001** | **0.62** | **0.56 - 0.69** |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  | - | **0.68** | **0.04** | **15.30** | **<0.001** | **1.97** | **1.80 - 2.15** |
| *Female (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  | - | **0.54** | **0.08** | **6.92** | **<0.001** | **1.71** | **1.47 - 2.00** |
| *NVQ3/A level* |  |  |  |  |  | - | **0.44** | **0.09** | **5.11** | **<0.001** | **1.55** | **1.31 - 1.83** |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  | - | **0.29** | **0.08** | **3.69** | **<0.001** | **1.34** | **1.15 - 1.56** |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | 0.44 | 0.38 | 1.15 | 0.251 | 1.56 | 0.73 - 3.31 |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  | - | 0.24 | 0.13 | 1.92 | 0.055 | 1.27 | 0.99 - 1.63 |
| *Retired/other inactive* |  |  |  |  |  | - | **-0.17** | **0.07** | **-2.39** | **0.017** | **0.84** | **0.73 - 0.97** |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | 0.40 | 0.41 | 0.96 | 0.337 | 1.49 | 0.66 - 3.36 |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  | - | **-0.58** | **0.06** | **-9.61** | **<0.001** | **0.56** | **0.50 - 0.63** |
| *Widowed/separated/divorced* |  |  |  |  |  | - | **-0.32** | **0.09** | **-3.65** | **<0.001** | **0.73** | **0.62 - 0.86** |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | -10.05 | 0.83 | -12.18 | 0 | 0 | 0.00 |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  | - | **0.63** | **0.07** | **8.61** | **<0.001** | **1.89** | **1.63 - 2.18** |
| *Non-limiting longstanding illness* | |  |  |  |  | - | **0.53** | **0.08** | **6.31** | **<0.001** | **1.70** | **1.44 - 2.01** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -0.63 | 0.99 | -0.64 | 0.525 | 0.53 | 0.08 - 3.73 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  | - | **-0.43** | **0.07** | **-6.23** | **<0.001** | **0.65** | **0.57 - 0.75** |
| *Overweight* |  |  |  |  |  | - | -0.05 | 0.05 | -1.01 | 0.314 | 0.95 | 0.85 - 1.05 |
| *Underweight* |  |  |  |  |  | - | **-0.47** | **0.19** | **-2.53** | **0.011** | **0.62** | **0.43 - 0.90** |
| *Normal weight (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | **-0.33** | **0.07** | **-4.44** | **<0.001** | **0.72** | **0.62 - 0.83** |
| Cigarette smoking status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* |  |  |  |  |  | - | **0.42** | **0.06** | **6.71** | **<0.001** | **1.52** | **1.34 - 1.72** |
| *Used to smoke* |  |  |  |  |  | - | **0.50** | **0.07** | **7.39** | **<0.001** | **1.64** | **1.44 - 1.88** |
| *Current smoker (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | -0.15 | 0.24 | -0.61 | 0.544 | 0.86 | 0.54 - 1.38 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  | - | 0.05 | 0.05 | 1.04 | 0.298 | 1.05 | 0.95 - 1.16 |
| *2008 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.32 |  |  |  |  |  | -2.30 |  |  |  |  |  |
| N | 18438 |  |  |  |  |  | 18438 |  |  |  |  |  |
| Households | 11437 |  |  |  |  |  | 11437 |  |  |  |  |  |
| AIC | 18424.30 |  |  |  |  |  | 16256.05 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.12 |  |  |  |  |  | 11.64 |  |  |  |  |  |

Table Combined adjusted model results for self-reported sports and exercise activity with imputed data (5 imputed datasets) for covariates with low counts of missing values – car, marital status and limiting illness.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | results | se | (lower | upper) | Missing data | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.03 | 0.11 | -0.18 | 0.23 | 0% | 1.03 | 0.84 - 1.26 |
| *60 - <80 %* | 0.03 | 0.08 | -0.13 | 0.19 | 0% | 1.03 | 0.88 - 1.20 |
| *40 - <60 %* | 0.03 | 0.07 | -0.11 | 0.17 | 0% | 1.03 | 0.89 - 1.18 |
| *20 - <40 %* | -0.01 | 0.06 | -0.13 | 0.11 | 0% | 0.99 | 0.88 - 1.11 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.24 | 0.15 | -0.05 | 0.53 | 0% | 1.27 | 0.95 - 1.69 |
| *>1 - 5 %* | 0.01 | 0.10 | -0.19 | 0.21 | 0% | 1.01 | 0.83 - 1.24 |
| *>0 - 1 %* | -0.06 | 0.11 | -0.28 | 0.16 | 0% | 0.94 | 0.76 - 1.17 |
| *0% (ref)* |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |
| *<5 km* | 0.00 | 0.07 | -0.13 | 0.14 | 0% | 1.00 | 0.88 - 1.14 |
| *5 - 20 km* | 0.06 | 0.07 | -0.07 | 0.19 | 0% | 1.06 | 0.93 - 1.21 |
| *>20 km (ref)* |  |  |  |  |  |  |  |
| **LSOA level covariates** |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |
| *Least deprived* | **0.18** | **0.08** | **0.02** | **0.34** | **0%** | **1.20** | **1.02 - 1.40** |
| *2nd least deprived* | **0.27** | **0.08** | **0.11** | **0.43** | **0%** | **1.31** | **1.12 - 1.54** |
| *Medium deprived* | 0.06 | 0.08 | -0.09 | 0.21 | 0% | 1.06 | 0.91 - 1.23 |
| *2nd most deprived* | 0.01 | 0.07 | -0.14 | 0.15 | 0% | 1.01 | 0.87 - 1.16 |
| *Most deprived (ref)* |  |  |  |  |  |  |  |
| **Household level covariates** |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |
| *Highest Quintile* | **0.41** | **0.09** | **0.22** | **0.59** | **0%** | **1.50** | **1.25 - 1.81** |
| *Second highest Quintile* | 0.17 | 0.09 | -0.01 | 0.35 | 0% | 1.18 | 0.99 - 1.42 |
| *Middle Quintile* | 0.12 | 0.09 | -0.07 | 0.30 | 0% | 1.13 | 0.94 - 1.36 |
| *Second lowest Quintile* | 0.05 | 0.09 | -0.13 | 0.23 | 0% | 1.06 | 0.88 - 1.26 |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 0.11 | 0.09 | -0.07 | 0.29 | 0% | 1.12 | 0.94 - 1.34 |
| Children in household |  |  |  |  |  |  |  |
| *>=1* | 0.07 | 0.05 | -0.04 | 0.17 | 0% | 1.07 | 0.96 - 1.19 |
| *None (ref)* |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |
| *No* | -0.07 | 0.07 | -0.21 | 0.07 | 0% | 0.93 | 0.81 - 1.07 |
| *Yes (ref)* |  |  |  |  |  |  |  |
| **Individual level covariates** |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| *75+* | **-1.75** | **0.17** | **-2.07** | **-1.43** | **0%** | **0.17** | **0.13 - 0.24** |
| *55 - 74* | **-0.89** | **0.08** | **-1.05** | **-0.73** | **0%** | **0.41** | **0.35 - 0.48** |
| *35 - 54* | **-0.48** | **0.06** | **-0.59** | **-0.37** | **0%** | **0.62** | **0.56 - 0.69** |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| *Male* | **0.68** | **0.04** | **0.59** | **0.76** | **0%** | **1.97** | **1.80 - 2.15** |
| *Female (ref)* |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |
| *Higher ed/Degree* | **0.54** | **0.08** | **0.39** | **0.69** | **0%** | **1.71** | **1.47 - 2.00** |
| *NVQ3/A level* | **0.43** | **0.09** | **0.27** | **0.60** | **0%** | **1.54** | **1.31 - 1.83** |
| *NVQ1/NVQ2/GCSE* | **0.29** | **0.08** | **0.13** | **0.44** | **0%** | **1.33** | **1.14 - 1.56** |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 0.43 | 0.39 | -0.32 | 1.19 | 0% | 1.54 | 0.72 - 3.28 |
| Economic activity |  |  |  |  |  |  |  |
| *ILO unemployed* | **0.24** | **0.13** | **0.00** | **0.49** | **0%** | **1.27** | **1.00 - 1.63** |
| *Retired/other inactive* | **-0.17** | **0.07** | **-0.31** | **-0.03** | **0%** | **0.84** | **0.73 - 0.97** |
| *In work/student (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 0.38 | 0.41 | -0.43 | 1.20 | 0% | 1.47 | 0.65 - 3.31 |
| Relationship status |  |  |  |  |  |  |  |
| *Living with partner* | **-0.58** | **0.06** | **-0.70** | **-0.46** | **0%** | **0.56** | **0.50 - 0.63** |
| *Widowed/separated/divorced* | **-0.32** | **0.09** | **-0.49** | **-0.15** | **0%** | **0.73** | **0.62 - 0.86** |
| *Single (ref)* |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |
| *No longstanding illness* | **0.63** | **0.07** | **0.49** | **0.78** | **0%** | **1.89** | **1.63 - 2.18** |
| *Non-limiting longstanding illness* | **0.53** | **0.08** | **0.37** | **0.70** | **0%** | **1.70** | **1.44 - 2.01** |
| *Limiting longstanding illness (ref)* |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |
| *Obese* | **-0.43** | **0.07** | **-0.56** | **-0.29** | **0%** | **0.65** | **0.57 - 0.75** |
| *Overweight* | -0.05 | 0.05 | -0.16 | 0.05 | 0% | 0.95 | 0.85 - 1.05 |
| *Underweight* | **-0.47** | **0.19** | **-0.84** | **-0.11** | **0%** | **0.62** | **0.43 - 0.90** |
| *Normal weight (ref)* |  |  |  |  |  |  |  |
| *Missing data* | **-0.33** | **0.07** | **-0.47** | **-0.18** | **0%** | **0.72** | **0.62 - 0.83** |
| Cigarette smoking status |  |  |  |  |  |  |  |
| *Never smoked at all* | **0.50** | **0.07** | **0.37** | **0.63** | **0%** | **1.64** | **1.44 - 1.88** |
| *Used to smoke* | **0.42** | **0.06** | **0.30** | **0.54** | **0%** | **1.52** | **1.34 - 1.72** |
| *Current smoker (ref)* |  |  |  |  |  |  |  |
| *Missing data* | -0.15 | 0.24 | -0.62 | 0.31 | 0% | 0.86 | 0.54 - 1.37 |
| Year |  |  |  |  |  |  |  |
| *2012* | 0.05 | 0.05 | -0.05 | 0.15 | 0% | 1.05 | 0.95 - 1.16 |
| *2008 (ref)* |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Intercept | -2.30 |  |  |  |  |  |  |
| N | 18438 |  |  |  |  |  |  |
| Households | 11439 |  |  |  |  |  |  |
| AIC (min, max) | 16253.72 | 16255.26 |  |  |  |  |  |
| Average Cox & Snell *pseudo-R2* (%) | 11.63 |  |  |  |  |  |  |

Table Unadjusted and adjusted model results predicting meeting PA guidelines through walking

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | | |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.18 | 0.09 | -1.95 | 0.052 | 0.84 | 0.70 - 1.00 | -0.08 | 0.10 | -0.83 | 0.407 | 0.92 | 0.77 - 1.11 |
| *60 - <80 %* | **-0.22** | **0.07** | **-3.13** | **0.002** | **0.80** | **0.69 - 0.92** | **-0.16** | **0.08** | **-2.07** | **0.038** | **0.86** | **0.74 - 0.99** |
| *40 - <60 %* | **-0.20** | **0.06** | **-3.08** | **0.002** | **0.82** | **0.73 - 0.93** | -0.12 | 0.07 | -1.77 | 0.076 | 0.89 | 0.78 - 1.01 |
| *20 - <40 %* | **-0.25** | **0.05** | **-4.71** | **<0.001** | **0.78** | **0.70 - 0.86** | **-0.17** | **0.06** | **-3.15** | **0.002** | **0.84** | **0.75 - 0.94** |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.22 | 0.15 | 1.48 | 0.138 | 1.25 | 0.93 - 1.67 | 0.21 | 0.14 | 1.58 | 0.114 | 1.24 | 0.95 - 1.62 |
| *>1 - 5 %* | 0.10 | 0.08 | 1.22 | 0.222 | 1.11 | 0.94 - 1.31 | 0.09 | 0.09 | 0.99 | 0.321 | 1.09 | 0.92 - 1.29 |
| *>0 - 1 %* | 0.07 | 0.11 | 0.69 | 0.492 | 1.08 | 0.87 - 1.32 | 0.02 | 0.11 | 0.19 | 0.851 | 1.02 | 0.83 - 1.26 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | 0.05 | 0.06 | 0.96 | 0.338 | 1.05 | 0.95 - 1.18 | **0.20** | **0.06** | **3.50** | **<0.001** | **1.22** | **1.09 - 1.37** |
| *5 - 20 km* | **0.14** | **0.06** | **2.25** | **0.025** | **1.15** | **1.02 - 1.29** | **0.18** | **0.06** | **3.01** | **0.003** | **1.20** | **1.07 - 1.35** |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | **0.29** | **0.08** | **3.82** | **<0.001** | **1.33** | **1.15 - 1.55** |
| *2nd least deprived* | | |  |  |  |  | **0.26** | **0.07** | **3.52** | **<0.001** | **1.30** | **1.12 - 1.51** |
| *Medium deprived* | |  |  |  |  |  | **0.21** | **0.07** | **2.86** | **0.004** | **1.23** | **1.07 - 1.42** |
| *2nd most deprived* | | |  |  |  |  | **0.16** | **0.07** | **2.38** | **0.018** | **1.18** | **1.03 - 1.35** |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Household income | |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* | |  |  |  |  |  | 0.17 | 0.09 | 1.94 | 0.053 | 1.18 | 1.00 - 1.40 |
| *Second highest Quintile* | |  |  |  |  |  | -0.09 | 0.09 | -1.07 | 0.286 | 0.91 | 0.77 - 1.08 |
| *Middle Quintile* | |  |  |  |  |  | **-0.19** | **0.09** | **-2.19** | **0.029** | **0.83** | **0.70 - 0.98** |
| *Second lowest Quintile* | |  |  |  |  |  | -0.06 | 0.08 | -0.72 | 0.472 | 0.94 | 0.80 - 1.11 |
| *Lowest Quintile (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.07 | 0.08 | -0.84 | 0.399 | 0.93 | 0.80 - 1.10 |
| Children in household | | |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.04 | 0.05 | -0.76 | 0.445 | 0.96 | 0.87 - 1.06 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **0.41** | **0.06** | **6.60** | **<0.001** | **1.51** | **1.33 - 1.70** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.46 | 0.79 | -0.58 | 0.562 | 0.63 | 0.13 - 2.99 |
| **Individual level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.35** | **0.14** | **-9.81** | **<0.001** | **0.26** | **0.20 - 0.34** |
| *55 - 74* |  |  |  |  |  |  | -0.13 | 0.07 | -1.70 | 0.088 | 0.88 | 0.76 - 1.02 |
| *35 - 54* |  |  |  |  |  |  | 0.06 | 0.06 | 1.13 | 0.260 | 1.06 | 0.96 - 1.19 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.09** | **0.04** | **2.17** | **0.030** | **1.09** | **1.01 - 1.18** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.53** | **0.07** | **7.97** | **<0.001** | **1.70** | **1.49 - 1.93** |
| *NVQ3/A level* | |  |  |  |  |  | **0.46** | **0.08** | **6.09** | **<0.001** | **1.58** | **1.37 - 1.83** |
| *NVQ1/NVQ2/GCSE* | | |  |  |  |  | **0.30** | **0.07** | **4.48** | **<0.001** | **1.35** | **1.18 - 1.54** |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.11 | 0.43 | 0.26 | 0.793 | 1.12 | 0.48 - 2.59 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.14 | 0.12 | 1.20 | 0.231 | 1.15 | 0.92 - 1.44 |
| *Retired/other inactive* | |  |  |  |  |  | -0.12 | 0.06 | -1.91 | 0.056 | 0.89 | 0.79 - 1.00 |
| *In work/student (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.12 | 0.48 | 0.26 | 0.796 | 1.13 | 0.44 - 2.90 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | | |  |  |  |  | **-0.18** | **0.06** | **-3.09** | **0.002** | **0.83** | **0.74 - 0.94** |
| *Widowed/separated/divorced* | | |  |  |  |  | **-0.25** | **0.08** | **-3.20** | **0.001** | **0.78** | **0.67 - 0.91** |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -9.15 | 0.79 | -11.62 | 0 | 0 | 0 |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.61** | **0.07** | **9.32** | **<0.001** | **1.85** | **1.62 - 2.10** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.59** | **0.07** | **8.01** | **<0.001** | **1.80** | **1.56 - 2.08** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.71 | 0.67 | 1.05 | 0.294 | 2.03 | 0.54 - 7.61 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.85** | **0.06** | **-13.29** | **<0.001** | **0.43** | **0.38 - 0.49** |
| *Overweight* | |  |  |  |  |  | **-0.34** | **0.05** | **-6.83** | **<0.001** | **0.71** | **0.64 - 0.78** |
| *Underweight* | |  |  |  |  |  | -0.19 | 0.16 | -1.19 | 0.235 | 0.83 | 0.60 - 1.13 |
| *Normal weight (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.56** | **0.07** | **-7.98** | **<0.001** | **0.57** | **0.50 - 0.66** |
| Cigarette smoking status | |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | **0.13** | **0.06** | **2.27** | **0.023** | **1.14** | **1.02 - 1.27** |
| *Used to smoke* | |  |  |  |  |  | **0.18** | **0.06** | **2.94** | **0.003** | **1.20** | **1.06 - 1.35** |
| *Current smoker (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.08 | 0.25 | 0.34 | 0.735 | 1.09 | 0.67 - 1.77 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.02 | 0.05 | 0.43 | 0.669 | 1.02 | 0.93 - 1.12 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.19 |  |  |  |  |  | -1.92 |  |  |  |  |  |
| N | 18391 |  |  |  |  |  | 18391 |  |  |  |  |  |
| Households | 11415 |  |  |  |  |  | 11415 |  |  |  |  |  |
| AIC | 19221.75 |  |  |  |  |  | 17965.30 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.26 |  |  |  |  |  | 7.29 |  |  |  |  |  |

Table Combined adjusted model results for self-reported walking activity with imputed data (5 imputed datasets) for covariates with low counts of missing values – car, marital status and limiting illness.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | results | se | (lower | upper) | Missing data | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.08 | 0.10 | -0.27 | 0.11 | 0% | 0.92 | 0.77 - 1.11 |
| *60 - <80 %* | **-0.16** | **0.08** | **-0.30** | **-0.01** | **0%** | **0.86** | **0.74 - 0.99** |
| *40 - <60 %* | -0.12 | 0.07 | -0.24 | 0.01 | 0% | 0.89 | 0.78 - 1.01 |
| *20 - <40 %* | **-0.17** | **0.06** | **-0.28** | **-0.07** | **0%** | **0.84** | **0.75 - 0.94** |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.21 | 0.14 | -0.05 | 0.48 | 0% | 1.24 | 0.95 - 1.61 |
| *>1 - 5 %* | 0.09 | 0.09 | -0.08 | 0.25 | 0% | 1.09 | 0.92 - 1.29 |
| *>0 - 1 %* | 0.02 | 0.11 | -0.19 | 0.23 | 0% | 1.02 | 0.83 - 1.26 |
| *0% (ref)* |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |
| *<5 km* | **0.20** | **0.06** | **0.09** | **0.32** | **0%** | **1.22** | **1.09 - 1.37** |
| *5 - 20 km* | **0.18** | **0.06** | **0.06** | **0.30** | **0%** | **1.20** | **1.07 - 1.35** |
| *>20 km (ref)* |  |  |  |  |  |  |  |
| **LSOA level covariates** |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |
| *Least deprived* | **0.29** | **0.08** | **0.14** | **0.44** | **0%** | **1.33** | **1.15 - 1.55** |
| *2nd least deprived* | **0.26** | **0.07** | **0.12** | **0.41** | **0%** | **1.30** | **1.12 - 1.51** |
| *Medium deprived* | **0.21** | **0.07** | **0.07** | **0.35** | **0%** | **1.23** | **1.07 - 1.42** |
| *2nd most deprived* | **0.16** | **0.07** | **0.03** | **0.30** | **0%** | **1.18** | **1.03 - 1.35** |
| *Most deprived (ref)* |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |
| *Highest Quintile* | 0.17 | 0.09 | 0.00 | 0.34 | 0% | 1.18 | 1.00 - 1.40 |
| *Second highest Quintile* | -0.09 | 0.09 | -0.26 | 0.08 | 0% | 0.91 | 0.77 - 1.08 |
| *Middle Quintile* | **-0.19** | **0.09** | **-0.36** | **-0.02** | **0%** | **0.83** | **0.70 - 0.98** |
| *Second lowest Quintile* | -0.06 | 0.08 | -0.22 | 0.10 | 0% | 0.94 | 0.80 - 1.11 |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |
| *Missing data* | -0.07 | 0.08 | -0.23 | 0.09 | 0% | 0.93 | 0.79 - 1.09 |
| Children in household |  |  |  |  |  |  |  |
| *>=1* | -0.04 | 0.05 | -0.14 | 0.06 | 0% | 0.96 | 0.87 - 1.07 |
| *None (ref)* |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |
| *No* | **0.41** | **0.06** | **0.29** | **0.53** | **0%** | **1.50** | **1.33 - 1.70** |
| *Yes (ref)* |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| *75+* | **-1.35** | **0.14** | **-1.62** | **-1.08** | **0%** | **0.26** | **0.20 - 0.34** |
| *55 - 74* | -0.13 | 0.07 | -0.27 | 0.02 | 0% | 0.88 | 0.76 - 1.02 |
| *35 - 54* | 0.06 | 0.06 | -0.05 | 0.17 | 0% | 1.06 | 0.95 - 1.18 |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| *Male* | **0.09** | **0.04** | **0.01** | **0.17** | **0%** | **1.09** | **1.01 - 1.19** |
| *Female (ref)* |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |
| *Higher ed/Degree* | **0.53** | **0.07** | **0.40** | **0.66** | **0%** | **1.70** | **1.49 - 1.93** |
| *NVQ3/A level* | **0.46** | **0.08** | **0.31** | **0.61** | **0%** | **1.58** | **1.37 - 1.83** |
| *NVQ1/NVQ2/GCSE* | **0.30** | **0.07** | **0.17** | **0.43** | **0%** | **1.35** | **1.18 - 1.53** |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |
| *Missing data* | 0.11 | 0.43 | -0.73 | 0.95 | 0% | 1.12 | 0.48 - 2.59 |
| Economic activity |  |  |  |  |  |  |  |
| *ILO unemployed* | 0.14 | 0.12 | -0.09 | 0.37 | 0% | 1.15 | 0.92 - 1.44 |
| *Retired/other inactive* | -0.11 | 0.06 | -0.23 | 0.00 | 0% | 0.89 | 0.79 - 1.00 |
| *In work/student (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 0.12 | 0.48 | -0.82 | 1.06 | 0% | 1.13 | 0.44 - 2.90 |
| Relationship status |  |  |  |  |  |  |  |
| *Living with partner* | **-0.18** | **0.06** | **-0.30** | **-0.07** | **0%** | **0.83** | **0.74 - 0.94** |
| *Widowed/separated/divorced* | **-0.25** | **0.08** | **-0.41** | **-0.10** | **0%** | **0.78** | **0.67 - 0.91** |
| *Single (ref)* |  |  |  |  |  |  |  |
| Longstanding illness presence | |  |  |  |  |  |  |
| *No longstanding illness* | **0.61** | **0.07** | **0.48** | **0.74** | **0%** | **1.84** | **1.62 - 2.10** |
| *Non-limiting longstanding illness* | **0.58** | **0.07** | **0.44** | **0.73** | **0%** | **1.79** | **1.55 - 2.07** |
| *Limiting longstanding illness (ref)* | | |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |
| *Obese* | **-0.85** | **0.06** | **-0.97** | **-0.72** | **0%** | **0.43** | **0.38 - 0.49** |
| *Overweight* | **-0.34** | **0.05** | **-0.44** | **-0.24** | **0%** | **0.71** | **0.64 - 0.78** |
| *Underweight* | -0.19 | 0.16 | -0.51 | 0.12 | 0% | 0.83 | 0.60 - 1.13 |
| *Normal weight (ref)* |  |  |  |  |  |  |  |
| *Missing data* | **-0.56** | **0.07** | **-0.70** | **-0.42** | **0%** | **0.57** | **0.50 - 0.66** |
| Cigarette smoking status |  |  |  |  |  |  |  |
| *Never smoked at all* | **0.18** | **0.06** | **0.06** | **0.30** | **0%** | **1.20** | **1.06 - 1.35** |
| *Used to smoke* | **0.13** | **0.06** | **0.02** | **0.24** | **0%** | **1.14** | **1.02 - 1.27** |
| *Current smoker (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 0.08 | 0.25 | -0.40 | 0.57 | 0% | 1.09 | 0.67 - 1.78 |
| Year |  |  |  |  |  |  |  |
| *2012* | 0.02 | 0.05 | -0.07 | 0.11 | 0% | 1.02 | 0.93 - 1.12 |
| *2008 (ref)* |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Intercept | -1.92 |  |  |  |  |  |  |
| N | 18391 |  |  |  |  |  |  |
| Households | 11415 |  |  |  |  |  |  |
| AIC (min, max) | 17962.39 | 17965.2 |  |  |  |  |  |
| Average Cox & Snell *pseudo-R2* (%) | 7.28 |  |  |  |  |  |  |

Table Unadjusted and adjusted model results predicting meeting PA guidelines through non-recreational self-reported activity

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | **0.34** | **0.08** | **4.31** | **<0.001** | **1.40** | **1.20 - 1.63** | **0.28** | **0.08** | **3.36** | **0.001** | **1.32** | **1.12 - 1.56** |
| *60 - <80 %* | **0.24** | **0.06** | **3.95** | **<0.001** | **1.28** | **1.13 - 1.44** | **0.18** | **0.06** | **2.88** | **0.004** | **1.20** | **1.06 - 1.36** |
| *40 - <60 %* | **0.18** | **0.06** | **3.20** | **0.001** | **1.20** | **1.07 - 1.34** | **0.14** | **0.06** | **2.41** | **0.016** | **1.15** | **1.03 - 1.30** |
| *20 - <40 %* | 0.06 | 0.05 | 1.21 | 0.226 | 1.06 | 0.96 - 1.16 | 0.03 | 0.05 | 0.55 | 0.580 | 1.03 | 0.93 - 1.13 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.14 | 0.12 | -1.18 | 0.237 | 0.87 | 0.70 - 1.09 | -0.06 | 0.12 | -0.52 | 0.600 | 0.94 | 0.75 - 1.18 |
| *>1 - 5 %* | -0.15 | 0.08 | -1.91 | 0.056 | 0.86 | 0.73 - 1.00 | -0.15 | 0.08 | -1.88 | 0.061 | 0.86 | 0.73 - 1.01 |
| *>0 - 1 %* | |  |  |  |  |  |  |  |  |  |  |  |
| *0% (ref)* | -0.15 | 0.09 | -1.76 | 0.078 | 0.86 | 0.73 - 1.02 | -0.11 | 0.09 | -1.22 | 0.224 | 0.90 | 0.76 - 1.07 |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | **0.20** | **0.05** | **3.99** | **<0.001** | **1.22** | **1.11 - 1.34** | **0.22** | **0.05** | **4.25** | **<0.001** | **1.24** | **1.12 - 1.38** |
| *5 - 20 km* | 0.06 | 0.06 | 1.15 | 0.249 | 1.07 | 0.96 - 1.19 | 0.08 | 0.06 | 1.36 | 0.173 | 1.08 | 0.97 - 1.21 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.01 | 0.07 | 0.22 | 0.829 | 1.01 | 0.89 - 1.15 |
| *2nd least deprived* | |  |  |  |  |  | -0.01 | 0.07 | -0.09 | 0.929 | 0.99 | 0.87 - 1.13 |
| *Medium deprived* | |  |  |  |  |  | -0.06 | 0.06 | -1.00 | 0.316 | 0.94 | 0.83 - 1.06 |
| *2nd most deprived* | |  |  |  |  |  | -0.04 | 0.06 | -0.70 | 0.481 | 0.96 | 0.85 - 1.08 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| Household income | |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* | |  |  |  |  |  | **-0.31** | **0.08** | **-3.84** | **<0.001** | **0.73** | **0.62 - 0.86** |
| *Second highest Quintile* | | |  |  |  |  | -0.13 | 0.08 | -1.76 | 0.078 | 0.87 | 0.75 - 1.01 |
| *Middle Quintile* | |  |  |  |  |  | 0.10 | 0.07 | 1.37 | 0.170 | 1.11 | 0.96 - 1.28 |
| *Second lowest Quintile* | | |  |  |  |  | 0.04 | 0.07 | 0.57 | 0.569 | 1.04 | 0.91 - 1.20 |
| *Lowest Quintile (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.15** | **0.07** | **-2.09** | **0.037** | **0.86** | **0.75 - 0.99** |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.05 | 0.05 | 0.97 | 0.333 | 1.05 | 0.95 - 1.15 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -1.97 | 1.34 | -1.47 | 0.143 | 0.14 | 0.01 - 1.94 |
| *Yes (ref)* | |  |  |  |  |  | **0.17** | **0.06** | **2.95** | **0.003** | **1.18** | **1.06 - 1.33** |
| **Individual level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-0.72** | **0.11** | **-6.54** | **<0.001** | **0.48** | **0.39 - 0.60** |
| *55 - 74* |  |  |  |  |  |  | 0.10 | 0.07 | 1.43 | 0.153 | 1.10 | 0.96 - 1.26 |
| *35 - 54* |  |  |  |  |  |  | **0.25** | **0.05** | **4.92** | **<0.001** | **1.29** | **1.16 - 1.42** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.10** | **0.04** | **2.96** | **0.003** | **1.11** | **1.04 - 1.19** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | 0.03 | 0.06 | 0.47 | 0.639 | 1.03 | 0.92 - 1.15 |
| *NVQ3/A level* | |  |  |  |  |  | 0.03 | 0.07 | 0.48 | 0.629 | 1.03 | 0.91 - 1.18 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | **0.17** | **0.05** | **3.07** | **0.002** | **1.18** | **1.06 - 1.31** |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.41 | 0.36 | 1.13 | 0.258 | 1.50 | 0.74 - 3.06 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.11 | 0.11 | -1.04 | 0.296 | 0.90 | 0.73 - 1.10 |
| *Retired/other inactive* | | |  |  |  |  | **-0.38** | **0.05** | **-7.06** | **<0.001** | **0.68** | **0.62 - 0.76** |
| *In work/student (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.73 | 0.46 | -1.57 | 0.116 | 0.48 | 0.20 - 1.20 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **0.55** | **0.06** | **9.32** | **<0.001** | **1.73** | **1.54 - 1.94** |
| *Widowed/separated/divorced* | | |  |  |  |  | **0.32** | **0.07** | **4.39** | **<0.001** | **1.38** | **1.20 - 1.59** |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **2.95** | **1.01** | **2.91** | **0.004** | **19.16** | **2.63 - 139.65** |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.54** | **0.05** | **10.06** | **<0.001** | **1.71** | **1.54 - 1.90** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.53** | **0.06** | **8.80** | **<0.001** | **1.70** | **1.51 - 1.91** |
| *Limiting longstanding illness (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.15 | 0.75 | -0.20 | 0.841 | 0.86 | 0.20 - 3.74 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **0.11** | **0.05** | **2.07** | **0.039** | **1.11** | **1.01 - 1.23** |
| *Overweight* | |  |  |  |  |  | **0.15** | **0.05** | **3.22** | **0.001** | **1.16** | **1.06 - 1.27** |
| *Underweight* | |  |  |  |  |  | -0.24 | 0.18 | -1.38 | 0.168 | 0.79 | 0.56 - 1.11 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.20** | **0.06** | **-3.21** | **0.001** | **0.82** | **0.73 - 0.93** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | |  |  |  |  |  | **-0.37** | **0.05** | **-7.62** | **<0.001** | **0.69** | **0.63 - 0.76** |
| *Used to smoke* | |  |  |  |  |  | **-0.24** | **0.05** | **-4.67** | **<0.001** | **0.79** | **0.71 - 0.87** |
| *Current smoker (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-1.07** | **0.30** | **-3.58** | **<0.001** | **0.34** | **0.19 - 0.62** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | **-0.09** | **0.04** | **-2.18** | **0.029** | **0.91** | **0.84 - 0.99** |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.06 |  |  |  |  |  | -1.74 |  |  |  |  |  |
| N | 18446 |  |  |  |  |  | 18446 |  |  |  |  |  |
| Households | 11439 |  |  |  |  |  | 11439 |  |  |  |  |  |
| AIC | 21919.08 |  |  |  |  |  | 20793.63 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.32 |  |  |  |  |  | 6.66 |  |  |  |  |  |

Table Combined adjusted model results for self-reported non- recreational activity with imputed data for covariates with low counts of missing values – car, marital status and limiting illness.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | results | se | (lower | upper) | missInfo | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |
| *80 - 100 %* | **0.28** | **0.08** | **0.12** | **0.45** | **0%** | **1.33** | **1.13 - 1.56** |
| *60 - <80 %* | **0.19** | **0.06** | **0.06** | **0.31** | **0%** | **1.20** | **1.06 - 1.37** |
| *40 - <60 %* | **0.14** | **0.06** | **0.03** | **0.26** | **0%** | **1.15** | **1.03 - 1.30** |
| *20 - <40 %* | 0.03 | 0.05 | -0.07 | 0.13 | 0% | 1.03 | 0.93 - 1.13 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.06 | 0.12 | -0.29 | 0.17 | 0% | 0.94 | 0.75 - 1.18 |
| *>1 - 5 %* | -0.15 | 0.08 | -0.31 | 0.01 | 0% | 0.86 | 0.73 - 1.01 |
| *>0 - 1 %* | -0.11 | 0.09 | -0.28 | 0.07 | 0% | 0.90 | 0.76 - 1.07 |
| *0% (ref)* |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |
| *<5 km* | **0.22** | **0.05** | **0.12** | **0.32** | **0%** | **1.24** | **1.12 - 1.37** |
| *5 - 20 km* | 0.08 | 0.06 | -0.03 | 0.19 | 0% | 1.08 | 0.97 - 1.21 |
| *>20 km (ref)* |  |  |  |  |  |  |  |
| **LSOA level covariates** |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |
| *Least deprived* | 0.01 | 0.07 | -0.11 | 0.14 | 0% | 1.01 | 0.89 - 1.15 |
| *2nd least deprived* | -0.01 | 0.07 | -0.14 | 0.13 | 0% | 0.99 | 0.87 - 1.13 |
| *Medium deprived* | -0.06 | 0.06 | -0.19 | 0.06 | 0% | 0.94 | 0.83 - 1.06 |
| *2nd most deprived* | -0.04 | 0.06 | -0.16 | 0.08 | 0% | 0.96 | 0.85 - 1.08 |
| *Most deprived (ref)* |  |  |  |  |  |  |  |
| **Household level covariates** |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |
| *Highest Quintile* | **-0.31** | **0.08** | **-0.47** | **-0.15** | **0%** | **0.73** | **0.62 - 0.86** |
| *Second highest Quintile* | -0.13 | 0.08 | -0.28 | 0.02 | 0% | 0.88 | 0.75 - 1.02 |
| *Middle Quintile* | 0.10 | 0.07 | -0.04 | 0.25 | 0% | 1.11 | 0.96 - 1.28 |
| *Second lowest Quintile* | 0.04 | 0.07 | -0.10 | 0.18 | 0% | 1.04 | 0.91 - 1.20 |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |
| *Missing data* | **-0.16** | **0.07** | **-0.30** | **-0.01** | **0%** | **0.86** | **0.74 - 0.99** |
| Children in household |  |  |  |  |  |  |  |
| *>=1* | 0.05 | 0.05 | -0.05 | 0.14 | 0% | 1.05 | 0.95 - 1.15 |
| *None (ref)* |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |
| *No* | **0.17** | **0.06** | **0.06** | **0.28** | **0%** | **1.19** | **1.06 - 1.33** |
| *Yes (ref)* |  |  |  |  |  |  |  |
| **Individual level covariates** |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| *75+* | **-0.73** | **0.11** | **-0.94** | **-0.51** | **0%** | **0.48** | **0.39 - 0.60** |
| *55 - 74* | 0.10 | 0.07 | -0.04 | 0.23 | 0% | 1.10 | 0.96 - 1.26 |
| *35 - 54* | **0.25** | **0.05** | **0.15** | **0.35** | **0%** | **1.29** | **1.16 - 1.42** |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| *Male* | **0.11** | **0.04** | **0.04** | **0.17** | **0%** | **1.11** | **1.04 - 1.19** |
| *Female (ref)* |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |
| *Higher ed/Degree* | 0.03 | 0.06 | -0.09 | 0.14 | 0% | 1.03 | 0.92 - 1.15 |
| *NVQ3/A level* | 0.03 | 0.07 | -0.10 | 0.16 | 0% | 1.03 | 0.91 - 1.17 |
| *NVQ1/NVQ2/GCSE* | **0.17** | **0.05** | **0.06** | **0.27** | **0%** | **1.18** | **1.06 - 1.31** |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 0.41 | 0.36 | -0.30 | 1.12 | 0% | 1.51 | 0.74 - 3.06 |
| Economic activity |  |  |  |  |  |  |  |
| *ILO unemployed* | -0.11 | 0.11 | -0.32 | 0.10 | 0% | 0.90 | 0.73 - 1.10 |
| *Retired/other inactive* | **-0.38** | **0.05** | **-0.48** | **-0.27** | **0%** | **0.69** | **0.62 - 0.76** |
| *In work/student (ref)* |  |  |  |  |  |  |  |
| *Missing data* | -0.72 | 0.46 | -1.63 | 0.18 | 0% | 0.48 | 0.20 - 1.20 |
| Relationship status |  |  |  |  |  |  |  |
| *Living with partner* | **0.55** | **0.06** | **0.43** | **0.66** | **0%** | **1.73** | **1.54 - 1.94** |
| *Widowed/separated/divorced* | **0.32** | **0.07** | **0.18** | **0.47** | **0%** | **1.38** | **1.20 - 1.59** |
| *Single (ref)* |  |  |  |  |  |  |  |
| *Missing data* | 2.07 | 1.15 | -0.19 | 4.33 | 0% | 7.95 | 0.83 - 76.29 |
| Longstanding illness presence | |  |  |  |  |  |  |
| *No longstanding illness* | **0.54** | **0.05** | **0.43** | **0.64** | **0%** | **1.71** | **1.54 - 1.90** |
| *Non-limiting longstanding illness* | **0.53** | **0.06** | **0.41** | **0.65** | **0%** | **1.69** | **1.51 - 1.91** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |
| *Missing data* | -0.15 | 0.75 | -1.62 | 1.32 | 0% | 0.86 | 0.20 - 3.74 |
| BMI |  |  |  |  |  |  |  |
| *Obese* | **0.11** | **0.05** | **0.01** | **0.21** | **0%** | **1.11** | **1.01 - 1.23** |
| *Overweight* | **0.15** | **0.05** | **0.06** | **0.24** | **0%** | **1.16** | **1.06 - 1.27** |
| *Underweight* | -0.24 | 0.18 | -0.58 | 0.10 | 0% | 0.79 | 0.56 - 1.11 |
| *Normal weight (ref)* |  |  |  |  |  |  |  |
| *Missing data* | **-0.20** | **0.06** | **-0.32** | **-0.08** | **0%** | **0.82** | **0.73 - 0.93** |
| Cigarette smoking status |  |  |  |  |  |  |  |
| *Never smoked at all* | **-0.37** | **0.05** | **-0.46** | **-0.27** | **0%** | **0.69** | **0.63 - 0.76** |
| *Used to smoke* | **-0.24** | **0.05** | **-0.34** | **-0.14** | **0%** | **0.78** | **0.71 - 0.87** |
| *Current smoker (ref)* |  |  |  |  |  |  |  |
| *Missing data* | **-1.07** | **0.30** | **-1.66** | **-0.48** | **0%** | **0.34** | **0.19 - 0.62** |
| Year |  |  |  |  |  |  |  |
| *2012* | **-0.09** | **0.04** | **-0.17** | **-0.01** | **0%** | **0.91** | **0.84 - 0.99** |
| *2008 (ref)* |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Intercept | -1.74 |  |  |  |  |  |  |
| N | 18446 |  |  |  |  |  |  |
| Households | 11439 |  |  |  |  |  |  |
| AIC (min, max) | 20796.68 | 20797.25 |  |  |  |  |  |
| Average Cox & Snell *pseudo-R2* (%) | 6.64 |  |  |  |  |  |  |

Table 0 Unadjusted and adjusted model results predicting meeting PA guidelines through occupational self-reported activity

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | **0.35** | **0.13** | **2.82** | **0.005** | **1.43** | **1.11 - 1.82** | **0.39** | **0.14** | **2.84** | **0.005** | **1.47** | **1.13 - 1.92** |
| *60 - <80 %* | **0.36** | **0.09** | **3.93** | **<0.001** | **1.44** | **1.20 - 1.73** | **0.37** | **0.10** | **3.70** | **<0.001** | **1.44** | **1.19 - 1.75** |
| *40 - <60 %* | **0.33** | **0.09** | **3.81** | **<0.001** | **1.38** | **1.17 - 1.64** | **0.34** | **0.09** | **3.70** | **<0.001** | **1.40** | **1.17 - 1.68** |
| *20 - <40 %* | **0.19** | **0.07** | **2.56** | **0.010** | **1.21** | **1.05 - 1.40** | **0.18** | **0.08** | **2.28** | **0.023** | **1.20** | **1.03 - 1.39** |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.04 | 0.17 | -0.25 | 0.805 | 0.96 | 0.68 - 1.34 | 0.04 | 0.17 | 0.20 | 0.839 | 1.04 | 0.74 - 1.45 |
| *>1 - 5 %* | -0.21 | 0.12 | -1.83 | 0.067 | 0.81 | 0.64 - 1.02 | **-0.27** | **0.12** | **-2.25** | **0.025** | **0.76** | **0.60 - 0.97** |
| *>0 - 1 %* | **-0.31** | **0.13** | **-2.39** | **0.017** | **0.74** | **0.57 - 0.95** | **-0.31** | **0.13** | **-2.33** | **0.020** | **0.73** | **0.56 - 0.95** |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | **0.21** | **0.07** | **2.85** | **0.004** | **1.23** | **1.07 - 1.43** | **0.29** | **0.08** | **3.62** | **<0.001** | **1.34** | **1.14 - 1.56** |
| *5 - 20 km* | -0.02 | 0.08 | -0.27 | 0.789 | 0.98 | 0.83 - 1.15 | -0.01 | 0.09 | -0.11 | 0.908 | 0.99 | 0.83 - 1.18 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | -0.06 | 0.11 | -0.59 | 0.556 | 0.94 | 0.76 - 1.16 |
| *2nd least deprived* | |  |  |  |  |  | -0.03 | 0.10 | -0.31 | 0.754 | 0.97 | 0.79 - 1.18 |
| *Medium deprived* | |  |  |  |  |  | -0.02 | 0.10 | -0.23 | 0.815 | 0.98 | 0.80 - 1.19 |
| *2nd most deprived* | |  |  |  |  |  | 0.13 | 0.09 | 1.46 | 0.145 | 1.14 | 0.95 - 1.37 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* |  |  |  |  |  |  | **-0.52** | **0.15** | **-3.57** | **<0.001** | **0.59** | **0.45 - 0.79** |
| *Second highest Quintile* |  |  |  |  |  |  | -0.10 | 0.13 | -0.77 | 0.438 | 0.9 | 0.69 - 1.17 |
| *Middle Quintile* |  |  |  |  |  |  | 0.23 | 0.13 | 1.76 | 0.078 | 1.26 | 0.97 - 1.64 |
| *Second lowest Quintile* |  |  |  |  |  |  | **0.27** | **0.13** | **2.02** | **0.043** | **1.31** | **1.01 - 1.70** |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.03 | 0.14 | 0.18 | 0.854 | 1.03 | 0.79 - 1.34 |
| Children in household |  |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | **-0.20** | **0.07** | **-2.87** | **0.004** | **0.82** | **0.72 - 0.94** |
| *None (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -0.16 | 0.10 | -1.55 | 0.120 | 0.85 | 0.7 - 1.04 |
| *Yes (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -20.52 | 1.35 | -15.19 | 0 | 0 | 0 - 0 |
| **Individual level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.30** | **0.54** | **-2.40** | **0.016** | **0.27** | **0.09 - 0.79** |
| *55 - 74* |  |  |  |  |  |  | -0.12 | 0.1 | -1.18 | 0.238 | 0.88 | 0.72 - 1.09 |
| *35 - 54* |  |  |  |  |  |  | **0.21** | **0.08** | **2.76** | **0.006** | **1.23** | **1.06 - 1.43** |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.86** | **0.06** | **14.21** | **<0.001** | **2.37** | **2.11 - 2.67** |
| *Female (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  |  | **-0.62** | **0.09** | **-6.73** | **<0.001** | **0.54** | **0.45 - 0.64** |
| *NVQ3/A level* |  |  |  |  |  |  | **-0.54** | **0.01** | **-5.38** | **<0.001** | **0.58** | **0.48 - 0.71** |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  |  | **-0.28** | **0.09** | **-3.20** | **0.001** | **0.76** | **0.64 - 0.9** |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -0.76 | 0.79 | -0.96 | 0.336 | 0.47 | 0.10 - 2.19 |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  |  | **-3.28** | **0.49** | **-6.71** | **<0.001** | **0.04** | **0.01 - 0.10** |
| *Retired/other inactive* |  |  |  |  |  |  | **-4.19** | **0.28** | **-14.85** | **<0.001** | **0.02** | **0.01 - 0.03** |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -13.17 | 0.5 | -26.42 | 0 | 0 | 0 - 0 |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  |  | **0.41** | **0.09** | **4.49** | **<0.001** | **1.50** | **1.26 - 1.80** |
| *Widowed/separated/divorced* |  |  |  |  |  |  | **0.50** | **0.12** | **4.05** | **<0.001** | **1.65** | **1.29 - 2.09** |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | **0.35** | **0.10** | **3.65** | **<0.001** | **1.42** | **1.18 - 1.71** |
| *Non-limiting longstanding illness* |  |  |  |  |  |  | **0.26** | **0.11** | **2.37** | **0.018** | **1.30** | **1.05 - 1.61** |
| *Limiting longstanding illness (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 1.24 | 0.91 | 1.37 | 0.172 | 3.47 | 0.58 - 20.66 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | 0.08 | 0.09 | 0.87 | 0.382 | 1.08 | 0.91 - 1.28 |
| *Overweight* |  |  |  |  |  |  | **0.18** | **0.07** | **2.42** | **0.015** | **1.19** | **1.03 - 1.37** |
| *Underweight* |  |  |  |  |  |  | -0.49 | 0.31 | -1.60 | 0.109 | 0.61 | 0.34 - 1.12 |
| *Normal weight (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -0.09 | 0.10 | -0.92 | 0.357 | 0.91 | 0.74 - 1.11 |
| Cigarette smoking status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* |  |  |  |  |  |  | **-0.26** | **0.07** | **-3.49** | **<0.001** | **0.77** | **0.67 - 0.89** |
| *Used to smoke* |  |  |  |  |  |  | -0.14 | 0.08 | -1.67 | 0.095 | 0.87 | 0.74 - 1.02 |
| *Current smoker (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | **-0.93** | **0.47** | **-1.98** | **0.048** | **0.4** | **0.16 - 0.99** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.08 | 0.07 | -1.23 | 0.218 | 0.92 | 0.81 - 1.05 |
| *2008 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -2.42 |  |  |  |  |  | -2.49 |  |  |  |  |  |
| N | 18404 |  |  |  |  |  | 18404 |  |  |  |  |  |
| Households | 11422 |  |  |  |  |  | 11422 |  |  |  |  |  |
| AIC | 11699.9 |  |  |  |  |  | 9661.25 |  |  |  |  |  |

Figure 11 Unadjusted and adjusted model results predicting meeting PA guidelines through domestic (heavy housework and heavy manual work such as gardening and DIY) self-reported activity

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | **0.32** | **0.09** | **3.78** | **<0.001** | **1.38** | **1.17 - 1.63** | **0.25** | **0.09** | **2.81** | **0.005** | **1.29** | **1.08 - 1.53** |
| *60 - <80 %* | **0.20** | **0.07** | **2.85** | **0.004** | **1.22** | **1.06 - 1.40** | **0.13** | **0.07** | **1.81** | **0.070** | **1.14** | **0.99 - 1.31** |
| *40 - <60 %* | 0.12 | 0.06 | 1.94 | 0.052 | 1.13 | 1.00 - 1.28 | 0.08 | 0.07 | 1.21 | 0.226 | 1.08 | 0.95 - 1.23 |
| *20 - <40 %* | 0.02 | 0.05 | 0.46 | 0.644 | 1.02 | 0.92 - 1.14 | 0.00 | 0.05 | -0.08 | 0.933 | 1.00 | 0.90 - 1.11 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.18 | 0.13 | -1.38 | 0.167 | 0.83 | 0.64 - 1.08 | -0.12 | 0.13 | -0.92 | 0.358 | 0.88 | 0.68 - 1.15 |
| *>1 - 5 %* | -0.12 | 0.09 | -1.34 | 0.179 | 0.89 | 0.75 - 1.06 | -0.10 | 0.09 | -1.13 | 0.259 | 0.90 | 0.76 - 1.08 |
| *>0 - 1 %* | -0.07 | 0.09 | -0.74 | 0.459 | 0.93 | 0.78 - 1.12 | -0.02 | 0.10 | -0.22 | 0.830 | 0.98 | 0.81 - 1.18 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | **0.13** | **0.05** | **2.32** | **0.021** | **1.13** | **1.02 - 1.26** | **0.12** | **0.06** | **2.17** | **0.030** | **1.13** | **1.01 - 1.26** |
| *5 - 20 km* | 0.09 | 0.06 | 1.57 | 0.116 | 1.1 | 0.98 - 1.23 | 0.10 | 0.06 | 1.74 | 0.082 | 1.11 | 0.99 - 1.25 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  | - | 0.02 | 0.07 | 0.30 | 0.765 | 1.02 | 0.89 - 1.18 |
| *2nd least deprived* | |  |  |  |  | - | -0.02 | 0.07 | -0.22 | 0.827 | 0.98 | 0.85 = 1.14 |
| *Medium deprived* | |  |  |  |  | - | -0.08 | 0.07 | -1.17 | 0.240 | 0.92 | 0.80 - 1.06 |
| *2nd most deprived* | |  |  |  |  | - | -0.05 | 0.07 | -0.67 | 0.500 | 0.96 | 0.84 - 1.09 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* |  |  |  |  |  | - | **-0.17** | **0.09** | **-2.00** | **0.046** | **0.84** | **0.71 - 1.00** |
| *Second highest Quintile* |  |  |  |  |  | - | -0.15 | 0.08 | -1.81 | 0.070 | 0.86 | 0.73 - 1.01 |
| *Middle Quintile* |  |  |  |  |  | - | 0.02 | 0.08 | 0.31 | 0.758 | 1.02 | 0.88 - 1.20 |
| *Second lowest Quintile* |  |  |  |  |  | - | -0.05 | 0.08 | -0.69 | 0.489 | 0.95 | 0.82 - 1.10 |
| *Lowest Quintile (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | **-0.21** | **0.08** | **-2.64** | **0.008** | **0.81** | **0.70 - 0.95** |
| Children in household |  |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  | - | **0.12** | **0.05** | **2.37** | **0.018** | **1.13** | **1.02 - 1.26** |
| *None (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  | - | **-0.18** | **0.06** | **-2.8** | **0.005** | **0.84** | **0.74 - 0.95** |
| *Yes (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | -1.17 | 1.09 | -1.07 | 0.285 | 0.31 | 0.04 - 2.64 |
| **Individual level covariates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  | - | **-0.53** | **0.12** | **-4.58** | **<0.001** | **0.59** | **0.47 - 0.74** |
| *55 - 74* |  |  |  |  |  | - | **0.22** | **0.08** | **2.97** | **0.003** | **1.25** | **1.08 - 1.45** |
| *35 - 54* |  |  |  |  |  | - | **0.24** | **0.06** | **4.21** | **<0.001** | **1.28** | **1.14 - 1.43** |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  | - | **-0.21** | **0.04** | **-5.6** | **<0.001** | **0.81** | **0.75 - 0.87** |
| *Female (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  | - | **0.28** | **0.06** | **4.55** | **<0.001** | **1.33** | **1.18 - 1.50** |
| *NVQ3/A level* |  |  |  |  |  | - | **0.29** | **0.07** | **4.00** | **<0.001** | **1.33** | **1.16 - 1.53** |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  | - | **0.28** | **0.06** | **4.76** | **<0.001** | **1.32** | **1.18 - 1.48** |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | **0.76** | **0.37** | **2.04** | **0.041** | **2.13** | **1.03 - 4.42** |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  | - | **0.53** | **0.11** | **5.02** | **<0.001** | **1.70** | **1.38 - 2.10** |
| *Retired/other inactive* |  |  |  |  |  | - | **0.18** | **0.06** | **3.15** | **0.002** | **1.19** | **1.07 - 1.33** |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | -0.18 | 0.47 | -0.4 | 0.693 | 0.83 | 0.33 - 2.07 |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  | - | **0.57** | **0.07** | **8.54** | **<0.001** | **1.77** | **1.55 - 2.02** |
| *Widowed/separated/divorced* |  |  |  |  |  | - | **0.27** | **0.08** | **3.31** | **0.001** | **1.31** | **1.12 - 1.54** |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | -9.51 | 0.73 | -13.05 | 0 | 0 | 0 |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  | - | **0.45** | **0.06** | **7.75** | **<0.001** | **1.57** | **1.40 - 1.76** |
| *Non-limiting longstanding illness* |  |  |  |  |  | - | **0.47** | **0.06** | **7.23** | **<0.001** | **1.60** | **1.41 -1.81** |
| *Limiting longstanding illness (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | -0.83 | 1.05 | -0.79 | 0.427 | 0.44 | 0.06 - 3.39 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  | - | 0.11 | 0.06 | 1.92 | 0.055 | 1.11 | 1.00 - 1.24 |
| *Overweight* |  |  |  |  |  | - | **0.12** | **0.05** | **2.42** | **0.015** | **1.13** | **1.02 - 1.24** |
| *Underweight* |  |  |  |  |  | - | -0.12 | 0.19 | -0.61 | 0.544 | 0.89 | 0.61 - 1.30 |
| *Normal weight (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | **-0.21** | **0.07** | **-3.18** | **0.001** | **0.81** | **0.71 - 0.92** |
| Cigarette smoking status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* |  |  |  |  |  | - | **-0.38** | **0.05** | **-7.16** | **<0.001** | **0.68** | **0.62 - 0.76** |
| *Used to smoke* |  |  |  |  |  | - | **-0.28** | **0.06** | **-4.92** | **<0.001** | **0.76** | **0.68 - 0.85** |
| *Current smoker (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  | - | **-1.11** | **0.37** | **-3.03** | **0.002** | **0.33** | **0.16 - 0.68** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  | - | **-0.09** | **0.05** | **-2.04** | **0.042** | **0.91** | **0.83 - 1.00** |
| *2008 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.42 |  |  |  |  |  | -2.08 |  |  |  |  |  |
| N | 18447 |  |  |  |  |  | 18447 |  |  |  |  |  |
| Households | 11439 |  |  |  |  |  | 11439 |  |  |  |  |  |
| AIC | 18966.77 |  |  |  |  |  | 18285.92 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.19 |  |  |  |  |  | 4.25 |  |  |  |  |  |

Table 12 Unadjusted and adjusted GLM results predicting meeting physical activity guidelines through recreational, non-recreational and all physical activity for the year 2008 only.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Sport | | | |  | Walking | | | | |  | Non-recreational | | | | |  | | Total | | | | |
|  | Unadjusted | | Adjusted | |  | Unadjusted | |  | Adjusted | |  | Unadjusted | |  | Adjusted | |  | | Unadjusted | |  | Adjusted | |
| term | OR | 95 % CI | OR | 95 % CI |  | OR | 95 % CI |  | OR | 95 % CI |  | OR | 95 % CI |  | OR | 95 % CI |  | | OR | 95 % CI |  | OR | 95 % CI |
| **Environmental variables** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Greenspace coverage | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *80 - 100 %* | 0.88 | 0.69 - 1.11 | 0.94 | 0.73 - 1.21 |  | **0.79\*** | **0.62 - 0.99** |  | 0.87 | 0.68 - 1.10 |  | **1.23\*** | **1.01 - 1.48** |  | 1.18 | 0.96 - 1.44 |  | | 0.99 | 0.83 - 1.19 |  | 1.04 | 0.86 - 1.26 |
| *60 - <80 %* | 0.92 | 0.76 - 1.10 | 1.03 | 0.85 - 1.25 |  | **0.79\*\*** | **0.66 - 0.94** |  | 0.85 | 0.71 - 1.02 |  | **1.25\*\*** | **1.08 - 1.45** |  | **1.20\*** | **1.03 - 1.39** |  | | 0.97 | 0.85 - 1.12 |  | 1.01 | 0.87 - 1.18 |
| *40 - <60 %* | 0.93 | 0.79 - 1.10 | 1.01 | 0.85 - 1.19 |  | 0.87 | 0.75 - 1.01 |  | 0.95 | 0.81 - 1.10 |  | **1.15\*** | **1.00 - 1.31** |  | 1.10 | 0.96 - 1.27 |  | | 0.98 | 0.87 - 1.11 |  | 1.03 | 0.90 - 1.17 |
| *20 - <40 %* | 0.94 | 0.82 - 1.07 | 1.03 | 0.90 - 1.19 |  | **0.78\*\*\*** | **0.69 - 0.89** |  | **0.84\*** | **0.74 - 0.96** |  | 1.07 | 0.95 - 1.20 |  | 1.02 | 0.91 - 1.15 |  | | **0.89\*** | **0.81 - 0.99** |  | 0.95 | 0.85 - 1.06 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Freshwater coverage | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *>5 - 100 %* | 1.40 | 0.97 - 2.03 | 1.32 | 0.93 - 1.88 |  | **1.63\*\*** | **1.13 - 2.35** |  | **1.55\*** | **1.11 - 2.16** |  | 1.04 | 0.77 - 1.39 |  | 1.11 | 0.83 - 1.49 |  | | 1.25 | 0.93 - 1.67 |  | 1.24 | 0.93 - 1.67 |
| *>1 - 5 %* | 1.03 | 0.83 - 1.27 | 1.01 | 0.80 - 1.28 |  | 1.11 | 0.90 - 1.35 |  | 1.14 | 0.92 - 1.40 |  | 0.91 | 0.76 - 1.09 |  | 0.92 | 0.76 - 1.11 |  | | 1.00 | 0.85 - 1.18 |  | 1.03 | 0.85 - 1.23 |
| *>0 - 1 %* | 0.85 | 0.65 - 1.11 | 0.79 | 0.60 - 1.05 |  | 1.15 | 0.88 - 1.49 |  | 1.10 | 0.84 - 1.45 |  | 1.00 | 0.82 - 1.23 |  | 1.04 | 0.85 - 1.28 |  | | 1.06 | 0.88 - 1.28 |  | 1.04 | 0.85 - 1.28 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *<5 km* | 0.96 | 0.83 - 1.10 | 1.14 | 0.98 - 1.33 |  | 1.05 | 0.92 - 1.20 |  | **1.21\*\*** | **1.06 - 1.39** |  | **1.27\*\*\*** | **1.14 - 1.43** |  | **1.32\*\*\*** | **1.17 - 1.49** |  | | 1.09 | 0.98 - 1.21 |  | **1.32\*\*\*** | **1.17 - 1.48** |
| *5 - 20 km* | 1.05 | 0.89 - 1.23 | 1.02 | 0.87 - 1.20 |  | 1.15 | 0.99 - 1.34 |  | 1.19\* | 1.03 - 1.38 |  | 1.04 | 0.91 - 1.19 |  | 1.07 | 0.93 - 1.22 |  | | 1.12 | 1.00 - 1.27 |  | **1.16\*** | **1.02 - 1.32** |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Least deprived* | |  | **1.23\*** | **1.02 - 1.49** |  |  |  |  | **1.20\*** | **1.00 - 1.44** |  |  |  |  | 1.03 | 0.88 - 1.20 |  | |  |  |  | **1.41\*\*\*** | **1.21 - 1.64** |
| *2nd least deprived* | |  | **1.26\*** | **1.04 - 1.53** |  |  |  |  | 1.18 | 0.99 - 1.41 |  |  |  |  | 1.01 | 0.86 - 1.18 |  | |  |  |  | **1.32\*\*\*** | **1.14 - 1.53** |
| *Medium deprived* | |  | 1.07 | 0.90 - 1.28 |  |  |  |  | 1.13 | 0.95 - 1.33 |  |  |  |  | 0.98 | 0.84 - 1.13 |  | |  |  |  | **1.15\*** | **1.00 - 1.32** |
| *2nd most deprived* | | | 1.02 | 0.85 - 1.22 |  |  |  |  | 1.15 | 0.98 - 1.35 |  |  |  |  | 0.92 | 0.80 - 1.07 |  | |  |  |  | 1.11 | 0.97 - 1.27 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| **Household level covariates** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Household income | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Highest Quintile* | |  | **1.47\*\*** | **1.16 - 1.84** |  |  |  |  | 1.17 | 0.94 - 1.46 |  |  |  |  | **0.75\*\*** | **0.61 - 0.91** |  | |  |  |  | 1.12 | 0.94 - 1.34 |
| *Second highest Quintile* | | | 1.11 | 0.88 - 1.40 |  |  |  |  | 0.89 | 0.72 - 1.11 |  |  |  |  | **0.82\*** | **0.68 - 0.99** |  | |  |  |  | 0.94 | 0.78 - 1.12 |
| *Middle Quintile* | |  | 1.12 | 0.89 - 1.42 |  |  |  |  | 0.83 | 0.67 - 1.02 |  |  |  |  | 1.10 | 0.92 - 1.32 |  | |  |  |  | 1.01 | 0.86 - 1.20 |
| *Second lowest Quintile* | | | 1.07 | 0.85 - 1.34 |  |  |  |  | 0.97 | 0.79 - 1.19 |  |  |  |  | 1.07 | 0.90 - 1.27 |  | |  |  |  | 1.02 | 0.87 - 1.20 |
| *Lowest Quintile (ref)* | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Missing data* | |  | 1.11 | 0.89 - 1.38 |  |  |  |  | 0.92 | 0.75 - 1.12 |  |  |  |  | 0.84 | 0.70 - 1.01 |  | |  |  |  | 0.89 | 0.76 - 1.04 |
| Children in household | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *>=1* |  |  | 1.07 | 0.94 - 1.23 |  |  |  |  | 0.98 | 0.86 - 1.11 |  |  |  |  | 1.11 | 0.99 - 1.24 |  | |  |  |  | 1.02 | 0.91 - 1.14 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *No* |  |  | **0.83\*** | **0.71 - 0.99** |  |  |  |  | **1.43\*\*\*** | **1.24 - 1.65** |  |  |  |  | 0.93 | 0.81 - 1.07 |  | |  |  |  | 1.06 | 0.93 - 1.19 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Missing data* | |  | 0.58 | 0.11 - 3.06 |  |  |  |  | 0.71 | 0.14 - 3.63 |  |  |  |  | 0.21 | 0.02 - 1.92 |  | |  |  |  | 0.66 | 0.19 - 2.23 |
| **Individual level covariates** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *75+* |  |  | **0.19\*\*\*** | **0.13 - 0.29** |  |  |  |  | **0.28\*\*\*** | **0.20 - 0.39** |  |  |  |  | **0.41\*\*\*** | **0.32 - 0.54** |  | |  |  |  | **0.24\*\*\*** | **0.19 - 0.30** |
| *55 - 74* |  |  | **0.41\*\*\*** | **0.34 - 0.50** |  |  |  |  | 0.86 | 0.72 - 1.03 |  |  |  |  | 1.10 | 0.93 - 1.29 |  | |  |  |  | **0.65\*\*\*** | **0.55 - 0.75** |
| *35 - 54* |  |  | **0.57\*\*\*** | **0.50 - 0.65** |  |  |  |  | 1.03 | 0.90 - 1.18 |  |  |  |  | **1.29\*\*\*** | **1.14 - 1.46** |  | |  |  |  | 0.90 | 0.80 - 1.01 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Male* |  |  | **1.98\*\*\*** | **1.78 - 2.20** |  |  |  |  | 1.09 | 0.99 - 1.21 |  |  |  |  | **1.14\*\*** | **1.05 - 1.24** |  | |  |  |  | **1.38\*\*\*** | **1.27 - 1.50** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Highest qualification | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Higher ed/Degree* | |  | **1.62\*\*\*** | **1.35 - 1.95** |  |  |  |  | **1.74\*\*\*** | **1.48 - 2.04** |  |  |  |  | 0.93 | 0.81 - 1.07 |  | |  |  |  | **1.45\*\*\*** | **1.28 - 1.65** |
| *NVQ3/A level* | |  | **1.54\*\*\*** | **1.26 - 1.88** |  |  |  |  | **1.62\*\*\*** | **1.35 - 1.95** |  |  |  |  | 0.95 | 0.81 - 1.12 |  | |  |  |  | **1.42\*\*\*** | **1.22 - 1.66** |
| *NVQ1/NVQ2/GCSE* | |  | **1.37\*\*\*** | **1.14 - 1.64** |  |  |  |  | **1.38\*\*\*** | **1.18 - 1.62** |  |  |  |  | **1.15\*** | **1.01 - 1.31** |  | |  |  |  | **1.24\*\*\*** | **1.10 - 1.39** |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Missing data* | |  | 1.55 | 0.55 - 4.43 |  |  |  |  | 1.71 | 0.61 - 4.79 |  |  |  |  | **2.64\*** | **1.05 - 6.63** |  | |  |  |  | 1.50 | 0.57 - 3.99 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *ILO unemployed* | |  | **1.51\*\*** | **1.11 - 2.05** |  |  |  |  | 1.23 | 0.91 - 1.67 |  |  |  |  | 0.87 | 0.66 - 1.13 |  | |  |  |  | 1.04 | 0.80 - 1.35 |
| *Retired/other inactive* | | | **0.80\*** | **0.67 - 0.96** |  |  |  |  | 0.90 | 0.77 - 1.04 |  |  |  |  | **0.63\*\*\*** | **0.56 - 0.72** |  | |  |  |  | **0.62\*\*\*** | **0.55 - 0.69** |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Missing data* | |  | 1.35 | 0.42 - 4.31 |  |  |  |  | 1.12 | 0.32 - 3.95 |  |  |  |  | 0.39 | 0.11 - 1.41 |  | |  |  |  | 1.17 | 0.40 - 3.48 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Living with partner* | |  | **0.56\*\*\*** | **0.48 - 0.64** |  |  |  |  | **0.84\*** | **0.73 - 0.97** |  |  |  |  | **1.76\*\*\*** | **1.53 - 2.02** |  | |  |  |  | 0.98 | 0.86 - 1.11 |
| *Widowed/separated/divorced* | | | **0.71\*\*** | **0.57 - 0.87** |  |  |  |  | **0.78\*** | **0.65 - 0.94** |  |  |  |  | **1.38\*\*\*** | **1.16 - 1.65** |  | |  |  |  | 0.90 | 0.77 - 1.05 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Longstanding illness presence | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *No longstanding illness* | | | **1.74\*\*\*** | **1.46 - 2.07** |  |  |  |  | **1.80\*\*\*** | **1.54 - 2.10** |  |  |  |  | **1.69\*\*\*** | **1.49 - 1.91** |  | |  |  |  | **2.24\*\*\*** | **2.01 - 2.50** |
| *Non-limiting longstanding illness* | | | **1.61\*\*\*** | **1.32 - 1.95** |  |  |  |  | **1.71\*\*\*** | **1.44 - 2.02** |  |  |  |  | **1.76\*\*\*** | **1.53 - 2.02** |  | |  |  |  | **2.10\*\*\*** | **1.85 - 2.38** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Missing data* | |  | 1.19 | 0.17 - 8.52 |  |  |  |  | 2.16 | 0.29 - 16.32 |  |  |  |  | 1.15 | 0.18 - 7.21 |  | |  |  |  | 0.71 | 0.15 - 3.28 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Obese* |  |  | **0.59\*\*\*** | **0.50 - 0.70** |  |  |  |  | **0.45\*\*\*** | **0.39 - 0.53** |  |  |  |  | 1.10 | 0.97 - 1.25 |  | |  |  |  | **0.67\*\*\*** | **0.59 - 0.76** |
| *Overweight* | |  | 0.94 | 0.82 - 1.07 |  |  |  |  | **0.73\*\*\*** | **0.64 - 0.82** |  |  |  |  | **1.24\*\*\*** | **1.11 - 1.38** |  | |  |  |  | 1.00 | 0.90 - 1.12 |
| *Underweight* | |  | **0.56\*** | **0.36 - 0.88** |  |  |  |  | 0.85 | 0.57 - 1.26 |  |  |  |  | 0.65 | 0.42 - 1.01 |  | |  |  |  | 0.73 | 0.52 - 1.04 |
| *Normal weight (ref)* | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Missing data* | |  | **0.75\*\*** | **0.63 - 0.89** |  |  |  |  | **0.54\*\*\*** | **0.45 - 0.64** |  |  |  |  | **0.80\*\*** | **0.69 - 0.93** |  | |  |  |  | **0.59\*\*\*** | **0.51 - 0.67** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Never smoked at all* | | | **1.48\*\*\*** | **1.27 - 1.71** |  |  |  |  | 1.11 | 0.98 - 1.27 |  |  |  |  | **0.68\*\*\*** | **0.61 - 0.76** |  | |  |  |  | 0.97 | 0.87 - 1.09 |
| *Used to smoke* | |  | **1.65\*\*\*** | **1.40 - 1.94** |  |  |  |  | **1.18\*** | **1.02 - 1.36** |  |  |  |  | **0.77\*\*\*** | **0.68 - 0.87** |  | |  |  |  | 1.07 | 0.95 - 1.21 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| *Missing data* | |  | 0.83 | 0.42 - 1.64 |  |  |  |  | 1.11 | 0.56 - 2.21 |  | |  |  | **0.22\*\*** | **0.08 - 0.60** | |  | |  |  | **0.42\*\*** | **0.23 - 0.76** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |
| Intercept | -1.37 |  | -2.14 |  |  | -1.22 |  |  | -1.85 |  |  | -1.03 |  |  | -1.56 |  |  | | 0.25 |  |  | -0.37 |  |
| N | 11991 |  | 11991 |  |  | 11982 |  |  | 11982 |  |  | 11991 |  |  | 11991 |  |  | | 11992 |  |  | 11992 |  |
| Households | 7336 |  | 7336 |  |  | 7334 |  |  | 7334 |  |  | 7336 |  |  | 7336 |  |  | | 7336 |  |  | 7336 |  |
| AIC | 11839.0 |  | 10449.9 |  |  | 12407.6 |  |  | 11658.0 |  |  | 14409.9 |  |  | 13579.6 |  |  | | 16439.6 |  |  | 14438.1 |  |
| Cox & Snell *pseudo-R2* (%) | 0.11 |  | 11.65 |  |  | 0.34 |  |  | 7.04 |  |  | 0.3 |  |  | 7.59 |  |  | | 0.14 |  |  | 16.06 |  |

Table 13 Unadjusted and adjusted model results predicting meeting PA guidelines through all self-reported activity from people in the highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.19 | 0.18 | -1.05 | 0.292 | 0.83 | 0.58 - 1.18 | -0.13 | 0.19 | -0.70 | 0.487 | 0.87 | 0.60 - 1.28 |
| *60 - <80 %* | -0.23 | 0.14 | -1.72 | 0.085 | 0.79 | 0.61 - 1.03 | -0.19 | 0.15 | -1.31 | 0.189 | 0.82 | 0.62 - 1.10 |
| *40 - <60 %* | -0.22 | 0.13 | -1.69 | 0.092 | 0.81 | 0.63- 1.04 | -0.10 | 0.13 | -0.75 | 0.451 | 0.91 | 0.70 - 1.17 |
| *20 - <40 %* | -0.22 | 0.11 | -1.96 | 0.050 | 0.81 | 0.65 - 1.00 | -0.17 | 0.12 | -1.43 | 0.153 | 0.85 | 0.67 - 1.06 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.08 | 0.25 | 0.32 | 0.749 | 1.08 | 0.66 - 1.77 | 0.03 | 0.27 | 0.11 | 0.911 | 1.03 | 0.61 - 1.75 |
| *>1 - 5 %* | -0.10 | 0.16 | -0.60 | 0.547 | 0.91 | 0.66 - 1.25 | -0.23 | 0.17 | -1.33 | 0.183 | 0.80 | 0.57 - 1.11 |
| *>0 - 1 %* | -0.30 | 0.17 | -1.78 | 0.075 | 0.74 | 0.53 - 1.03 | -0.24 | 0.18 | -1.33 | 0.184 | 0.79 | 0.55 - 1.12 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | 0.03 | 0.13 | 0.25 | 0.804 | 1.03 | 0.81 - 1.32 | 0.17 | 0.13 | 1.33 | 0.182 | 1.19 | 0.92 - 1.52 |
| *5 - 20 km* | 0.10 | 0.13 | 0.76 | 0.445 | 1.11 | 0.85 - 1.43 | 0.13 | 0.14 | 0.96 | 0.336 | 1.14 | 0.87 - 1.49 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.06 | 0.17 | 0.34 | 0.737 | 1.06 | 0.76 - 1.47 |
| *2nd least deprived* | |  |  |  |  |  | 0.05 | 0.18 | 0.31 | 0.755 | 1.06 | 0.75 - 1.49 |
| *Medium deprived* | |  |  |  |  |  | -0.12 | 0.17 | -0.69 | 0.489 | 0.89 | 0.63 - 1.24 |
| *2nd most deprived* | |  |  |  |  |  | -0.06 | 0.18 | -0.35 | 0.727 | 0.94 | 0.66 - 1.34 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.09 | 0.11 | -0.83 | 0.409 | 0.91 | 0.73 - 1.14 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **0.40** | **0.18** | **2.29** | **0.022** | **1.50** | **1.06 - 2.11** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.85** | **0.31** | **-5.96** | **<0.001** | **0.16** | **0.09 - 0.29** |
| *55 - 74* |  |  |  |  |  |  | **-0.35** | **0.15** | **-2.38** | **0.018** | **0.71** | **0.53 - 0.94** |
| *35 - 54* |  |  |  |  |  |  | 0.09 | 0.12 | 0.78 | 0.435 | 1.09 | 0.87 - 1.37 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.47** | **0.09** | **5.46** | **<0.001** | **1.60** | **1.35 - 1.89** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  |  | **0.43** | **0.16** | **2.77** | **0.006** | **1.54** | **1.13 - 2.09** |
| *NVQ3/A level* |  |  |  |  |  |  | 0.35 | 0.19 | 1.89 | 0.059 | 1.42 | 0.99 - 2.05 |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  |  | 0.02 | 0.17 | 0.09 | 0.930 | 1.02 | 0.72 - 1.43 |
| *Foreign/other/none (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -0.46 | 1.12 | -0.41 | 0.683 | 0.63 | 0.07 - 5.71 |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  |  | -0.09 | 0.58 | -0.15 | 0.879 | 0.92 | 0.30 - 2.83 |
| *Retired/other inactive* |  |  |  |  |  |  | -0.07 | 0.14 | -0.54 | 0.591 | 0.93 | 0.71 - 1.21 |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.18 | 1.27 | 0.14 | 0.886 | 1.20 | 0.10 - 14.45 |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  |  | 0.09 | 0.13 | 0.69 | 0.488 | 1.09 | 0.85 - 1.41 |
| *Widowed/separated/divorced* | |  |  |  |  |  | 0.12 | 0.17 | 0.71 | 0.476 | 1.13 | 0.80 - 1.59 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | **0.50** | **0.13** | **3.95** | **<0.001** | **1.65** | **1.29 - 2.11** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | **0.32** | **0.14** | **2.22** | **0.027** | **1.37** | **1.04 - 1.81** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 11.57 | 1.02 | 11.31 | 0 | NA | NA |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.74** | **0.13** | **-5.74** | **<0.001** | **0.48** | **0.37 - 0.61** |
| *Overweight* | |  |  |  |  |  | **-0.24** | **0.11** | **-2.14** | **0.033** | **0.78** | **0.63 - 0.98** |
| *Underweight* | |  |  |  |  |  | **-1.69** | **0.47** | **-3.58** | **<0.001** | **0.18** | **0.07 - 0.46** |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | **-0.63** | **0.14** | **-4.44** | **<0.001** | **0.53** | **0.40 - 0.70** |
| Cigarette smoking status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* |  |  |  |  |  |  | -0.03 | 0.13 | -0.21 | 0.832 | 0.97 | 0.75 - 1.26 |
| *Used to smoke* |  |  |  |  |  |  | 0.20 | 0.14 | 1.39 | 0.164 | 1.22 | 0.92 - 1.61 |
| *Current smoker (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -0.90 | 0.68 | -1.31 | 0.190 | 0.41 | 0.11 - 1.56 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.06 | 0.10 | -0.57 | 0.568 | 0.95 | 0.78 - 1.14 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 0.90 |  |  |  |  |  | 0.23 |  |  |  |  |  |
| N | 2922 |  |  |  |  |  | 2922 |  |  |  |  |  |
| Households | 1823 |  |  |  |  |  | 1823 |  |  |  |  |  |
| AIC | 3671.33 |  |  |  |  |  | 3476.92 |  |  |  |  |  |
| Cox & Snell *pseudo-R2*(%) | 0.45 |  |  |  |  |  | 8.78 |  |  |  |  |  |

Table 14 Unadjusted and adjusted model results predicting meeting PA guidelines through all self-reported activity from people in the second highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.06 | 0.18 | -0.36 | 0.718 | 0.94 | 0.66 - 1.33 | 0.04 | 0.19 | 0.20 | 0.838 | 1.04 | 0.72 - 1.50 |
| *60 - <80 %* | -0.14 | 0.14 | -0.97 | 0.330 | 0.87 | 0.66 - 1.15 | -0.14 | 0.15 | -0.94 | 0.346 | 0.87 | 0.65 - 1.16 |
| *40 - <60 %* | -0.06 | 0.13 | -0.47 | 0.637 | 0.94 | 0.73 - 1.21 | -0.03 | 0.14 | -0.23 | 0.822 | 0.97 | 0.74 - 1.27 |
| *20 - <40 %* | -0.15 | 0.11 | -1.35 | 0.177 | 0.86 | 0.69 - 1.07 | -0.08 | 0.12 | -0.67 | 0.502 | 0.92 | 0.73 - 1.16 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.22 | 0.30 | 0.74 | 0.456 | 1.25 | 0.70 - 2.25 | 0.18 | 0.33 | 0.55 | 0.584 | 1.20 | 0.63 - 2.27 |
| *>1 - 5 %* | 0.13 | 0.18 | 0.71 | 0.478 | 1.13 | 0.80 - 1.60 | 0.24 | 0.19 | 1.31 | 0.191 | 1.28 | 0.89 - 1.84 |
| *>0 - 1 %* | 0.19 | 0.19 | 1.01 | 0.311 | 1.21 | 0.84 - 1.75 | 0.27 | 0.21 | 1.27 | 0.204 | 1.31 | 0.86 - 1.98 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | 0.03 | 0.11 | 0.30 | 0.766 | 1.03 | 0.83 - 1.29 | 0.14 | 0.12 | 1.19 | 0.233 | 1.16 | 0.91 - 1.46 |
| *5 - 20 km* | 0.24 | 0.13 | 1.88 | 0.060 | 1.27 | 0.99 - 1.62 | **0.34** | **0.14** | **2.51** | **0.012** | **1.40** | **1.08 - 1.83** |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.21 | 0.17 | 1.26 | 0.207 | 1.23 | 0.89 - 1.71 |
| *2nd least deprived* | |  |  |  |  |  | 0.09 | 0.18 | 0.51 | 0.608 | 1.09 | 0.78 - 1.55 |
| *Medium deprived* | |  |  |  |  |  | 0.01 | 0.17 | 0.06 | 0.948 | 1.01 | 0.73 - 1.41 |
| *2nd most deprived* | |  |  |  |  |  | 0.09 | 0.17 | 0.51 | 0.609 | 1.09 | 0.78 - 1.53 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.13 | 0.11 | -1.15 | 0.248 | 0.88 | 0.70 - 1.10 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -0.04 | 0.16 | -0.28 | 0.778 | 0.96 | 0.70 - 1.31 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.68** | **0.30** | **-5.51** | **<0.001** | **0.19** | **0.10 - 0.34** |
| *55 - 74* |  |  |  |  |  |  | **-0.51** | **0.15** | **-3.32** | **<0.001** | **0.60** | **0.44 - 0.81** |
| *35 - 54* |  |  |  |  |  |  | -0.04 | 0.11 | -0.38 | 0.703 | 0.96 | 0.77 - 1.20 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.53** | **0.08** | **6.32** | **<0.001** | **1.69** | **1.44 - 1.99** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | 0.04 | 0.16 | 0.27 | 0.789 | 1.04 | 0.77 - 1.41 |
| *NVQ3/A level* | |  |  |  |  |  | -0.12 | 0.17 | -0.71 | 0.479 | 0.89 | 0.63 - 1.24 |
| *NVQ1/NVQ2/GCSE* | | |  |  |  |  | -0.08 | 0.17 | -0.50 | 0.617 | 0.92 | 0.67 - 1.27 |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.09 | 0.36 | -0.26 | 0.795 | 0.91 | 0.45 - 1.84 |
| *Retired/other inactive* | | |  |  |  |  | **-0.34** | **0.13** | **-2.54** | **0.011** | **0.71** | **0.55 - 0.93** |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | -0.09 | 0.13 | -0.64 | 0.521 | 0.92 | 0.70 - 1.19 |
| *Widowed/separated/divorced* | | |  |  |  |  | -0.15 | 0.19 | -0.82 | 0.410 | 0.86 | 0.59 - 1.24 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.67** | **0.12** | **5.59** | **<0.001** | **1.96** | **1.55 - 2.48** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | **0.65** | **0.15** | **4.48** | **<0.001** | **1.92** | **1.44 - 2.56** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.55** | **0.12** | **-4.57** | **<0.001** | **0.57** | **0.45 - 0.73** |
| *Overweight* | |  |  |  |  |  | -0.15 | 0.11 | -1.44 | 0.151 | 0.86 | 0.69 - 1.06 |
| *Underweight* | |  |  |  |  |  | 0.01 | 0.39 | 0.02 | 0.987 | 1.01 | 0.47 - 2.16 |
| *Normal weight (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.46** | **0.15** | **-3.00** | **0.003** | **0.63** | **0.47 - 0.85** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | 0.14 | 0.12 | 1.16 | 0.247 | 1.15 | 0.91 - 1.46 |
| *Used to smoke* | |  |  |  |  |  | 0.13 | 0.13 | 1.03 | 0.305 | 1.14 | 0.89 - 1.47 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -1.26 | 0.68 | -1.86 | 0.063 | 0.28 | 0.08 - 1.07 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.16 | 0.10 | 1.61 | 0.108 | 1.17 | 0.97 - 1.42 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 0.60 |  |  |  |  |  | 0.04 |  |  |  |  |  |
| N | 2965 |  |  |  |  |  | 2965 |  |  |  |  |  |
| Household | 1744 |  |  |  |  |  | 1744 |  |  |  |  |  |
| AIC | 3880.97 |  |  |  |  |  | 3675.84 |  |  |  |  |  |
| Cox & Snell *pseudo-R2(%)* | 0.30 |  |  |  |  |  | 8.92 |  |  |  |  |  |

Table 15 Unadjusted and adjusted model results predicting meeting PA guidelines through all self-reported activity from people in the middle income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.29 | 0.17 | 1.65 | 0.099 | 1.33 | 0.95 - 1.87 | 0.23 | 0.19 | 1.20 | 0.230 | 1.26 | 0.87 - 1.83 |
| *60 - <80 %* | 0.23 | 0.14 | 1.64 | 0.102 | 1.25 | 0.96 - 1.64 | 0.21 | 0.15 | 1.39 | 0.165 | 1.24 | 0.92 - 1.67 |
| *40 - <60 %* | 0.04 | 0.14 | 0.28 | 0.781 | 1.04 | 0.80 - 1.35 | 0.06 | 0.15 | 0.44 | 0.663 | 1.07 | 0.80 - 1.42 |
| *20 - <40 %* | -0.05 | 0.11 | -0.47 | 0.638 | 0.95 | 0.77 - 1.18 | -0.06 | 0.12 | -0.51 | 0.609 | 0.94 | 0.75 - 1.19 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.07 | 0.31 | 0.23 | 0.815 | 1.08 | 0.58 - 1.98 | -0.16 | 0.31 | -0.53 | 0.596 | 0.85 | 0.46 - 1.56 |
| *>1 - 5 %* | -0.17 | 0.18 | -0.94 | 0.346 | 0.84 | 0.58 - 1.21 | -0.23 | 0.20 | -1.16 | 0.248 | 0.80 | 0.54 - 1.17 |
| *>0 - 1 %* | -0.37 | 0.22 | -1.71 | 0.088 | 0.69 | 0.45 - 1.06 | -0.35 | 0.24 | -1.44 | 0.151 | 0.71 | 0.44 - 1.13 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | 0.13 | 0.11 | 1.10 | 0.273 | 1.13 | 0.91 - 1.42 | **0.27** | **0.12** | **2.26** | **0.024** | **1.31** | **1.04 - 1.66** |
| *5 - 20 km* | -0.08 | 0.11 | -0.71 | 0.475 | 0.92 | 0.74 - 1.15 | -0.08 | 0.13 | -0.66 | 0.512 | 0.92 | 0.72 - 1.18 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | **0.33** | **0.16** | **2.02** | **0.044** | **1.39** | **1.01 - 1.90** |
| *2nd least deprived* | |  |  |  |  |  | 0.29 | 0.15 | 1.88 | 0.061 | 1.33 | 0.99 - 1.79 |
| *Medium deprived* | |  |  |  |  |  | 0.00 | 0.14 | 0.01 | 0.993 | 1.00 | 0.76 - 1.33 |
| *2nd most deprived* | |  |  |  |  |  | 0.15 | 0.14 | 1.02 | 0.306 | 1.16 | 0.88 - 1.53 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.11 | 0.12 | 0.91 | 0.363 | 1.12 | 0.88 - 1.42 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **0.27** | **0.13** | **2.06** | **0.039** | **1.31** | **1.01 - 1.70** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.33** | **0.25** | **-5.28** | **<0.001** | **0.26** | **0.16 - 0.43** |
| *55 - 74* |  |  |  |  |  |  | **-0.41** | **0.17** | **-2.38** | **0.017** | **0.66** | **0.47 - 0.93** |
| *35 - 54* |  |  |  |  |  |  | 0.14 | 0.13 | 1.10 | 0.272 | 1.15 | 0.90 - 1.48 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.46** | **0.08** | **5.44** | **<0.001** | **1.59** | **1.34 - 1.88** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification |  |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  |  | **0.35** | **0.13** | **2.72** | **0.007** | **1.42** | **1.10 - 1.82** |
| *NVQ3/A level* |  |  |  |  |  |  | 0.15 | 0.16 | 0.93 | 0.351 | 1.16 | 0.85 - 1.57 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | -0.10 | 0.12 | -0.80 | 0.424 | 0.91 | 0.71 - 1.15 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -2.14 | 1.74 | -1.23 | 0.219 | 0.12 | 0.00 - 3.57 |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  |  | -0.48 | 0.39 | -1.22 | 0.221 | 0.62 | 0.29 - 1.34 |
| *Retired/other inactive* | |  |  |  |  |  | **-0.29** | **0.12** | **-2.40** | **0.016** | **0.75** | **0.59 - 0.95** |
| *In work/student (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.69 | 1.16 | 0.60 | 0.552 | 2.00 | 0.20 - 19.46 |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  |  | 0.22 | 0.14 | 1.50 | 0.133 | 1.24 | 0.94 - 1.64 |
| *Widowed/separated/divorced* | |  |  |  |  |  | 0.16 | 0.18 | 0.91 | 0.362 | 1.18 | 0.83 - 1.67 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 10.84 | 1.05 | 10.36 | 0 | NA | NA |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | **0.75** | **0.11** | **6.59** | **<0.001** | **2.11** | **1.69 - 2.64** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | **0.74** | **0.13** | **5.60** | **<0.001** | **2.09** | **1.61 - 2.70** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.14 | 1.28 | 0.11 | 0.913 | 1.15 | 0.09 - 14.23 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.41** | **0.12** | **-3.28** | **0.001** | **0.66** | **0.52 - 0.85** |
| *Overweight* | |  |  |  |  |  | -0.05 | 0.11 | -0.45 | 0.652 | 0.95 | 0.77 - 1.18 |
| *Underweight* | |  |  |  |  |  | -0.02 | 0.43 | -0.04 | 0.970 | 0.98 | 0.43 - 2.26 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.55** | **0.15** | **-3.73** | **<0.001** | **0.58** | **0.43 - 0.77** |
| Cigarette smoking status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* |  |  |  |  |  |  | 0.06 | 0.12 | 0.46 | 0.642 | 1.06 | 0.84 - 1.33 |
| *Used to smoke* |  |  |  |  |  |  | 0.10 | 0.12 | 0.81 | 0.416 | 1.11 | 0.87 - 1.41 |
| *Current smoker (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.55 | 0.58 | 0.95 | 0.341 | 1.73 | 0.56 - 5.35 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.04 | 0.10 | -0.41 | 0.680 | 0.96 | 0.79 - 1.17 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 0.29 |  |  |  |  |  | -0.63 |  |  |  |  |  |
| N | 2851 |  |  |  |  |  | 2851 |  |  |  |  |  |
| Households | 1730 |  |  |  |  |  | 1730 |  |  |  |  |  |
| AIC | 3894.62 |  |  |  |  |  | 3591.88 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.44 |  |  |  |  |  | 12.61 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 16 Unadjusted and adjusted model results predicting meeting PA guidelines through all self-reported activity from people in the second lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
|  | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.01 | 0.19 | 0.08 | 0.939 | 1.01 | 0.70 - 1.47 | 0.05 | 0.22 | 0.23 | 0.815 | 1.05 | 0.69 - 1.61 |
| *60 - <80 %* | -0.12 | 0.14 | -0.84 | 0.402 | 0.89 | 0.68 - 1.17 | -0.14 | 0.15 | -0.94 | 0.346 | 0.87 | 0.64 - 1.17 |
| *40 - <60 %* | 0.01 | 0.12 | 0.10 | 0.918 | 1.01 | 0.80 - 1.29 | 0.00 | 0.13 | 0.02 | 0.981 | 1.00 | 0.77 - 1.31 |
| *20 - <40 %* | -0.17 | 0.11 | -1.61 | 0.107 | 0.84 | 0.68 - 1.04 | -0.10 | 0.12 | -0.84 | 0.401 | 0.91 | 0.72 - 1.14 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.00 | 0.25 | -0.02 | 0.986 | 1.00 | 0.61 - 1.61 | 0.28 | 0.28 | 1.03 | 0.305 | 1.33 | 0.77 - 2.27 |
| *>1 - 5 %* | -0.05 | 0.16 | -0.29 | 0.773 | 0.95 | 0.69 - 1.32 | -0.12 | 0.19 | -0.62 | 0.535 | 0.89 | 0.62 - 1.28 |
| *>0 - 1 %* | 0.16 | 0.18 | 0.92 | 0.358 | 1.18 | 0.83 - 1.67 | 0.09 | 0.20 | 0.44 | 0.661 | 1.09 | 0.74 - 1.60 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | 0.07 | 0.11 | 0.62 | 0.535 | 1.07 | 0.87 - 1.32 | 0.19 | 0.11 | 1.67 | 0.095 | 1.21 | 0.97 - 1.51 |
| *5 - 20 km* | 0.00 | 0.12 | 0.02 | 0.988 | 1.00 | 0.80 - 1.26 | 0.05 | 0.13 | 0.36 | 0.721 | 1.05 | 0.81 - 1.35 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | **0.50** | **0.16** | **3.12** | **0.002** | **1.65** | **1.20 - 2.26** |
| *2nd least deprived* | |  |  |  |  |  | **0.55** | **0.15** | **3.71** | **<0.001** | **1.73** | **1.30 - 2.31** |
| *Medium deprived* | |  |  |  |  |  | **0.28** | **0.13** | **2.06** | **0.040** | **1.32** | **1.01 - 1.72** |
| *2nd most deprived* | |  |  |  |  |  | 0.19 | 0.13 | 1.49 | 0.136 | 1.21 | 0.94 - 1.55 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.07 | 0.12 | 0.54 | 0.591 | 1.07 | 0.84 - 1.35 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | 0.06 | 0.11 | 0.54 | 0.589 | 1.06 | 0.86 - 1.31 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.18** | **0.22** | **-5.45** | **<0.001** | **0.31** | **0.20 - 0.47** |
| *55 - 74* |  |  |  |  |  |  | -0.31 | 0.17 | -1.81 | 0.071 | 0.73 | 0.52 - 1.03 |
| *35 - 54* |  |  |  |  |  |  | -0.07 | 0.12 | -0.58 | 0.561 | 0.93 | 0.73 - 1.19 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.24** | **0.09** | **2.76** | **0.006** | **1.28** | **1.07 - 1.52** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.49** | **0.13** | **3.66** | **<0.001** | **1.63** | **1.26 - 2.12** |
| *NVQ3/A level* | |  |  |  |  |  | 0.28 | 0.16 | 1.79 | 0.073 | 1.32 | 0.97 - 1.80 |
| *NVQ1/NVQ2/GCSE* | | |  |  |  |  | **0.25** | **0.11** | **2.18** | **0.029** | **1.28** | **1.03 - 1.61** |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.72 | 1.33 | 0.54 | 0.588 | 2.05 | 0.15 - 27.67 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.04 | 0.23 | -0.16 | 0.873 | 0.96 | 0.62 - 1.51 |
| *Retired/other inactive* | | |  |  |  |  | **-0.54** | **0.11** | **-4.87** | **<0.001** | **0.58** | **0.47 - 0.72** |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.16 | 1.48 | 0.11 | 0.916 | 1.17 | 0.06 - 21.07 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | 0.20 | 0.13 | 1.56 | 0.120 | 1.22 | 0.95 - 1.57 |
| *Widowed/separated/divorced* | |  |  |  |  |  | -0.04 | 0.16 | -0.22 | 0.824 | 0.97 | 0.71 - 1.32 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.98** | **0.11** | **8.90** | **<0.001** | **2.67** | **2.15 - 3.31** |
| *Non-limiting longstanding illness* | | | |  |  |  | **1.04** | **0.13** | **8.19** | **<0.001** | **2.83** | **2.21 - 3.63** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.32 | 1.21 | 0.26 | 0.792 | 1.38 | 0.13 - 14.73 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | -0.18 | 0.13 | -1.39 | 0.165 | 0.84 | 0.65 - 1.08 |
| *Overweight* | |  |  |  |  |  | 0.04 | 0.12 | 0.32 | 0.748 | 1.04 | 0.83 - 1.31 |
| *Underweight* | |  |  |  |  |  | -0.25 | 0.34 | -0.75 | 0.456 | 0.78 | 0.40 - 1.52 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.39** | **0.14** | **-2.81** | **0.005** | **0.67** | **0.51 - 0.89** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | -0.02 | 0.11 | -0.23 | 0.822 | 0.98 | 0.79 - 1.21 |
| *Used to smoke* | |  |  |  |  |  | 0.01 | 0.12 | 0.08 | 0.936 | 1.01 | 0.80 - 1.28 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-1.65** | **0.59** | **-2.80** | **0.005** | **0.19** | **0.06 - 0.61** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | **-0.20** | **0.10** | **-2.01** | **0.044** | **0.82** | **0.68 - 0.99** |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 0.05 |  |  |  |  |  | -0.79 |  |  |  |  |  |
| N | 2969 |  |  |  |  |  | 2969 |  |  |  |  |  |
| Households | 1839 |  |  |  |  |  | 1839 |  |  |  |  |  |
| AIC | 4130.07 |  |  |  |  |  | 3626.08 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.23 |  |  |  |  |  | 17.73 |  |  |  |  |  |

Table 17 Unadjusted and adjusted model results predicting meeting PA guidelines through all self-reported activity from people in the lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** | | |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.15 | 0.22 | -0.68 | 0.496 | 0.86 | 0.55 - 1.33 | 0.17 | 0.24 | 0.70 | 0.487 | 1.18 | 0.74 - 1.88 |
| *60 - <80 %* | 0.01 | 0.16 | 0.04 | 0.965 | 1.01 | 0.74 - 1.37 | 0.13 | 0.17 | 0.78 | 0.436 | 1.14 | 0.82 - 1.58 |
| *40 - <60 %* | 0.12 | 0.13 | 0.96 | 0.339 | 1.13 | 0.88 - 1.45 | 0.20 | 0.14 | 1.38 | 0.169 | 1.22 | 0.92 - 1.62 |
| *20 - <40 %* | -0.01 | 0.11 | -0.13 | 0.900 | 0.99 | 0.79 - 1.22 | 0.08 | 0.12 | 0.70 | 0.483 | 1.08 | 0.86 - 1.36 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.27 | 0.29 | 0.95 | 0.343 | 1.31 | 0.75 - 2.30 | 0.29 | 0.29 | 1.00 | 0.319 | 1.33 | 0.76 - 2.33 |
| *>1 - 5 %* | 0.01 | 0.22 | 0.06 | 0.954 | 1.01 | 0.66 - 1.56 | 0.21 | 0.24 | 0.87 | 0.386 | 1.23 | 0.77 - 1.96 |
| *>0 - 1 %* | -0.10 | 0.28 | -0.37 | 0.709 | 0.90 | 0.53 - 1.55 | 0.01 | 0.28 | 0.04 | 0.971 | 1.01 | 0.58 - 1.76 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | 0.11 | 0.11 | 1.01 | 0.313 | 1.12 | 0.90 - 1.38 | **0.37** | **0.12** | **3.11** | **0.002** | **1.45** | **1.15 - 1.83** |
| *5 - 20 km* | **0.35** | **0.13** | **2.66** | **0.008** | **1.42** | **1.10 - 1.83** | **0.33** | **0.14** | **2.40** | **0.017** | **1.40** | **1.06 - 1.83** |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | **0.41** | **0.20** | **2.02** | **0.044** | **1.51** | **1.01 - 2.25** |
| *2nd least deprived* | |  |  |  |  |  | 0.19 | 0.16 | 1.16 | 0.247 | 1.21 | 0.88 - 1.67 |
| *Medium deprived* | |  |  |  |  |  | 0.11 | 0.14 | 0.78 | 0.438 | 1.12 | 0.85 - 1.47 |
| *2nd most deprived* | |  |  |  |  |  | -0.02 | 0.13 | -0.18 | 0.861 | 0.98 | 0.77 - 1.25 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.13 | 0.12 | 1.01 | 0.311 | 1.13 | 0.89 - 1.44 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | 0.13 | 0.11 | 1.21 | 0.228 | 1.14 | 0.92 - 1.40 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.12** | **0.22** | **-5.10** | **<0.001** | **0.33** | **0.21 - 0.50** |
| *55 - 74* |  |  |  |  |  |  | **-0.59** | **0.17** | **-3.54** | **<0.001** | **0.55** | **0.40 - 0.77** |
| *35 - 54* |  |  |  |  |  |  | **-0.27** | **0.13** | **-2.10** | **0.036** | **0.76** | **0.59 - 0.98** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.06 | 0.09 | 0.64 | 0.525 | 1.06 | 0.88 - 1.28 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.57** | **0.15** | **3.91** | **<0.001** | **1.77** | **1.33 - 2.36** |
| *NVQ3/A level* | |  |  |  |  |  | **0.64** | **0.16** | **3.95** | **<0.001** | **1.89** | **1.38 - 2.60** |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | **0.47** | **0.12** | **4.00** | **<0.001** | **1.59** | **1.27 - 2.00** |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.29 | 0.83 | 1.55 | 0.121 | 3.65 | 0.71 - 18.71 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.10 | 0.17 | 0.59 | 0.557 | 1.11 | 0.79 - 1.55 |
| *Retired/other inactive* | | |  |  |  |  | **-0.61** | **0.12** | **-5.31** | **<0.001** | **0.54** | **0.43 - 0.68** |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.01 | 0.81 | 0.01 | 0.994 | 1.01 | 0.21 - 4.92 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | -0.06 | 0.13 | -0.50 | 0.620 | 0.94 | 0.73 - 1.21 |
| *Widowed/separated/divorced* | | |  |  |  |  | -0.09 | 0.15 | -0.63 | 0.529 | 0.91 | 0.68 - 1.22 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **1.06** | **0.11** | **9.58** | **<0.001** | **2.90** | **2.33 - 3.60** |
| *Non-limiting longstanding illness* | | | |  |  |  | **1.16** | **0.14** | **8.23** | **<0.001** | **3.19** | **2.42 - 4.20** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.85 | 1.06 | 0.80 | 0.425 | 2.33 | 0.29 - 18.58 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | -0.16 | 0.14 | -1.17 | 0.243 | 0.85 | 0.65 - 1.11 |
| *Overweight* | |  |  |  |  |  | 0.07 | 0.12 | 0.60 | 0.548 | 1.08 | 0.84 - 1.37 |
| *Underweight* | |  |  |  |  |  | -0.45 | 0.31 | -1.45 | 0.148 | 0.64 | 0.35 - 1.17 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.50** | **0.15** | **-3.25** | **0.001** | **0.61** | **0.45 - 0.82** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | **-0.24** | **0.12** | **-2.08** | **0.038** | **0.79** | **0.63 - 0.99** |
| *Used to smoke* | |  |  |  |  |  | -0.18 | 0.12 | -1.48 | 0.139 | 0.83 | 0.66 - 1.06 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.60 | 0.36 | -1.66 | 0.097 | 0.55 | 0.27 - 1.12 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.13 | 0.10 | -1.29 | 0.198 | 0.88 | 0.71 - 1.07 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -0.18 |  |  |  |  |  | -0.58 |  |  |  |  |  |
| N | 2926 |  |  |  |  |  | 2926 |  |  |  |  |  |
| Households | 1947 |  |  |  |  |  | 1947 |  |  |  |  |  |
| AIC | 4059.22 |  |  |  |  |  | 3440.35 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.60 |  |  |  |  |  | 21.47 |  |  |  |  |  |

Table 18 Unadjusted and adjusted model results predicting meeting PA guidelines through sports and exercise self-reported activity from people in the highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.07 | 0.19 | -0.34 | 0.735 | 0.94 | 0.64 - 1.37 | 0.03 | 0.21 | 0.16 | 0.873 | 1.03 | 0.68 - 1.56 |
| *60 - <80 %* | -0.18 | 0.16 | -1.16 | 0.247 | 0.83 | 0.61 - 1.14 | -0.11 | 0.17 | -0.64 | 0.520 | 0.90 | 0.65 - 1.25 |
| *40 - <60 %* | -0.03 | 0.14 | -0.21 | 0.832 | 0.97 | 0.74 - 1.28 | 0.08 | 0.14 | 0.53 | 0.594 | 1.08 | 0.81 - 1.44 |
| *20 - <40 %* | -0.17 | 0.13 | -1.36 | 0.173 | 0.84 | 0.65 - 1.08 | -0.11 | 0.13 | -0.82 | 0.412 | 0.90 | 0.69 - 1.16 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.29 | 0.29 | 1.01 | 0.312 | 1.34 | 0.76 - 2.37 | 0.33 | 0.30 | 1.10 | 0.271 | 1.39 | 0.77 - 2.52 |
| *>1 - 5 %* | -0.05 | 0.18 | -0.25 | 0.799 | 0.95 | 0.67 - 1.37 | -0.19 | 0.20 | -0.99 | 0.324 | 0.82 | 0.56 - 1.21 |
| *>0 - 1 %* | -0.16 | 0.20 | -0.81 | 0.421 | 0.85 | 0.57 - 1.26 | -0.09 | 0.21 | -0.42 | 0.671 | 0.91 | 0.60 - 1.38 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | -0.16 | 0.17 | -0.93 | 0.353 | 0.86 | 0.62 - 1.19 | -0.02 | 0.17 | -0.12 | 0.903 | 0.98 | 0.70 - 1.37 |
| *5 - 20 km* | 0.11 | 0.14 | 0.76 | 0.445 | 1.11 | 0.85 - 1.47 | 0.12 | 0.15 | 0.84 | 0.403 | 1.13 | 0.85 - 1.50 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.09 | 0.19 | 0.46 | 0.648 | 1.09 | 0.75 - 1.60 |
| *2nd least deprived* | |  |  |  |  |  | 0.36 | 0.20 | 1.82 | 0.069 | 1.43 | 0.97 - 2.10 |
| *Medium deprived* | |  |  |  |  |  | 0.29 | 0.19 | 1.49 | 0.137 | 1.33 | 0.91 - 1.95 |
| *2nd most deprived* | |  |  |  |  |  | 0.26 | 0.20 | 1.26 | 0.208 | 1.29 | 0.87 - 1.93 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.12 | 0.12 | -0.96 | 0.337 | 0.89 | 0.69 - 1.13 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -0.02 | 0.20 | -0.09 | 0.931 | 0.98 | 0.67 - 1.44 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.29** | **0.50** | **-2.60** | **0.009** | **0.27** | **0.10 - 0.73** |
| *55 - 74* |  |  |  |  |  |  | **-0.50** | **0.16** | **-3.14** | **0.002** | **0.61** | **0.44 - 0.83** |
| *35 - 54* |  |  |  |  |  |  | -0.14 | 0.12 | -1.17 | 0.242 | 0.87 | 0.69 - 1.10 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.55** | **0.09** | **6.14** | **<0.001** | **1.74** | **1.46 - 2.07** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.72** | **0.24** | **3.04** | **0.002** | **2.06** | **1.29 - 3.29** |
| *NVQ3/A level* | |  |  |  |  |  | **0.63** | **0.26** | **2.41** | **0.016** | **1.87** | **1.12 - 3.11** |
| *NVQ1/NVQ2/GCSE* | | |  |  |  |  | 0.38 | 0.26 | 1.48 | 0.140 | 1.46 | 0.88 - 2.43 |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.72 | 1.07 | -0.67 | 0.500 | 0.49 | 0.06 - 3.94 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.69 | 0.60 | 1.15 | 0.251 | 1.99 | 0.61 - 6.45 |
| *Retired/other inactive* | | |  |  |  |  | -0.36 | 0.20 | -1.84 | 0.066 | 0.70 | 0.48 - 1.02 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.66 | 1.61 | 1.03 | 0.303 | 5.26 | 0.22 - 123.78 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **-0.55** | **0.13** | **-4.24** | **<0.001** | **0.57** | **0.44 - 0.74** |
| *Widowed/separated/divorced* | | |  |  |  |  | -0.28 | 0.19 | -1.48 | 0.140 | 0.76 | 0.53 - 1.09 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.67** | **0.17** | **3.84** | **<0.001** | **1.95** | **1.39 - 2.75** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.55** | **0.19** | **2.82** | **0.005** | **1.73** | **1.18 - 2.53** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -9.40 | 1.05 | -8.98 | 0 | 0 | 0 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.83** | **0.16** | **-5.33** | **<0.001** | **0.43** | **0.32 - 0.59** |
| *Overweight* | |  |  |  |  |  | -0.15 | 0.11 | -1.34 | 0.180 | 0.86 | 0.69 - 1.07 |
| *Underweight* | |  |  |  |  |  | **-2.73** | **1.11** | **-2.46** | **0.014** | **0.07** | **0.01 - 0.58** |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.37** | **0.16** | **-2.33** | **0.020** | **0.69** | **0.50 - 0.94** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | **0.67** | **0.15** | **4.33** | **<0.001** | **1.95** | **1.44 - 2.64** |
| *Used to smoke* | |  |  |  |  |  | **0.83** | **0.16** | **5.11** | **<0.001** | **2.29** | **1.67 - 3.15** |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.84 | 0.77 | -1.08 | 0.279 | 0.43 | 0.10 - 1.97 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.11 | 0.11 | 1.05 | 0.296 | 1.12 | 0.91 - 1.38 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -0.86 |  |  |  |  |  | -2.39 |  |  |  |  |  |
| N | 2922 |  |  |  |  |  | 2922 |  |  |  |  |  |
| Households | 1823 |  |  |  |  |  | 1823 |  |  |  |  |  |
| AIC | 3476.83 |  |  |  |  |  | 3260.68 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.32 |  |  |  |  |  | 9.52 |  |  |  |  |  |

Table 19 Unadjusted and adjusted model results predicting meeting PA guidelines through sports and exercise self-reported activity from people in the second highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Undjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.08 | 0.23 | -0.33 | 0.739 | 0.93 | 0.60 - 1.44 | 0.09 | 0.23 | 0.37 | 0.713 | 1.09 | 0.69 - 1.71 |
| *60 - <80 %* | -0.20 | 0.17 | -1.19 | 0.232 | 0.82 | 0.59 - 1.14 | -0.15 | 0.18 | -0.85 | 0.395 | 0.86 | 0.61 - 1.22 |
| *40 - <60 %* | -0.14 | 0.16 | -0.92 | 0.356 | 0.87 | 0.64 - 1.17 | -0.04 | 0.16 | -0.26 | 0.794 | 0.96 | 0.69 - 1.32 |
| *20 - <40 %* | -0.18 | 0.13 | -1.41 | 0.160 | 0.84 | 0.65 - 1.07 | -0.09 | 0.13 | -0.65 | 0.516 | 0.92 | 0.71 - 1.19 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.36 | 0.34 | 1.06 | 0.290 | 1.44 | 0.74 - 2.80 | 0.15 | 0.41 | 0.36 | 0.721 | 1.16 | 0.52 - 2.58 |
| *>1 - 5 %* | -0.03 | 0.22 | -0.14 | 0.889 | 0.97 | 0.64 - 1.48 | 0.13 | 0.23 | 0.58 | 0.565 | 1.14 | 0.73 - 1.77 |
| *>0 - 1 %* | 0.02 | 0.20 | 0.10 | 0.922 | 1.02 | 0.69 - 1.51 | -0.01 | 0.22 | -0.04 | 0.968 | 0.99 | 0.65 - 1.52 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | -0.03 | 0.13 | -0.26 | 0.793 | 0.97 | 0.75 - 1.25 | 0.04 | 0.14 | 0.25 | 0.805 | 1.04 | 0.78 - 1.37 |
| *5 - 20 km* | 0.19 | 0.14 | 1.36 | 0.173 | 1.20 | 0.92 - 1.57 | 0.26 | 0.15 | 1.80 | 0.073 | 1.30 | 0.98 - 1.73 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.11 | 0.19 | 0.58 | 0.559 | 1.11 | 0.77 - 1.61 |
| *2nd least deprived* | |  |  |  |  |  | -0.01 | 0.20 | -0.03 | 0.978 | 0.99 | 0.68 - 1.46 |
| *Medium deprived* | |  |  |  |  |  | -0.04 | 0.18 | -0.22 | 0.827 | 0.96 | 0.67 - 1.38 |
| *2nd most deprived* | |  |  |  |  |  | 0.03 | 0.19 | 0.17 | 0.864 | 1.03 | 0.71 - 1.51 |
| *Most deprived (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.01 | 0.13 | 0.06 | 0.956 | 1.01 | 0.78 - 1.29 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **-0.40** | **0.20** | **-2.03** | **0.043** | **0.67** | **0.46 - 0.99** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-2.13** | **0.50** | **-4.27** | **<0.001** | **0.12** | **0.04 - 0.31** |
| *55 - 74* |  |  |  |  |  |  | **-1.02** | **0.19** | **-5.36** | **<0.001** | **0.36** | **0.25 - 0.52** |
| *35 - 54* |  |  |  |  |  |  | **-0.49** | **0.12** | **-4.00** | **<0.001** | **0.62** | **0.49 - 0.78** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.64** | **0.11** | **6.04** | **<0.001** | **1.90** | **1.54 - 2.34** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | 0.17 | 0.20 | 0.86 | 0.389 | 1.19 | 0.80 - 1.77 |
| *NVQ3/A level* | |  |  |  |  |  | 0.03 | 0.23 | 0.13 | 0.898 | 1.03 | 0.66 - 1.61 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | -0.20 | 0.22 | -0.89 | 0.375 | 0.82 | 0.53 - 1.27 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.55 | 0.98 | 0.56 | 0.576 | 1.73 | 0.25 - 11.72 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.50 | 0.47 | -1.06 | 0.290 | 0.61 | 0.24 - 1.53 |
| *Retired/other inactive* | | |  |  |  |  | 0.27 | 0.18 | 1.53 | 0.125 | 1.32 | 0.93 - 1.87 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.14 | 0.87 | -0.16 | 0.870 | 0.87 | 0.16 - 4.80 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **-0.64** | **0.14** | **-4.58** | **<0.001** | **0.53** | **0.40 - 0.69** |
| *Widowed/separated/divorced* | | |  |  |  |  | **-0.51** | **0.23** | **-2.28** | **0.022** | **0.60** | **0.38 - 0.93** |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.82** | **0.18** | **4.54** | **<0.001** | **2.27** | **1.59 - 3.24** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | **0.52** | **0.21** | **2.52** | **0.012** | **1.69** | **1.12 - 2.53** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.55** | **0.16** | **-3.39** | **<0.001** | **0.57** | **0.42 - 0.79** |
| *Overweight* | |  |  |  |  |  | -0.02 | 0.12 | -0.13 | 0.898 | 0.98 | 0.78 - 1.25 |
| *Underweight* | |  |  |  |  |  | -0.65 | 0.43 | -1.49 | 0.138 | 0.52 | 0.22 - 1.23 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.37** | **0.18** | **-2.08** | **0.038** | **0.69** | **0.49 - 0.98** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | 0.29 | 0.15 | 1.90 | 0.058 | 1.34 | 0.99 - 1.81 |
| *Used to smoke* | |  |  |  |  |  | **0.43** | **0.16** | **2.76** | **0.006** | **1.54** | **1.13 - 2.10** |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -1.30 | 0.97 | -1.34 | 0.179 | 0.27 | 0.04 - 1.82 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.19 | 0.11 | 1.65 | 0.099 | 1.20 | 0.97 - 1.50 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.13 |  |  |  |  |  | -1.62 |  |  |  |  |  |
| N | 2975 |  |  |  |  |  | 2975 |  |  |  |  |  |
| Households | 1746 |  |  |  |  |  | 1746 |  |  |  |  |  |
| AIC | 3225.53 |  |  |  |  |  | 2996.09 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.24 |  |  |  |  |  | 9.74 |  |  |  |  |  |

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Table 20 Unadjusted and adjusted model results predicting meeting PA guidelines through sports and exercise self-reported activity from people in the middle income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | p | OR | 95 % CI | Co-ef | S.E. | statistic | p | OR | 95 % CI |
| **Environmental variables** | | |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | | |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.15 | 0.23 | 0.64 | 0.522 | 1.16 | 0.74 - 1.82 | 0.05 | 0.24 | 0.22 | 0.830 | 1.05 | 0.66 - 1.67 |
| *60 - <80 %* | 0.04 | 0.17 | 0.23 | 0.818 | 1.04 | 0.74 - 1.46 | 0.00 | 0.18 | -0.01 | 0.991 | 1.00 | 0.70 - 1.43 |
| *40 - <60 %* | 0.06 | 0.18 | 0.33 | 0.743 | 1.06 | 0.74 - 1.52 | -0.01 | 0.19 | -0.04 | 0.966 | 0.99 | 0.68 - 1.44 |
| *20 - <40 %* | -0.10 | 0.14 | -0.68 | 0.495 | 0.91 | 0.69 - 1.20 | -0.09 | 0.15 | -0.59 | 0.555 | 0.92 | 0.68 - 1.23 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  | - |
| Freshwater coverage | | |  |  |  |  |  |  |  |  |  | - |
| *>5 - 100 %* | 0.03 | 0.34 | 0.08 | 0.933 | 1.03 | 0.53 - 2.00 | -0.13 | 0.38 | -0.34 | 0.733 | 0.88 | 0.42 - 1.84 |
| *>1 - 5 %* | -0.17 | 0.23 | -0.71 | 0.479 | 0.85 | 0.54 - 1.34 | -0.26 | 0.27 | -0.98 | 0.327 | 0.77 | 0.45 - 1.30 |
| *>0 - 1 %* | -0.40 | 0.34 | -1.18 | 0.239 | 0.67 | 0.34 - 1.31 | -0.43 | 0.34 | -1.29 | 0.197 | 0.65 | 0.34 - 1.25 |
| *0% (ref)* |  |  |  |  |  | - |  |  |  |  |  | - |
| Coastal proximity | |  |  |  |  | - |  |  |  |  |  | - |
| *<5 km* | -0.07 | 0.14 | -0.52 | 0.604 | 0.93 | 0.70 - 1.23 | -0.04 | 0.15 | -0.27 | 0.785 | 0.96 | 0.71 - 1.29 |
| *5 - 20 km* | -0.16 | 0.16 | -0.99 | 0.322 | 0.85 | 0.63 - 1.17 | -0.13 | 0.16 | -0.82 | 0.414 | 0.87 | 0.63 - 1.21 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.09 | 0.20 | 0.43 | 0.668 | 1.09 | 0.73 - 1.62 |
| *2nd least deprived* | |  |  |  |  |  | 0.16 | 0.21 | 0.78 | 0.436 | 1.17 | 0.78 - 1.76 |
| *Medium deprived* | |  |  |  |  |  | -0.16 | 0.20 | -0.80 | 0.426 | 0.86 | 0.58 - 1.26 |
| *2nd most deprived* | | |  |  |  |  | -0.11 | 0.19 | -0.56 | 0.575 | 0.90 | 0.62 - 1.30 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| Children in household | | |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.21 | 0.14 | 1.47 | 0.141 | 1.23 | 0.93 - 1.63 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -0.27 | 0.18 | -1.50 | 0.133 | 0.76 | 0.54 - 1.09 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Individual level covariates | | |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.50** | **0.41** | **-3.69** | **<0.001** | **0.22** | **0.10 - 0.49** |
| *55 - 74* |  |  |  |  |  |  | **-0.63** | **0.22** | **-2.87** | **0.004** | **0.53** | **0.35 - 0.82** |
| *35 - 54* |  |  |  |  |  |  | **-0.28** | **0.15** | **-1.84** | **0.066** | **0.76** | **0.56 - 1.02** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.77** | **0.11** | **7.21** | **<0.001** | **2.16** | **1.75 - 2.67** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | | |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.68** | **0.19** | **3.56** | **<0.001** | **1.97** | **1.36 - 2.86** |
| *NVQ3/A level* | |  |  |  |  |  | **0.54** | **0.21** | **2.54** | **0.011** | **1.72** | **1.13 - 2.62** |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | 0.33 | 0.19 | 1.73 | 0.083 | 1.39 | 0.96 - 2.03 |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 14.21 | 1.56 | 9.09 | 0 | 0 | 0 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.03 | 0.51 | -0.05 | 0.960 | 0.97 | 0.36 - 2.63 |
| *Retired/other inactive* | | |  |  |  |  | -0.21 | 0.18 | -1.18 | 0.239 | 0.81 | 0.58 - 1.15 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -13.81 | 0.99 | -13.92 | 0 | 0 | 0 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **-0.45** | **0.17** | **-2.63** | **0.009** | **0.64** | **0.45 - 0.89** |
| *Widowed/separated/divorced* | | | |  |  |  | -0.18 | 0.24 | -0.76 | 0.449 | 0.84 | 0.52 - 1.33 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -13.14 | 1.04 | -12.57 | 0 | 0 | 0 |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | 0.13 | 0.17 | 0.77 | 0.444 | 1.14 | 0.82 - 1.59 |
| *Non-limiting longstanding illness* | | | |  |  |  | 0.32 | 0.19 | 1.69 | 0.092 | 1.37 | 0.95 - 1.99 |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -13.89 | 1.15 | -12.1 | 0 | 0 | 0 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.36** | **0.16** | **-2.21** | **0.027** | **0.70** | **0.51 - 0.96** |
| *Overweight* | |  |  |  |  |  | -0.12 | 0.13 | -0.90 | 0.368 | 0.89 | 0.68 - 1.15 |
| *Underweight* | |  |  |  |  |  | -0.71 | 0.59 | -1.20 | 0.230 | 0.49 | 0.16 - 1.56 |
| *Normal weight (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.32 | 0.2 | -1.63 | 0.104 | 0.73 | 0.50 - 1.07 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | **0.48** | **0.16** | **3.01** | **0.003** | **1.61** | **1.18 - 2.21** |
| *Used to smoke* | |  |  |  |  |  | **0.37** | **0.17** | **2.15** | **0.031** | **1.45** | **1.03 - 2.03** |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **1.35** | **0.63** | **2.15** | **0.031** | **3.86** | **1.13 - 13.19** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.01 | 0.12 | 0.07 | 0.944 | 1.01 | 0.79 - 1.28 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.38 |  |  |  |  |  | -1.94 |  |  |  |  |  |
| N | 2850 |  |  |  |  |  | 2850 |  |  |  |  |  |
| Households | 1730 |  |  |  |  |  | 1730 |  |  |  |  |  |
| AIC | 2799.82 |  |  |  |  |  | 2605.07 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.21 |  |  |  |  |  | 9.04 |  |  |  |  |  |

Table 21 Unadjusted and adjusted model results predicting meeting PA guidelines through sports and exercise self-reported activity from people in the second lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** | | |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | | |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.56 | 0.3 | -1.84 | 0.066 | 0.57 | 0.32 - 1.04 | -0.63 | 0.33 | -1.89 | 0.059 | 0.53 | 0.28 - 1.02 |
| *60 - <80 %* | -0.11 | 0.2 | -0.56 | 0.574 | 0.89 | 0.60 - 1.32 | -0.03 | 0.22 | -0.12 | 0.907 | 0.97 | 0.64 - 1.49 |
| *40 - <60 %* | -0.19 | 0.17 | -1.13 | 0.257 | 0.83 | 0.59 - 1.15 | -0.25 | 0.19 | -1.33 | 0.183 | 0.78 | 0.54 - 1.13 |
| *20 - <40 %* | -0.21 | 0.15 | -1.36 | 0.176 | 0.81 | 0.60 - 1.10 | -0.15 | 0.16 | -0.97 | 0.332 | 0.86 | 0.63 - 1.17 |
| *0 - <20 % (ref)* | |  |  |  |  | - |  |  |  |  |  | - |
| Freshwater coverage | | |  |  |  | - |  |  |  |  |  | - |
| *>5 - 100 %* | 0.49 | 0.28 | 1.78 | 0.075 | 1.63 | 0.95 - 2.81 | **0.87** | **0.31** | **2.84** | **0.005** | **2.39** | **1.31 - 4.35** |
| *>1 - 5 %* | 0.28 | 0.21 | 1.34 | 0.181 | 1.33 | 0.88 - 2.00 | 0.10 | 0.23 | 0.45 | 0.656 | 1.11 | 0.71 - 1.73 |
| *>0 - 1 %* | 0.54 | 0.26 | 2.09 | 0.037 | 1.72 | 1.03 - 2.87 | 0.37 | 0.28 | 1.32 | 0.187 | 1.45 | 0.84 - 2.52 |
| *0% (ref)* |  |  |  |  |  | - |  |  |  |  |  | - |
| Coastal proximity | |  |  |  |  | - |  |  |  |  |  | - |
| *<5 km* | 0.03 | 0.15 | 0.18 | 0.859 | 1.03 | 0.77 - 1.37 | 0.16 | 0.15 | 1.07 | 0.287 | 1.18 | 0.87 - 1.60 |
| *5 - 20 km* | -0.17 | 0.18 | -0.97 | 0.334 | 0.84 | 0.60 - 1.19 | -0.14 | 0.19 | -0.73 | 0.467 | 0.87 | 0.60 - 1.26 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.27 | 0.22 | 1.24 | 0.216 | 1.31 | 0.85 - 2.02 |
| *2nd least deprived* | |  |  |  |  |  | 0.36 | 0.20 | 1.80 | 0.072 | 1.43 | 0.97 - 2.12 |
| *Medium deprived* | |  |  |  |  |  | 0.11 | 0.19 | 0.54 | 0.586 | 1.11 | 0.76 - 1.63 |
| *2nd most deprived* | | |  |  |  |  | -0.16 | 0.18 | -0.86 | 0.391 | 0.85 | 0.60 - 1.22 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| Children in household | | |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.22 | 0.16 | 1.40 | 0.163 | 1.25 | 0.91 - 1.72 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -0.3 | 0.16 | -1.90 | 0.057 | 0.74 | 0.54 - 1.01 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.86** | **0.39** | **-4.74** | **<0.001** | **0.16** | **0.07 - 0.34** |
| *55 - 74* |  |  |  |  |  |  | **-1.02** | **0.25** | **-4.16** | **<0.001** | **0.36** | **0.22 - 0.58** |
| *35 - 54* |  |  |  |  |  |  | **-0.97** | **0.17** | **-5.74** | **<0.001** | **0.38** | **0.27 - 0.53** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.84** | **0.13** | **6.22** | **<0.001** | **2.31** | **1.77 - 3.00** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | | |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.49** | **0.19** | **2.55** | **0.011** | **1.63** | **1.12 - 2.38** |
| *NVQ3/A level* | |  |  |  |  |  | 0.36 | 0.21 | 1.73 | 0.084 | 1.44 | 0.95 - 2.16 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | **0.47** | **0.17** | **2.71** | **0.007** | **1.60** | **1.14 - 2.25** |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.13 | 0.86 | 1.31 | 0.190 | 3.1 | 0.57 - 16.82 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.15 | 0.27 | 0.54 | 0.591 | 1.16 | 0.68 - 1.98 |
| *Retired/other inactive* | | |  |  |  |  | -0.20 | 0.19 | -1.08 | 0.281 | 0.82 | 0.57 - 1.18 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.03 | 0.88 | 0.03 | 0.972 | 1.03 | 0.18 - 5.83 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | -0.32 | 0.16 | -1.92 | 0.054 | 0.73 | 0.52 - 1.01 |
| *Widowed/separated/divorced* | | | |  |  |  | 0.08 | 0.24 | 0.33 | 0.744 | 1.08 | 0.68 - 1.71 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.91** | **0.20** | **4.46** | **<0.001** | **2.48** | **1.66 - 3.70** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.79** | **0.22** | **3.60** | **<0.001** | **2.21** | **1.44 - 3.41** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.71 | 1.17 | 1.46 | 0.143 | 5.53 | 0.56 - 54.53 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.40** | **0.18** | **-2.19** | **0.029** | **0.67** | **0.47 - 0.96** |
| *Overweight* | |  |  |  |  |  | -0.07 | 0.16 | -0.46 | 0.648 | 0.93 | 0.68 - 1.27 |
| *Underweight* | |  |  |  |  |  | -0.38 | 0.44 | -0.86 | 0.389 | 0.68 | 0.29 - 1.63 |
| *Normal weight (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.26 | 0.19 | -1.34 | 0.182 | 0.77 | 0.53 - 1.13 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | **0.64** | **0.17** | **3.87** | **<0.001** | **1.90** | **1.37 - 2.62** |
| *Used to smoke* | |  |  |  |  |  | **0.54** | **0.19** | **2.81** | **0.005** | **1.72** | **1.18 - 2.52** |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.34 | 0.71 | -0.48 | 0.631 | 0.71 | 0.18 - 2.85 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.07 | 0.14 | -0.52 | 0.601 | 0.93 | 0.71 - 1.22 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.63 |  |  |  |  |  | -2.64 |  |  |  |  |  |
| N | 2969 |  |  |  |  |  | 2969 |  |  |  |  |  |
| Households | 1839 |  |  |  |  |  | 1839 |  |  |  |  |  |
| AIC | 2544.82 |  |  |  |  |  | 2223.06 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.46 |  |  |  |  |  | 12.71 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 22 Unadjusted and adjusted model results predicting meeting PA guidelines through sports and exercise self-reported activity from people in the lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** | | |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | | |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.14 | 0.35 | 0.38 | 0.701 | 1.14 | 0.57 - 2.28 | 0.63 | 0.43 | 1.45 | 0.146 | 1.87 | 0.80 - 4.36 |
| *60 - <80 %* | 0.00 | 0.26 | 0.01 | 0.990 | 1.00 | 0.61 - 1.66 | 0.21 | 0.28 | 0.74 | 0.458 | 1.23 | 0.71 - 2.14 |
| *40 - <60 %* | 0.25 | 0.18 | 1.36 | 0.175 | 1.28 | 0.90 - 1.83 | 0.33 | 0.20 | 1.64 | 0.101 | 1.40 | 0.94 - 2.08 |
| *20 - <40 %* | 0.11 | 0.16 | 0.69 | 0.491 | 1.12 | 0.81 - 1.54 | 0.21 | 0.17 | 1.26 | 0.209 | 1.23 | 0.89 - 1.71 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | | |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.47 | 0.40 | 1.17 | 0.243 | 1.60 | 0.73 - 3.53 | 0.26 | 0.36 | 0.73 | 0.466 | 1.30 | 0.64 - 2.64 |
| *>1 - 5 %* | 0.22 | 0.28 | 0.78 | 0.435 | 1.24 | 0.72 - 2.14 | 0.40 | 0.31 | 1.32 | 0.188 | 1.50 | 0.82 - 2.72 |
| *>0 - 1 %* | -0.30 | 0.34 | -0.87 | 0.384 | 0.74 | 0.38 - 1.45 | -0.17 | 0.40 | -0.44 | 0.663 | 0.84 | 0.39 - 1.83 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | -0.28 | 0.17 | -1.69 | 0.091 | 0.76 | 0.55 - 1.05 | -0.02 | 0.18 | -0.13 | 0.898 | 0.98 | 0.69 - 1.39 |
| *5 - 20 km* | 0.26 | 0.17 | 1.52 | 0.128 | 1.30 | 0.93 - 1.83 | 0.00 | 0.18 | 0.01 | 0.993 | 1.00 | 0.70 - 1.43 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.46 | 0.30 | 1.57 | 0.117 | 1.59 | 0.89 - 2.84 |
| *2nd least deprived* | |  |  |  |  |  | **0.56** | **0.23** | **2.39** | **0.017** | **1.75** | **1.11 - 2.76** |
| *Medium deprived* | |  |  |  |  |  | -0.15 | 0.20 | -0.75 | 0.455 | 0.86 | 0.59 - 1.27 |
| *2nd most deprived* | | |  |  |  |  | -0.12 | 0.18 | -0.68 | 0.497 | 0.88 | 0.62 - 1.26 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| Children in household | | |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.12 | 0.16 | 0.74 | 0.461 | 1.12 | 0.83 - 1.53 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | 0.18 | 0.15 | 1.21 | 0.226 | 1.20 | 0.90 - 1.60 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Individual level covariates | | |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-2.24** | **0.39** | **-5.76** | **<0.001** | **0.11** | **0.05 - 0.23** |
| *55 - 74* |  |  |  |  |  |  | **-1.66** | **0.27** | **-6.22** | **<0.001** | **0.19** | **0.11 - 0.32** |
| *35 - 54* |  |  |  |  |  |  | **-0.88** | **0.19** | **-4.74** | **<0.001** | **0.42** | **0.29 - 0.60** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.86** | **0.13** | **6.65** | **<0.001** | **2.36** | **1.83 - 3.04** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | | |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.45** | **0.22** | **2.03** | **0.043** | **1.57** | **1.02 - 2.43** |
| *NVQ3/A level* | |  |  |  |  |  | **0.62** | **0.20** | **3.05** | **0.002** | **1.85** | **1.25 - 2.76** |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | **0.44** | **0.18** | **2.37** | **0.018** | **1.55** | **1.08 - 2.22** |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.55 | 0.75 | 0.73 | 0.465 | 1.73 | 0.40 - 7.48 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.31 | 0.22 | 1.40 | 0.161 | 1.37 | 0.88 - 2.11 |
| *Retired/other inactive* | | |  |  |  |  | 0.00 | 0.17 | -0.03 | 0.978 | 1.00 | 0.71 - 1.39 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.38 | 0.74 | 1.85 | 0.064 | 3.96 | 0.92 - 16.98 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **-0.56** | **0.18** | **-3.21** | **0.001** | **0.57** | **0.40 - 0.80** |
| *Widowed/separated/divorced* | | | |  |  |  | -0.02 | 0.22 | -0.89 | 0.371 | 0.82 | 0.53 - 1.27 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.79** | **0.19** | **4.09** | **<0.001** | **2.21** | **1.51 - 3.24** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.90** | **0.23** | **3.97** | **<0.001** | **2.46** | **1.58 - 3.83** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -12.46 | 0.56 | -22.1 | 0 | 0 | 0 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | -0.15 | 0.21 | -0.74 | 0.461 | 0.86 | 0.57 - 1.29 |
| *Overweight* | |  |  |  |  |  | 0.08 | 0.16 | 0.52 | 0.606 | 1.09 | 0.79 - 1.49 |
| *Underweight* | |  |  |  |  |  | 0.00 | 0.36 | 0.01 | 0.994 | 1.00 | 0.50 - 2.03 |
| *Normal weight (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.10 | 0.22 | -0.44 | 0.660 | 0.91 | 0.59 - 1.40 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | 0.18 | 0.16 | 1.11 | 0.267 | 1.20 | 0.87 - 1.65 |
| *Used to smoke* | |  |  |  |  |  | **0.56** | **0.18** | **3.06** | **0.002** | **1.74** | **1.22 - 2.49** |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.89 | 0.57 | -1.55 | 0.121 | 0.41 | 0.13 - 1.26 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.02 | 0.15 | -0.17 | 0.867 | 0.98 | 0.73 - 1.30 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.83 |  |  |  |  |  | -2.8 |  |  |  |  |  |
| N | 2923 |  |  |  |  |  | 2923 |  |  |  |  |  |
| Households | 1946 |  |  |  |  |  | 1946 |  |  |  |  |  |
| AIC | 2505.07 |  |  |  |  |  | 2134.97 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.68 |  |  |  |  |  | 14.67 |  |  |  |  |  |

Table 23 Unadjusted and adjusted model results predicting meeting PA guidelines through walking self-reported activity from people in the highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.15 | 0.20 | -0.73 | 0.467 | 0.86 | 0.58 - 1.28 | -0.08 | 0.21 | -0.40 | 0.689 | 0.92 | 0.62 - 1.38 |
| *60 - <80 %* | -0.15 | 0.15 | -0.99 | 0.321 | 0.86 | 0.64 - 1.15 | -0.15 | 0.15 | -0.96 | 0.339 | 0.86 | 0.64 - 1.17 |
| *40 - <60 %* | **-0.43** | **0.14** | **-2.99** | **0.003** | **0.65** | **0.49 - 0.86** | **-0.34** | **0.15** | **-2.30** | **0.022** | **0.71** | **0.53 - 0.95** |
| *20 - <40 %* | **-0.25** | **0.12** | **-2.06** | **0.039** | **0.78** | **0.62 - 0.99** | -0.19 | 0.12 | -1.55 | 0.122 | 0.83 | 0.65 - 1.05 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.21 | 0.29 | -0.70 | 0.481 | 0.81 | 0.46 - 1.45 | -0.23 | 0.29 | -0.80 | 0.422 | 0.79 | 0.45 - 1.40 |
| *>1 - 5 %* | 0.25 | 0.18 | 1.35 | 0.178 | 1.28 | 0.89 - 1.84 | 0.19 | 0.19 | 1.04 | 0.300 | 1.21 | 0.84 - 1.75 |
| *>0 - 1 %* | -0.07 | 0.20 | -0.36 | 0.717 | 0.93 | 0.63 - 1.37 | -0.02 | 0.20 | -0.08 | 0.934 | 0.98 | 0.66 - 1.46 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | -0.01 | 0.13 | -0.08 | 0.939 | 0.99 | 0.76 - 1.29 | 0.11 | 0.14 | 0.78 | 0.433 | 1.11 | 0.85 - 1.45 |
| *5 - 20 km* | -0.06 | 0.14 | -0.43 | 0.669 | 0.94 | 0.72 - 1.24 | -0.05 | 0.14 | -0.34 | 0.732 | 0.95 | 0.72 - 1.26 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.18 | 0.19 | 0.99 | 0.323 | 1.20 | 0.83 - 1.73 |
| *2nd least deprived* | |  |  |  |  |  | 0.14 | 0.19 | 0.71 | 0.475 | 1.15 | 0.79 - 1.68 |
| *Medium deprived* | |  |  |  |  |  | -0.03 | 0.19 | -0.18 | 0.855 | 0.97 | 0.66 - 1.41 |
| *2nd most deprived* | | |  |  |  |  | 0.08 | 0.20 | 0.43 | 0.668 | 1.09 | 0.74 - 1.60 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.03 | 0.12 | -0.25 | 0.805 | 0.97 | 0.77 - 1.22 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **0.58** | **0.18** | **3.33** | **<0.001** | **1.79** | **1.27 - 2.53** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.56** | **0.43** | **-3.67** | **<0.001** | **0.21** | **0.09 - 0.48** |
| *55 - 74* |  |  |  |  |  |  | -0.07 | 0.16 | -0.46 | 0.645 | 0.93 | 0.68 - 1.27 |
| *35 - 54* |  |  |  |  |  |  | 0.20 | 0.12 | 1.63 | 0.102 | 1.22 | 0.96 - 1.54 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.08 | 0.09 | 0.99 | 0.324 | 1.09 | 0.92 - 1.29 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.47** | **0.19** | **2.54** | **0.011** | **1.60** | **1.11 - 2.30** |
| *NVQ3/A level* | |  |  |  |  |  | **0.46** | **0.21** | **2.20** | **0.028** | **1.59** | **1.05 - 2.39** |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | 0.19 | 0.21 | 0.94 | 0.349 | 1.21 | 0.81 - 1.81 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -1.14 | 1.78 | -0.64 | 0.520 | 0.32 | 0.01 - 10.36 |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  |  | 0.10 | 0.58 | 0.16 | 0.870 | 1.10 | 0.35 - 3.45 |
| *Retired/other inactive* |  |  |  |  |  |  | 0.23 | 0.15 | 1.53 | 0.125 | 1.26 | 0.94 - 1.69 |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 1.87 | 1.57 | 1.19 | 0.234 | 6.47 | 0.30 - 139.51 |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  |  | -0.04 | 0.14 | -0.29 | 0.772 | 0.96 | 0.73 - 1.26 |
| *Widowed/separated/divorced* |  |  |  |  |  |  | 0.03 | 0.19 | 0.14 | 0.887 | 1.03 | 0.71 - 1.48 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | **0.39** | **0.16** | **2.46** | **0.014** | **1.47** | **1.08 - 2.00** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | 0.33 | 0.17 | 1.95 | 0.052 | 1.39 | 1.00 - 1.93 |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -10.18 | 1.03 | -9.89 | 0 | 0 | 0 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-1.00** | **0.14** | **-6.90** | **<0.001** | **0.37** | **0.28 - 0.49** |
| *Overweight* | |  |  |  |  |  | **-0.41** | **0.11** | **-3.71** | **<0.001** | **0.66** | **0.53 - 0.82** |
| *Underweight* | |  |  |  |  |  | -0.46 | 0.47 | -0.99 | 0.321 | 0.63 | 0.25 - 1.57 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.54** | **0.16** | **-3.48** | **<0.001** | **0.58** | **0.43 - 0.79** |
| Cigarette smoking status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* |  |  |  |  |  |  | 0.01 | 0.13 | 0.06 | 0.949 | 1.01 | 0.77 - 1.31 |
| *Used to smoke* |  |  |  |  |  |  | 0.20 | 0.14 | 1.42 | 0.154 | 1.23 | 0.93 - 1.62 |
| *Current smoker (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.19 | 0.80 | 0.24 | 0.811 | 1.21 | 0.25 - 5.77 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.07 | 0.10 | 0.64 | 0.523 | 1.07 | 0.87 - 1.30 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -0.71 |  |  |  |  |  | -1.43 |  |  |  |  |  |
| N | 2916 |  |  |  |  |  | 2916 |  |  |  |  |  |
| Households | 1820 |  |  |  |  |  | 1820 |  |  |  |  |  |
| AIC | 3537.26 |  |  |  |  |  | 3457.08 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.59 |  |  |  |  |  | 5.43 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 24 Unadjusted and adjusted model results predicting meeting PA guidelines through walking self-reported activity from people in the second highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.14 | 0.20 | -0.70 | 0.486 | 0.87 | 0.59 - 1.29 | 0.01 | 0.20 | 0.02 | 0.980 | 1.01 | 0.67 - 1.50 |
| *60 - <80 %* | -0.20 | 0.17 | -1.21 | 0.225 | 0.81 | 0.59 - 1.13 | -0.14 | 0.17 | -0.82 | 0.413 | 0.87 | 0.62 - 1.22 |
| *40 - <60 %* | 0.00 | 0.14 | -0.01 | 0.989 | 1.00 | 0.76 - 1.32 | 0.10 | 0.15 | 0.68 | 0.498 | 1.11 | 0.83 - 1.47 |
| *20 - <40 %* | **-0.39** | **0.13** | **-3.12** | **0.002** | **0.68** | **0.53 - 0.86** | **-0.32** | **0.13** | **-2.40** | **0.016** | **0.73** | **0.56 - 0.94** |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.04 | 0.33 | -0.13 | 0.897 | 0.96 | 0.50 - 1.85 | -0.12 | 0.32 | -0.36 | 0.719 | 0.89 | 0.47 - 1.67 |
| *>1 - 5 %* | 0.17 | 0.18 | 0.91 | 0.362 | 1.18 | 0.83 - 1.69 | 0.23 | 0.19 | 1.21 | 0.226 | 1.26 | 0.87 - 1.82 |
| *>0 - 1 %* | 0.02 | 0.25 | 0.08 | 0.940 | 1.02 | 0.62 - 1.66 | 0.01 | 0.26 | 0.03 | 0.976 | 1.01 | 0.61 - 1.68 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | **0.29** | **0.12** | **2.38** | **0.017** | **1.34** | **1.05 - 1.71** | **0.38** | **0.13** | **3.01** | **0.003** | **1.47** | **1.14 - 1.88** |
| *5 - 20 km* | 0.17 | 0.13 | 1.30 | 0.195 | 1.19 | 0.91 - 1.55 | **0.28** | **0.14** | **2.01** | **0.044** | **1.32** | **1.01 - 1.72** |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.02 | 0.18 | 0.12 | 0.906 | 1.02 | 0.71 - 1.46 |
| *2nd least deprived* | |  |  |  |  |  | -0.07 | 0.19 | -0.35 | 0.725 | 0.94 | 0.65 - 1.35 |
| *Medium deprived* | |  |  |  |  |  | -0.01 | 0.19 | -0.07 | 0.941 | 0.99 | 0.68 - 1.43 |
| *2nd most deprived* | | |  |  |  |  | -0.02 | 0.19 | -0.09 | 0.929 | 0.98 | 0.68 - 1.42 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.08 | 0.12 | -0.61 | 0.539 | 0.93 | 0.73 - 1.18 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **0.39** | **0.18** | **2.19** | **0.029** | **1.47** | **1.04 - 2.08** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.42** | **0.41** | **-3.43** | **<0.001** | **0.24** | **0.11 - 0.54** |
| *55 - 74* |  |  |  |  |  |  | -0.21 | 0.17 | -1.20 | 0.230 | 0.81 | 0.58 - 1.14 |
| *35 - 54* |  |  |  |  |  |  | 0.03 | 0.13 | 0.22 | 0.829 | 1.03 | 0.80 - 1.31 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.14 | 0.09 | 1.56 | 0.119 | 1.15 | 0.96 - 1.38 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | 0.36 | 0.19 | 1.93 | 0.054 | 1.44 | 0.99 - 2.08 |
| *NVQ3/A level* | |  |  |  |  |  | 0.27 | 0.21 | 1.33 | 0.183 | 1.31 | 0.88 - 1.97 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | 0.12 | 0.20 | 0.63 | 0.529 | 1.13 | 0.77 - 1.67 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.22 | 1.48 | 0.15 | 0.883 | 1.24 | 0.07 - 22.72 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.29 | 0.40 | 0.71 | 0.475 | 1.33 | 0.61 - 2.92 |
| *Retired/other inactive* | | |  |  |  |  | -0.09 | 0.15 | -0.60 | 0.551 | 0.91 | 0.68 - 1.23 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.46 | 2.18 | 0.21 | 0.834 | 1.58 | 0.02 - 112.67 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | -0.14 | 0.14 | -1.02 | 0.307 | 0.87 | 0.66 - 1.14 |
| *Widowed/separated/divorced* | | |  |  |  |  | -0.22 | 0.21 | -1.07 | 0.283 | 0.80 | 0.53 - 1.20 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | 0.14 | 0.15 | 0.91 | 0.363 | 1.15 | 0.85 - 1.56 |
| *Non-limiting longstanding illness* | |  |  |  |  |  | **0.35** | **0.18** | **2.00** | **0.046** | **1.42** | **1.01 - 2.01** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.93** | **0.15** | **-6.33** | **<0.001** | **0.39** | **0.29 - 0.52** |
| *Overweight* | |  |  |  |  |  | **-0.47** | **0.11** | **-4.17** | **<0.001** | **0.63** | **0.50 - 0.78** |
| *Underweight* | |  |  |  |  |  | 0.09 | 0.39 | 0.23 | 0.818 | 1.09 | 0.51 - 2.35 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.62** | **0.20** | **-3.13** | **0.002** | **0.54** | **0.37 - 0.79** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | 0.26 | 0.14 | 1.85 | 0.065 | 1.29 | 0.98 - 1.70 |
| *Used to smoke* | |  |  |  |  |  | 0.17 | 0.14 | 1.16 | 0.245 | 1.18 | 0.89 - 1.57 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.77 | 0.98 | -0.78 | 0.434 | 0.46 | 0.07 - 3.17 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.12 | 0.11 | 1.14 | 0.254 | 1.13 | 0.91 - 1.40 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.13 |  |  |  |  |  | -1.38 |  |  |  |  |  |
| N | 2974 |  |  |  |  |  | 2974 |  |  |  |  |  |
| Households | 1745 |  |  |  |  |  | 1745 |  |  |  |  |  |
| AIC | 3239.23 |  |  |  |  |  | 3175.60 |  |  |  |  |  |
| Cox & Snell *pseudo-R2 (%)* | 0.77 |  |  |  |  |  | 5.09 |  |  |  |  |  |

Table 25 Unadjusted and adjusted model results predicting meeting PA guidelines through walking self-reported activity from people in the middle income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.12 | 0.22 | -0.54 | 0.586 | 0.89 | 0.57 - 1.37 | -0.09 | 0.24 | -0.39 | 0.695 | 0.91 | 0.57 - 1.45 |
| *60 - <80 %* | -0.02 | 0.17 | -0.11 | 0.910 | 0.98 | 0.70 - 1.37 | -0.05 | 0.18 | -0.28 | 0.778 | 0.95 | 0.67 - 1.35 |
| *40 - <60 %* | -0.29 | 0.17 | -1.72 | 0.086 | 0.75 | 0.53 - 1.04 | -0.24 | 0.18 | -1.33 | 0.184 | 0.79 | 0.55 - 1.12 |
| *20 - <40 %* | -0.11 | 0.14 | -0.80 | 0.424 | 0.90 | 0.69 - 1.17 | -0.09 | 0.14 | -0.65 | 0.516 | 0.91 | 0.69 - 1.20 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | **0.59** | **0.28** | **2.11** | **0.035** | **1.81** | **1.04 - 3.14** | 0.44 | 0.28 | 1.55 | 0.121 | 1.55 | 0.89 - 2.69 |
| *>1 - 5 %* | -0.09 | 0.21 | -0.45 | 0.652 | 0.91 | 0.60 - 1.37 | -0.23 | 0.21 | -1.06 | 0.288 | 0.80 | 0.52 - 1.21 |
| *>0 - 1 %* | 0.08 | 0.30 | 0.29 | 0.775 | 1.09 | 0.61 - 1.94 | 0.17 | 0.30 | 0.57 | 0.569 | 1.18 | 0.66 - 2.11 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | **0.34** | **0.14** | **2.46** | **0.014** | **1.40** | **1.07 - 1.83** | **0.45** | **0.14** | **3.11** | **0.002** | **1.57** | **1.18 - 2.08** |
| *5 - 20 km* | 0.22 | 0.14 | 1.58 | 0.115 | 1.24 | 0.95 - 1.63 | 0.22 | 0.14 | 1.49 | 0.137 | 1.24 | 0.93 - 1.65 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  | - | 0.38 | 0.20 | 1.90 | 0.058 | 1.46 | 0.99 - 2.15 |
| *2nd least deprived* | |  |  |  |  | - | 0.14 | 0.19 | 0.71 | 0.477 | 1.15 | 0.79 - 1.67 |
| *Medium deprived* | |  |  |  |  | - | 0.32 | 0.18 | 1.78 | 0.076 | 1.38 | 0.97 - 1.96 |
| *2nd most deprived* | | |  |  |  | - | 0.29 | 0.17 | 1.66 | 0.097 | 1.33 | 0.95 - 1.87 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  | - | -0.11 | 0.14 | -0.80 | 0.422 | 0.90 | 0.69 - 1.17 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  | - | **0.62** | **0.16** | **3.85** | **<0.001** | **1.87** | **1.36 - 2.57** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  | - | **-1.31** | **0.35** | **-3.74** | **<0.001** | **0.27** | **0.14 - 0.54** |
| *55 - 74* |  |  |  |  |  | - | -0.21 | 0.21 | -0.99 | 0.320 | 0.81 | 0.54 - 1.22 |
| *35 - 54* |  |  |  |  |  | - | 0.19 | 0.14 | 1.36 | 0.173 | 1.21 | 0.92 - 1.61 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  | - | -0.03 | 0.11 | -0.27 | 0.790 | 0.97 | 0.78 - 1.21 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  | - | **0.52** | **0.16** | **3.25** | **0.001** | **1.68** | **1.23 - 2.30** |
| *NVQ3/A level* | |  |  |  |  | - | 0.37 | 0.19 | 1.96 | 0.050 | 1.45 | 1.00 - 2.10 |
| *NVQ1/NVQ2/GCSE* | | |  |  |  | - | 0.10 | 0.17 | 0.58 | 0.564 | 1.10 | 0.79 - 1.54 |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -0.58 | 1.24 | -0.47 | 0.640 | 0.56 | 0.05 - 6.32 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  | - | -0.21 | 0.51 | -0.41 | 0.681 | 0.81 | 0.30 - 2.22 |
| *Retired/other inactive* | | |  |  |  | - | 0.10 | 0.16 | 0.60 | 0.549 | 1.10 | 0.80 - 1.51 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -13.33 | 0.87 | -15.30 | 0 | 0 | 0 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  | - | -0.03 | 0.16 | -0.18 | 0.857 | 0.97 | 0.71 - 1.34 |
| *Widowed/separated/divorced* | | |  |  |  | - | -0.14 | 0.23 | -0.60 | 0.552 | 0.87 | 0.56 - 1.36 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -13.31 | 1.04 | -12.79 | 0 | 0 | 00 |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  | - | **0.56** | **0.18** | **3.22** | **0.001** | **1.76** | **1.25 - 2.48** |
| *Non-limiting longstanding illness* | | | |  |  | - | **0.46** | **0.19** | **2.43** | **0.015** | **1.59** | **1.09 - 2.31** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | 16.26 | 1.05 | 15.52 | 0 | NA | NA |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  | - | **-0.80** | **0.17** | **-4.76** | **<0.001** | **0.45** | **0.32 - 0.62** |
| *Overweight* | |  |  |  |  | - | **-0.32** | **0.13** | **-2.47** | **0.014** | **0.73** | **0.56 - 0.94** |
| *Underweight* | |  |  |  |  | - | **0.91** | **0.43** | **2.10** | **0.036** | **2.48** | **1.06 - 5.81** |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | **-0.58** | **0.18** | **-3.17** | **0.002** | **0.56** | **0.39 - 0.80** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  | - | 0.24 | 0.15 | 1.53 | 0.127 | 1.27 | 0.94 - 1.71 |
| *Used to smoke* | |  |  |  |  | - | 0.23 | 0.17 | 1.34 | 0.181 | 1.25 | 0.90 - 1.74 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | **1.16** | **0.54** | **2.16** | **0.031** | **3.20** | **1.11 - 9.19** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  | - | 0.00 | 0.12 | 0.03 | 0.976 | 1.00 | 0.80 - 1.26 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.46 |  |  |  |  |  | -2.32 |  |  |  |  |  |
| N | 2844 |  |  |  |  |  | 2844 |  |  |  |  |  |
| Households | 1727 |  |  |  |  |  | 1727 |  |  |  |  |  |
| AIC | 2785.34 |  |  |  |  |  | 2682.89 |  |  |  |  |  |
| Cox & Snell *pseudo-R2 (%)* | 0.58 |  |  |  |  |  | 6.28 |  |  |  |  |  |

Table 26 Unadjusted and adjusted model results predicting meeting PA guidelines through walking self-reported activity from people in the second lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.05 | 0.24 | -0.23 | 0.819 | 0.95 | 0.59 - 1.51 | 0.00 | 0.25 | 0.00 | 0.997 | 1.00 | 0.61 - 1.63 |
| *60 - <80 %* | -0.33 | 0.19 | -1.75 | 0.081 | 0.72 | 0.49 - 1.04 | -0.30 | 0.21 | -1.43 | 0.152 | 0.74 | 0.49 - 1.12 |
| *40 - <60 %* | -0.08 | 0.16 | -0.51 | 0.608 | 0.92 | 0.67 - 1.26 | -0.09 | 0.17 | -0.51 | 0.609 | 0.92 | 0.66 - 1.27 |
| *20 - <40 %* | -0.16 | 0.14 | -1.13 | 0.258 | 0.85 | 0.64 - 1.13 | -0.08 | 0.15 | -0.53 | 0.594 | 0.92 | 0.69 - 1.23 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.05 | 0.35 | -0.15 | 0.881 | 0.95 | 0.48 - 1.88 | -0.01 | 0.39 | -0.03 | 0.974 | 0.99 | 0.46 - 2.11 |
| *>1 - 5 %* | -0.12 | 0.24 | -0.50 | 0.616 | 0.89 | 0.55 - 1.42 | -0.14 | 0.25 | -0.57 | 0.568 | 0.87 | 0.53 - 1.42 |
| *>0 - 1 %* | 0.23 | 0.23 | 0.98 | 0.326 | 1.26 | 0.80 - 1.98 | 0.13 | 0.24 | 0.52 | 0.602 | 1.14 | 0.71 - 1.83 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | -0.04 | 0.15 | -0.26 | 0.795 | 0.96 | 0.72 - 1.29 | 0.01 | 0.15 | 0.09 | 0.927 | 1.01 | 0.75 - 1.37 |
| *5 - 20 km* | 0.03 | 0.15 | 0.19 | 0.852 | 1.03 | 0.77 - 1.38 | 0.03 | 0.16 | 0.21 | 0.836 | 1.03 | 0.76 - 1.40 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | **0.45** | **0.19** | **2.29** | **0.022** | **1.56** | **1.07 - 2.29** |
| *2nd least deprived* | |  |  |  |  |  | **0.37** | **0.18** | **2.07** | **0.039** | **1.45** | **1.02 - 2.05** |
| *Medium deprived* | |  |  |  |  |  | 0.17 | 0.19 | 0.93 | 0.351 | 1.19 | 0.83 - 1.71 |
| *2nd most deprived* | | |  |  |  |  | 0.20 | 0.17 | 1.20 | 0.232 | 1.22 | 0.88 - 1.69 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.05 | 0.15 | -0.32 | 0.750 | 0.95 | 0.71 - 1.28 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **0.50** | **0.14** | **3.58** | **<0.001** | **1.65** | **1.25 - 2.17** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-0.86** | **0.31** | **-2.79** | **0.005** | **0.42** | **0.23 - 0.77** |
| *55 - 74* |  |  |  |  |  |  | 0.07 | 0.22 | 0.31 | 0.760 | 1.07 | 0.70 - 1.64 |
| *35 - 54* |  |  |  |  |  |  | 0.20 | 0.15 | 1.30 | 0.193 | 1.22 | 0.91 - 1.64 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.19 | 0.11 | 1.63 | 0.104 | 1.20 | 0.96 - 1.51 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.42** | **0.16** | **2.53** | **0.011** | **1.52** | **1.10 - 2.10** |
| *NVQ3/A level* | |  |  |  |  |  | 0.31 | 0.19 | 1.67 | 0.096 | 1.36 | 0.95 - 1.96 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | 0.16 | 0.15 | 1.04 | 0.296 | 1.17 | 0.87 - 1.57 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.24 | 0.87 | 1.42 | 0.156 | 3.44 | 0.62 - 18.97 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.09 | 0.29 | -0.31 | 0.756 | 0.91 | 0.51 - 1.62 |
| *Retired/other inactive* | | |  |  |  |  | -0.04 | 0.16 | -0.28 | 0.781 | 0.96 | 0.70 - 1.30 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.37 | 0.94 | 1.46 | 0.145 | 3.95 | 0.62 - 25.00 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | -0.23 | 0.15 | -1.52 | 0.129 | 0.79 | 0.58 - 1.07 |
| *Widowed/separated/divorced* | | |  |  |  |  | **-0.40** | **0.20** | **-2.01** | **0.045** | **0.67** | **0.45 - 0.99** |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.98** | **0.18** | **5.54** | **<0.001** | **2.67** | **1.89 - 3.78** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.99** | **0.19** | **5.33** | **<0.001** | **2.70** | **1.87 - 3.88** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.74 | 1.39 | 1.26 | 0.209 | 5.69 | 0.38 - 86.06 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.74** | **0.17** | **-4.39** | **<0.001** | **0.48** | **0.34 - 0.67** |
| *Overweight* | |  |  |  |  |  | **-0.34** | **0.14** | **-2.49** | **0.013** | **0.71** | **0.54 - 0.93** |
| *Underweight* | |  |  |  |  |  | -0.30 | 0.43 | -0.71 | 0.477 | 0.74 | 0.32 - 1.70 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.39** | **0.18** | **-2.16** | **0.031** | **0.68** | **0.48 - 0.96** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | 0.06 | 0.14 | 0.44 | 0.662 | 1.06 | 0.81 - 1.38 |
| *Used to smoke* | |  |  |  |  |  | -0.01 | 0.15 | -0.10 | 0.923 | 0.99 | 0.73 - 1.33 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-2.47** | **0.55** | **-4.54** | **<0.001** | **0.08** | **0.03 - 0.25** |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.09 | 0.13 | -0.72 | 0.474 | 0.91 | 0.71 - 1.17 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.39 |  |  |  |  |  | -2.24 |  |  |  |  |  |
| N | 2966 |  |  |  |  |  | 2966 |  |  |  |  |  |
| Households | 1838 |  |  |  |  |  | 1838 |  |  |  |  |  |
| AIC | 2842.54 |  |  |  |  |  | 2702.73 |  |  |  |  |  |
| Cox & Snell *pseudo-R2*(%) | 0.23 |  |  |  |  |  | 7.05 |  |  |  |  |  |

Table 27 Unadjusted and adjusted model results predicting meeting PA guidelines through walking self-reported activity from people in the lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | **-0.77** | **0.33** | **-2.34** | **0.019** | **0.46** | **0.24 - 0.88** | -0.55 | 0.33 | -1.65 | 0.100 | 0.58 | 0.30 - 1.11 |
| *60 - <80 %* | **-0.76** | **0.21** | **-3.63** | **<0.001** | **0.47** | **0.31 - 0.70** | **-0.70** | **0.22** | **-3.16** | **0.002** | **0.50** | **0.32 - 0.77** |
| *40 - <60 %* | -0.14 | 0.15 | -0.95 | 0.343 | 0.87 | 0.65 - 1.16 | -0.07 | 0.16 | -0.45 | 0.654 | 0.93 | 0.68 - 1.27 |
| *20 - <40 %* | -0.11 | 0.14 | -0.85 | 0.396 | 0.89 | 0.68 - 1.16 | -0.03 | 0.14 | -0.19 | 0.845 | 0.97 | 0.74 - 1.29 |
| *0 - <20 % (ref)* | |  |  |  |  | - |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  | - |  |  |  |  |  |  |
| *>5 - 100 %* | **0.93** | **0.31** | **2.99** | **0.003** | **2.52** | **1.38 - 4.62** | **0.96** | **0.24** | **3.96** | **<0.001** | **2.61** | **1.62 - 4.20** |
| *>1 - 5 %* | 0.25 | 0.27 | 0.92 | 0.355 | 1.28 | 0.76 - 2.16 | 0.45 | 0.29 | 1.57 | 0.118 | 1.57 | 0.89 - 2.76 |
| *>0 - 1 %* | 0.24 | 0.38 | 0.65 | 0.517 | 1.28 | 0.61 - 2.67 | 0.40 | 0.38 | 1.06 | 0.291 | 1.49 | 0.71 - 3.13 |
| *0% (ref)* | |  |  |  |  | - |  |  |  |  |  | - |
| Coastal proximity | |  |  |  |  | - |  |  |  |  |  | - |
| *<5 km* | 0.10 | 0.14 | 0.67 | 0.503 | 1.10 | 0.83 - 1.46 | **0.34** | **0.16** | **2.17** | **0.030** | **1.41** | **1.03 - 1.91** |
| *5 - 20 km* | **0.53** | **0.15** | **3.66** | **<0.001** | **1.70** | **1.28 - 2.26** | **0.41** | **0.16** | **2.59** | **0.010** | **1.50** | **1.10 - 2.04** |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | **0.51** | **0.22** | **2.34** | **0.019** | **1.67** | **1.09 - 2.55** |
| *2nd least deprived* | |  |  |  |  |  | **0.39** | **0.18** | **2.19** | **0.029** | **1.48** | **1.04 - 2.09** |
| *Medium deprived* | |  |  |  |  |  | 0.14 | 0.18 | 0.79 | 0.429 | 1.15 | 0.81 - 1.63 |
| *2nd most deprived* | | |  |  |  |  | 0.11 | 0.15 | 0.71 | 0.481 | 1.11 | 0.82 - 1.51 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.01 | 0.14 | -0.07 | 0.941 | 0.99 | 0.76 - 1.30 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | 0.25 | 0.13 | 1.93 | 0.054 | 1.29 | 1.00 - 1.66 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.43** | **0.34** | **-4.15** | **<0.001** | **0.24** | **0.12 - 0.47** |
| *55 - 74* |  |  |  |  |  |  | **-0.52** | **0.21** | **-2.45** | **0.014** | **0.59** | **0.39 - 0.90** |
| *35 - 54* |  |  |  |  |  |  | -0.09 | 0.16 | -0.57 | 0.568 | 0.91 | 0.67 - 1.24 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.19 | 0.11 | 1.68 | 0.093 | 1.21 | 0.97 - 1.52 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | **0.68** | **0.18** | **3.82** | **<0.001** | **1.97** | **1.39 - 2.78** |
| *NVQ3/A level* | |  |  |  |  |  | **0.60** | **0.18** | **3.26** | **0.001** | **1.82** | **1.27 - 2.62** |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | **0.55** | **0.15** | **3.75** | **<0.001** | **1.74** | **1.30 - 2.33** |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **1.12** | **0.47** | **2.41** | **0.016** | **3.08** | **1.24 - 7.67** |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.15 | 0.18 | 0.87 | 0.385 | 1.17 | 0.82 - 1.65 |
| *Retired/other inactive* | | |  |  |  |  | -0.22 | 0.14 | -1.62 | 0.105 | 0.80 | 0.61 - 1.05 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.14 | 0.80 | -0.18 | 0.857 | 0.87 | 0.18 - 4.19 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | -0.25 | 0.15 | -1.65 | 0.100 | 0.78 | 0.58 - 1.05 |
| *Widowed/separated/divorced* | | |  |  |  |  | -0.16 | 0.19 | -0.86 | 0.387 | 0.85 | 0.59 - 1.23 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.99** | **0.15** | **6.43** | **<0.001** | **2.70** | **1.99 - 3.65** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.77** | **0.19** | **4.15** | **<0.001** | **2.16** | **1.50 - 3.11** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.91 | 1.27 | 0.72 | 0.474 | 2.49 | 0.21 - 30.12 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.70** | **0.17** | **-4.16** | **<0.001** | **0.49** | **0.35 - 0.69** |
| *Overweight* | |  |  |  |  |  | **-0.32** | **0.14** | **-2.30** | **0.022** | **0.73** | **0.55 - 0.95** |
| *Underweight* | |  |  |  |  |  | **-1.06** | **0.37** | **-2.87** | **0.004** | **0.35** | **0.17 - 0.71** |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-0.53** | **0.19** | **-2.84** | **0.005** | **0.59** | **0.41 - 0.85** |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | -0.05 | 0.14 | -0.39 | 0.699 | 0.95 | 0.72 - 1.25 |
| *Used to smoke* | |  |  |  |  |  | -0.06 | 0.17 | -0.34 | 0.735 | 0.94 | 0.68 - 1.32 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.21 | 0.46 | 0.47 | 0.639 | 1.24 | 0.51 - 3.04 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.06 | 0.12 | -0.48 | 0.630 | 0.94 | 0.74 - 1.20 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.43 |  |  |  |  |  | -2.16 |  |  |  |  |  |
| N | 2913 |  |  |  |  |  | 2913 |  |  |  |  |  |
| Households | 1944 |  |  |  |  |  | 1944 |  |  |  |  |  |
| AIC | 2866.91 |  |  |  |  |  | 2565.15 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 2.07 |  |  |  |  |  | 13.74 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 28 Unadjusted and adjusted model results predicting meeting PA guidelines through non-recreational self-reported activity from people in the highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.15 | 0.20 | 0.78 | 0.435 | 1.17 | 0.79 - 1.71 | 0.21 | 0.20 | 1.00 | 0.315 | 1.23 | 0.82 - 1.83 |
| *60 - <80 %* | 0.18 | 0.15 | 1.16 | 0.246 | 1.19 | 0.89 - 1.61 | 0.21 | 0.16 | 1.37 | 0.171 | 1.24 | 0.91 - 1.68 |
| *40 - <60 %* | 0.04 | 0.14 | 0.25 | 0.802 | 1.04 | 0.78- 1.38 | 0.04 | 0.15 | 0.30 | 0.763 | 1.05 | 0.78 - 1.40 |
| *20 - <40 %* | 0.09 | 0.12 | 0.74 | 0.462 | 1.09 | 0.87 - 1.37 | 0.07 | 0.12 | 0.58 | 0.565 | 1.07 | 0.85 - 1.36 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.38 | 0.27 | 1.38 | 0.169 | 1.46 | 0.85 - 2.49 | 0.32 | 0.29 | 1.09 | 0.274 | 1.38 | 0.78 - 2.44 |
| *>1 - 5 %* | **-0.42** | **0.20** | **-2.07** | **0.039** | **0.66** | **0.45 - 0.98** | **-0.47** | **0.21** | **-2.23** | **0.026** | **0.63** | **0.41 - 0.94** |
| *>0 - 1 %* | -0.08 | 0.19 | -0.44 | 0.661 | 0.92 | 0.63 - 1.33 | -0.09 | 0.19 | -0.47 | 0.636 | 0.91 | 0.63 - 1.33 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | **0.33** | **0.13** | **2.48** | **0.013** | **1.39** | **1.07 - 1.79** | 0.26 | 0.14 | 1.89 | 0.059 | 1.30 | 0.99 - 1.69 |
| *5 - 20 km* | 0.09 | 0.13 | 0.64 | 0.521 | 1.09 | 0.84 - 1.42 | 0.10 | 0.14 | 0.77 | 0.442 | 1.11 | 0.85 - 1.45 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | -0.35 | 0.19 | -1.83 | 0.068 | 0.70 | 0.48 - 1.03 |
| *2nd least deprived* | |  |  |  |  |  | -0.27 | 0.20 | -1.37 | 0.170 | 0.76 | 0.52 - 1.12 |
| *Medium deprived* | |  |  |  |  |  | -0.27 | 0.20 | -1.38 | 0.166 | 0.76 | 0.52 - 1.12 |
| *2nd most deprived* | | |  |  |  |  | -0.35 | 0.21 | -1.67 | 0.094 | 0.71 | 0.47 - 1.06 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.21 | 0.12 | -1.77 | 0.077 | 0.81 | 0.64 - 1.02 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -0.21 | 0.21 | -0.99 | 0.324 | 0.81 | 0.54 - 1.23 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.27** | **0.40** | **-3.18** | **0.002** | **0.28** | **0.13 - 0.62** |
| *55 - 74* |  |  |  |  |  |  | 0.07 | 0.15 | 0.45 | 0.650 | 1.07 | 0.79 - 1.45 |
| *35 - 54* |  |  |  |  |  |  | 0.16 | 0.12 | 1.34 | 0.180 | 1.18 | 0.93 - 1.49 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.16 | 0.08 | 1.86 | 0.063 | 1.17 | 0.99 - 1.38 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | -0.31 | 0.18 | -1.76 | 0.078 | 0.73 | 0.51 - 1.04 |
| *NVQ3/A level* | |  |  |  |  |  | -0.29 | 0.21 | -1.43 | 0.154 | 0.75 | 0.50 - 1.12 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | -0.14 | 0.19 | -0.73 | 0.467 | 0.87 | 0.60 - 1.27 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.18 | 1.01 | 1.17 | 0.242 | 3.27 | 0.45 - 23.77 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | 0.26 | 0.61 | 0.43 | 0.666 | 1.30 | 0.39 - 4.29 |
| *Retired/other inactive* | | |  |  |  |  | 0.05 | 0.15 | 0.30 | 0.762 | 1.05 | 0.78 - 1.41 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -12.95 | 1.01 | -12.78 | 0 | 0 | 0 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **0.43** | **0.14** | **2.99** | **0.003** | **1.54** | **1.16 - 2.05** |
| *Widowed/separated/divorced* | | |  |  |  |  | 0.33 | 0.19 | 1.78 | 0.076 | 1.39 | 0.97 - 2.01 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | 0.05 | 0.14 | 0.36 | 0.722 | 1.05 | 0.80 - 1.37 |
| *Non-limiting longstanding illness* | | | |  |  |  | 0.02 | 0.15 | 0.10 | 0.917 | 1.02 | 0.75 - 1.37 |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 17.17 | 1.03 | 16.62 | 0 | NA | NA |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | 0.17 | 0.13 | 1.33 | 0.184 | 1.19 | 0.92 - 1.53 |
| *Overweight* | |  |  |  |  |  | 0.05 | 0.11 | 0.50 | 0.619 | 1.06 | 0.85 - 1.31 |
| *Underweight* | |  |  |  |  |  | -0.77 | 0.57 | -1.35 | 0.178 | 0.46 | 0.15 - 1.42 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.22 | 0.16 | -1.39 | 0.166 | 0.80 | 0.58 - 1.10 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | **-0.52** | **0.13** | **-4.11** | **<0.001** | **0.59** | **0.46 - 0.76** |
| *Used to smoke* | |  |  |  |  |  | **-0.37** | **0.13** | **-2.76** | **0.006** | **0.69** | **0.53 - 0.90** |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -14.34 | 0.40 | -36.25 | 0 | 0 | 0 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.15 | 0.11 | -1.40 | 0.161 | 0.86 | 0.70 - 1.06 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.05 |  |  |  |  |  | -0.57 |  |  |  |  |  |
| N | 2922 |  |  |  |  |  | 2922 |  |  |  |  |  |
| Households | 1823 |  |  |  |  |  | 1823 |  |  |  |  |  |
| AIC | 3464.92 |  |  |  |  |  | 3416.98 |  |  |  |  |  |
| Cox & Snell *pseudo-R2 (%)* | 0.57 |  |  |  |  |  | 4.21 |  |  |  |  |  |

Table 29 Unadjusted and adjusted model results predicting meeting PA guidelines through non-recreational self-reported activity from people in the second highest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | **0.36** | **0.18** | **2.04** | **0.041** | **1.43** | **1.01 - 2.02** | 0.33 | 0.19 | 1.80 | 0.073 | 1.39 | 0.97 - 2.00 |
| *60 - <80 %* | 0.11 | 0.14 | 0.78 | 0.437 | 1.11 | 0.85 - 1.46 | 0.05 | 0.14 | 0.32 | 0.749 | 1.05 | 0.79 - 1.38 |
| *40 - <60 %* | 0.17 | 0.13 | 1.30 | 0.194 | 1.18 | 0.92 - 1.50 | 0.05 | 0.13 | 0.38 | 0.704 | 1.05 | 0.81 - 1.37 |
| *20 - <40 %* | 0.13 | 0.11 | 1.19 | 0.233 | 1.14 | 0.92 - 1.43 | 0.10 | 0.12 | 0.89 | 0.374 | 1.11 | 0.88 - 1.39 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.24 | 0.32 | -0.76 | 0.445 | 0.79 | 0.42 - 1.46 | -0.23 | 0.34 | -0.67 | 0.502 | 0.80 | 0.41 - 1.55 |
| *>1 - 5 %* | -0.03 | 0.18 | -0.17 | 0.864 | 0.97 | 0.69 - 1.37 | -0.04 | 0.18 | -0.22 | 0.824 | 0.96 | 0.67 - 1.37 |
| *>0 - 1 %* | 0.08 | 0.17 | 0.48 | 0.632 | 1.09 | 0.77 - 1.53 | 0.17 | 0.18 | 0.96 | 0.337 | 1.19 | 0.84 - 1.69 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | 0.02 | 0.11 | 0.18 | 0.858 | 1.02 | 0.82 - 1.27 | 0.04 | 0.11 | 0.34 | 0.736 | 1.04 | 0.83 - 1.30 |
| *5 - 20 km* | 0.07 | 0.13 | 0.57 | 0.572 | 1.07 | 0.84 - 1.37 | 0.08 | 0.13 | 0.62 | 0.538 | 1.08 | 0.84 - 1.38 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | -0.06 | 0.16 | -0.39 | 0.697 | 0.94 | 0.69 - 1.29 |
| *2nd least deprived* | |  |  |  |  |  | -0.04 | 0.17 | -0.22 | 0.826 | 0.96 | 0.69 - 1.34 |
| *Medium deprived* | |  |  |  |  |  | -0.09 | 0.16 | -0.58 | 0.561 | 0.91 | 0.67 - 1.25 |
| *2nd most deprived* | | |  |  |  |  | 0.18 | 0.16 | 1.08 | 0.279 | 1.19 | 0.87 - 1.64 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.14 | 0.11 | -1.34 | 0.180 | 0.87 | 0.71 - 1.07 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **-0.42** | **0.19** | **-2.23** | **0.026** | **0.66** | **0.45 - 0.95** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | -0.50 | 0.36 | -1.36 | 0.173 | 0.61 | 0.30 - 1.24 |
| *55 - 74* |  |  |  |  |  |  | 0.20 | 0.16 | 1.28 | 0.201 | 1.22 | 0.90 - 1.66 |
| *35 - 54* |  |  |  |  |  |  | **0.49** | **0.12** | **4.13** | **<0.001** | **1.63** | **1.29 - 2.05** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.21** | **0.08** | **2.42** | **0.016** | **1.23** | **1.04 - 1.45** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | -0.19 | 0.15 | -1.26 | 0.208 | 0.83 | 0.61 - 1.11 |
| *NVQ3/A level* | |  |  |  |  |  | -0.11 | 0.17 | -0.64 | 0.521 | 0.90 | 0.65 - 1.25 |
| *NVQ1/NVQ2/GCSE* | | |  |  |  |  | 0.13 | 0.16 | 0.80 | 0.424 | 1.13 | 0.83 - 1.55 |
| *Foreign/other/none (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.24 | 0.98 | -0.25 | 0.804 | 0.78 | 0.11 - 5.37 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.22 | 0.41 | -0.54 | 0.592 | 0.80 | 0.36 - 1.79 |
| *Retired/other inactive* | | |  |  |  |  | -0.23 | 0.14 | -1.62 | 0.106 | 0.79 | 0.60 - 1.05 |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.50 | 1.34 | 1.11 | 0.265 | 4.46 | 0.32 - 62.07 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **0.46** | **0.14** | **3.32** | **<0.001** | **1.59** | **1.21 - 2.09** |
| *Widowed/separated/divorced* | | |  |  |  |  | 0.15 | 0.19 | 0.76 | 0.450 | 1.16 | 0.79 - 1.69 |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.47** | **0.13** | **3.50** | **<0.001** | **1.60** | **1.23 - 2.08** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | **0.45** | **0.16** | **2.88** | **0.004** | **1.56** | **1.15 - 2.12** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | -0.02 | 0.12 | -0.13 | 0.899 | 0.98 | 0.77 - 1.25 |
| *Overweight* | |  |  |  |  |  | -0.05 | 0.10 | -0.49 | 0.626 | 0.95 | 0.78 - 1.16 |
| *Underweight* | |  |  |  |  |  | 0.04 | 0.38 | 0.11 | 0.915 | 1.04 | 0.50 - 2.19 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.21 | 0.15 | -1.41 | 0.159 | 0.81 | 0.60 - 1.09 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | **-0.35** | **0.12** | **-2.86** | **0.004** | **0.71** | **0.56 - 0.90** |
| *Used to smoke* | |  |  |  |  |  | -0.21 | 0.13 | -1.66 | 0.098 | 0.81 | 0.63 - 1.04 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -1.39 | 0.83 | -1.68 | 0.093 | 0.25 | 0.05 - 1.26 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | 0.06 | 0.10 | 0.63 | 0.530 | 1.06 | 0.88 - 1.28 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -0.90 |  |  |  |  |  | -1.52 |  |  |  |  |  |
| N | 2976 |  |  |  |  |  | 2976 |  |  |  |  |  |
| Households | 1746 |  |  |  |  |  | 1746 |  |  |  |  |  |
| AIC | 3719.81 |  |  |  |  |  | 3631.87 |  |  |  |  |  |
| Cox & Snell *pseudo-R2*(%) | 0.26 |  |  |  |  |  | 5.20 |  |  |  |  |  |

Table 30 Unadjusted and adjusted model results predicting meeting PA guidelines through non-recreational self-reported activity from people in the middle income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.21 | 0.18 | 1.14 | 0.255 | 1.23 | 0.86 - 1.76 | 0.08 | 0.20 | 0.40 | 0.688 | 1.08 | 0.73 - 1.61 |
| *60 - <80 %* | **0.38** | **0.14** | **2.66** | **0.008** | **1.47** | **1.11 - 1.94** | **0.35** | **0.15** | **2.29** | **0.022** | **1.42** | **1.05 - 1.91** |
| *40 - <60 %* | 0.11 | 0.15 | 0.76 | 0.445 | 1.12 | 0.84 - 1.49 | 0.08 | 0.15 | 0.52 | 0.602 | 1.08 | 0.80 - 1.45 |
| *20 - <40 %* | 0.15 | 0.12 | 1.26 | 0.206 | 1.16 | 0.92 - 1.47 | 0.13 | 0.12 | 1.03 | 0.305 | 1.13 | 0.89 - 1.44 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.00 | 0.29 | -0.01 | 0.991 | 1.00 | 0.56 - 1.77 | -0.05 | 0.30 | -0.15 | 0.882 | 0.96 | 0.53 - 1.73 |
| *>1 - 5 %* | -0.33 | 0.22 | -1.50 | 0.135 | 0.72 | 0.47 - 1.11 | -0.31 | 0.20 | -1.53 | 0.126 | 0.74 | 0.50 - 1.09 |
| *>0 - 1 %* | -0.37 | 0.20 | -1.81 | 0.071 | 0.69 | 0.46 - 1.03 | -0.35 | 0.21 | -1.68 | 0.094 | 0.70 | 0.47 - 1.06 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | 0.15 | 0.12 | 1.20 | 0.231 | 1.16 | 0.91 - 1.47 | **0.25** | **0.12** | **2.06** | **0.040** | **1.29** | **1.01 - 1.63** |
| *5 - 20 km* | -0.14 | 0.12 | -1.11 | 0.265 | 0.87 | 0.68 - 1.11 | -0.14 | 0.13 | -1.07 | 0.286 | 0.87 | 0.67 - 1.13 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.16 | 0.16 | 1.02 | 0.308 | 1.17 | 0.86 - 1.60 |
| *2nd least deprived* | |  |  |  |  |  | -0.04 | 0.15 | -0.24 | 0.810 | 0.96 | 0.71 - 1.30 |
| *Medium deprived* | |  |  |  |  |  | -0.29 | 0.15 | -1.89 | 0.059 | 0.75 | 0.56 - 1.01 |
| *2nd most deprived* | | |  |  |  |  | -0.25 | 0.15 | -1.73 | 0.084 | 0.78 | 0.58 - 1.03 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.10 | 0.12 | 0.82 | 0.412 | 1.10 | 0.87 - 1.40 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | -0.18 | 0.15 | -1.20 | 0.229 | 0.83 | 0.62 - 1.12 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-0.74** | **0.28** | **-2.62** | **0.009** | **0.48** | **0.27 - 0.83** |
| *55 - 74* |  |  |  |  |  |  | 0.00 | 0.17 | 0.00 | 0.998 | 1.00 | 0.71 - 1.41 |
| *35 - 54* |  |  |  |  |  |  | **0.34** | **0.13** | **2.68** | **0.007** | **1.41** | **1.10 - 1.80** |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.26** | **0.08** | **3.05** | **0.002** | **1.29** | **1.10 - 1.53** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | -0.03 | 0.14 | -0.22 | 0.824 | 0.97 | 0.74 - 1.27 |
| *NVQ3/A level* | |  |  |  |  |  | -0.18 | 0.16 | -1.16 | 0.246 | 0.83 | 0.61 - 1.13 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | -0.17 | 0.13 | -1.30 | 0.192 | 0.85 | 0.66 - 1.09 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.19 | 1.28 | 0.93 | 0.353 | 3.27 | 0.27 - 39.96 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | -0.27 | 0.32 | -0.84 | 0.402 | 0.76 | 0.40 - 1.44 |
| *Retired/other inactive* | | |  |  |  |  | **-0.35** | **0.13** | **-2.67** | **0.008** | **0.71** | **0.55 - 0.91** |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | **-13.73** | **0.78** | **-17.65** | **<0.001** | **0** | **0** |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **0.62** | **0.15** | **4.16** | **<0.001** | **1.87** | **1.39 - 2.51** |
| *Widowed/separated/divorced* | | |  |  |  |  | **0.59** | **0.19** | **3.09** | **0.002** | **1.80** | **1.24 - 2.61** |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 15.03 | 1.05 | 14.35 | 0 | NA | NA |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.48** | **0.13** | **3.73** | **<0.001** | **1.61** | **1.25 - 2.07** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.39** | **0.14** | **2.73** | **0.006** | **1.47** | **1.11 - 1.94** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -12.96 | 1.02 | -12.72 | 0 | 00 | 0 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | -0.10 | 0.13 | -0.76 | 0.448 | 0.90 | 0.69 - 1.18 |
| *Overweight* | |  |  |  |  |  | 0.14 | 0.11 | 1.27 | 0.203 | 1.15 | 0.93 - 1.44 |
| *Underweight* | |  |  |  |  |  | -0.90 | 0.59 | -1.53 | 0.127 | 0.40 | 0.13 - 1.29 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.27 | 0.16 | -1.69 | 0.090 | 0.76 | 0.56 - 1.04 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | -0.21 | 0.12 | -1.75 | 0.080 | 0.81 | 0.64 - 1.02 |
| *Used to smoke* | |  |  |  |  |  | -0.23 | 0.13 | -1.84 | 0.067 | 0.79 | 0.62 - 1.02 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -1.06 | 0.78 | -1.36 | 0.174 | 0.35 | 0.08 - 1.59 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | -0.09 | 0.10 | -0.85 | 0.395 | 0.92 | 0.75 - 1.12 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -0.78 |  |  |  |  |  | -1.35 |  |  |  |  |  |
| N | 2851 |  |  |  |  |  | 2851 |  |  |  |  |  |
| Households | 1730 |  |  |  |  |  | 1730 |  |  |  |  |  |
| AIC | 3648.46 |  |  |  |  |  | 3481.13 |  |  |  |  |  |
| Cox & Snell *pseudo-R2(%)* | 0.62 |  |  |  |  |  | 8.30 |  |  |  |  |  |

Table 31 Unadjusted and adjusted model results predicting meeting PA guidelines through non-recreational self-reported activity from people in the second lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.07 | 0.20 | 0.34 | 0.731 | 1.07 | 0.73 - 1.57 | 0.07 | 0.20 | 0.34 | 0.732 | 1.07 | 0.72 - 1.58 |
| *60 - <80 %* | -0.01 | 0.16 | -0.05 | 0.957 | 0.99 | 0.73 - 1.35 | -0.05 | 0.16 | -0.30 | 0.766 | 0.95 | 0.69 - 1.31 |
| *40 - <60 %* | 0.11 | 0.13 | 0.83 | 0.406 | 1.11 | 0.86 - 1.44 | 0.09 | 0.14 | 0.67 | 0.503 | 1.10 | 0.84 - 1.43 |
| *20 - <40 %* | -0.16 | 0.11 | -1.38 | 0.167 | 0.85 | 0.68 - 1.07 | -0.16 | 0.12 | -1.26 | 0.208 | 0.85 | 0.67 - 1.09 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.35 | 0.27 | -1.27 | 0.204 | 0.71 | 0.41 - 1.21 | -0.16 | 0.27 | -0.60 | 0.550 | 0.85 | 0.50 - 1.45 |
| *>1 - 5 %* | -0.17 | 0.17 | -0.97 | 0.330 | 0.84 | 0.60 - 1.19 | -0.16 | 0.18 | -0.88 | 0.381 | 0.85 | 0.60 - 1.22 |
| *>0 - 1 %* | 0.15 | 0.21 | 0.71 | 0.478 | 1.16 | 0.77 - 1.77 | 0.22 | 0.22 | 1.00 | 0.317 | 1.24 | 0.81 - 1.91 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | -0.08 | 0.12 | -0.65 | 0.514 | 0.93 | 0.74 - 1.16 | -0.06 | 0.12 | -0.45 | 0.652 | 0.95 | 0.74 - 1.21 |
| *5 - 20 km* | 0.15 | 0.12 | 1.18 | 0.238 | 1.16 | 0.91 - 1.48 | 0.19 | 0.13 | 1.46 | 0.143 | 1.21 | 0.94 - 1.58 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.19 | 0.16 | 1.19 | 0.235 | 1.21 | 0.88 - 1.67 |
| *2nd least deprived* | |  |  |  |  |  | 0.07 | 0.15 | 0.45 | 0.650 | 1.07 | 0.80 - 1.44 |
| *Medium deprived* | |  |  |  |  |  | 0.06 | 0.14 | 0.39 | 0.697 | 1.06 | 0.80 - 1.40 |
| *2nd most deprived* | | |  |  |  |  | 0.01 | 0.13 | 0.07 | 0.945 | 1.01 | 0.78 - 1.31 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.06 | 0.12 | 0.46 | 0.647 | 1.06 | 0.83 - 1.35 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | 0.02 | 0.12 | 0.20 | 0.845 | 1.02 | 0.81 - 1.29 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-0.98** | **0.25** | **-3.97** | **<0.001** | **0.38** | **0.23 - 0.61** |
| *55 - 74* |  |  |  |  |  |  | -0.19 | 0.18 | -1.03 | 0.305 | 0.83 | 0.58 - 1.19 |
| *35 - 54* |  |  |  |  |  |  | 0.16 | 0.13 | 1.26 | 0.207 | 1.18 | 0.91 - 1.51 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.10 | 0.09 | 1.05 | 0.296 | 1.10 | 0.92 - 1.32 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  |  | 0.07 | 0.14 | 0.54 | 0.590 | 1.08 | 0.82 - 1.40 |
| *NVQ3/A level* | |  |  |  |  |  | 0.11 | 0.15 | 0.69 | 0.489 | 1.11 | 0.82 - 1.50 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | **0.24** | **0.12** | **1.98** | **0.048** | **1.27** | **1.00 - 1.61** |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -12.48 | 0.84 | -14.84 | 0 | 0 | 0 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  |  | **-0.63** | **0.26** | **-2.46** | **0.014** | **0.53** | **0.32 - 0.88** |
| *Retired/other inactive* | | |  |  |  |  | **-0.41** | **0.12** | **-3.36** | **<0.001** | **0.66** | **0.52 - 0.84** |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -13.53 | 0.84 | -16.06 | 0 | 0 | 0 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | **0.76** | **0.14** | **5.25** | **<0.001** | **2.13** | **1.61 - 2.83** |
| *Widowed/separated/divorced* | | |  |  |  |  | **0.48** | **0.18** | **2.68** | **0.007** | **1.62** | **1.14 - 2.30** |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  |  | **0.57** | **0.13** | **4.56** | **<0.001** | **1.77** | **1.38 - 2.26** |
| *Non-limiting longstanding illness* | | | |  |  |  | **0.78** | **0.14** | **5.73** | **<0.001** | **2.18** | **1.67 - 2.85** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.95 | 1.18 | 0.81 | 0.420 | 2.59 | 0.26 - 26.02 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | 0.16 | 0.13 | 1.23 | 0.217 | 1.17 | 0.91 - 1.50 |
| *Overweight* | |  |  |  |  |  | 0.19 | 0.12 | 1.63 | 0.103 | 1.21 | 0.96 - 1.53 |
| *Underweight* | |  |  |  |  |  | -0.67 | 0.45 | -1.48 | 0.140 | 0.51 | 0.21 - 1.25 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.11 | 0.15 | -0.74 | 0.457 | 0.89 | 0.66 - 1.21 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  |  | -0.19 | 0.11 | -1.71 | 0.088 | 0.82 | 0.66 - 1.03 |
| *Used to smoke* | |  |  |  |  |  | 0.02 | 0.12 | 0.20 | 0.842 | 1.02 | 0.81 - 1.30 |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -1.21 | 1.06 | -1.14 | 0.253 | 0.30 | 0.04 - 2.38 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  |  | **-0.24** | **0.11** | **-2.22** | **0.026** | **0.79** | **0.64 - 0.97** |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -0.86 |  |  |  |  |  | -1.76 |  |  |  |  |  |
| N | 2969 |  |  |  |  |  | 2969 |  |  |  |  |  |
| Households | 1839 |  |  |  |  |  | 1839 |  |  |  |  |  |
| AIC | 3592.49 |  |  |  |  |  | 3359.16 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.39 |  |  |  |  |  | 9.83 |  |  |  |  |  |

Table 32 Unadjusted and adjusted model results predicting meeting PA guidelines through non-recreational self-reported activity from people in the lowest income quintile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | Statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.41 | 0.25 | 1.62 | 0.106 | 1.51 | 0.92 - 2.48 | **0.63** | **0.27** | **2.33** | **0.020** | **1.88** | **1.11 - 3.20** |
| *60 - <80 %* | 0.29 | 0.17 | 1.71 | 0.088 | 1.33 | 0.96 - 1.85 | 0.31 | 0.17 | 1.79 | 0.073 | 1.36 | 0.97 - 1.90 |
| *40 - <60 %* | 0.22 | 0.15 | 1.41 | 0.158 | 1.24 | 0.92 - 1.67 | 0.18 | 0.16 | 1.11 | 0.266 | 1.20 | 0.87 - 1.65 |
| *20 - <40 %* | 0.04 | 0.13 | 0.29 | 0.769 | 1.04 | 0.81 - 1.33 | 0.05 | 0.13 | 0.41 | 0.680 | 1.05 | 0.82 - 1.36 |
| *0 - <20 % (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -0.07 | 0.27 | -0.25 | 0.806 | 0.94 | 0.55 - 1.59 | 0.00 | 0.31 | 0.01 | 0.996 | 1.00 | 0.55 - 1.83 |
| *>1 - 5 %* | 0.15 | 0.22 | 0.67 | 0.504 | 1.16 | 0.76 - 1.77 | 0.23 | 0.23 | 1.03 | 0.305 | 1.26 | 0.81 - 1.97 |
| *>0 - 1 %* | -0.47 | 0.25 | -1.89 | 0.059 | 0.63 | 0.39 - 1.02 | -0.44 | 0.26 | -1.69 | 0.091 | 0.65 | 0.39 - 1.07 |
| *0% (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity | |  |  |  |  |  |  |  |  |  |  |  |
| *<5 km* | **0.37** | **0.12** | **3.05** | **0.002** | **1.45** | **1.14 - 1.84** | **0.46** | **0.13** | **3.58** | **<0.001** | **1.58** | **1.23 - 2.03** |
| *5 - 20 km* | 0.09 | 0.16 | 0.57 | 0.569 | 1.10 | 0.80 - 1.50 | 0.18 | 0.16 | 1.11 | 0.269 | 1.20 | 0.87 - 1.65 |
| *>20 km (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | | |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  | - | 0.07 | 0.20 | 0.33 | 0.741 | 1.07 | 0.72 - 1.57 |
| *2nd least deprived* | |  |  |  |  | - | -0.10 | 0.20 | -0.53 | 0.596 | 0.90 | 0.61 - 1.33 |
| *Medium deprived* | |  |  |  |  | - | -0.15 | 0.16 | -0.93 | 0.355 | 0.86 | 0.64 - 1.18 |
| *2nd most deprived* | | |  |  |  | - | -0.08 | 0.14 | -0.61 | 0.539 | 0.92 | 0.70 - 1.20 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  | - | **0.33** | **0.14** | **2.42** | **0.015** | **1.39** | **1.07 - 1.81** |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  | - | -0.09 | 0.12 | -0.75 | 0.452 | 0.92 | 0.73 - 1.15 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  | - | **-0.55** | **0.26** | **-2.13** | **0.034** | **0.58** | **0.35 - 0.96** |
| *55 - 74* |  |  |  |  |  | - | -0.16 | 0.20 | -0.82 | 0.411 | 0.85 | 0.58 - 1.25 |
| *35 - 54* |  |  |  |  |  | - | 0.10 | 0.14 | 0.70 | 0.482 | 1.10 | 0.84 - 1.44 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  | - | **-0.30** | **0.10** | **-2.86** | **0.004** | **0.74** | **0.60 - 0.91** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* | |  |  |  |  | - | **0.32** | **0.16** | **2.00** | **0.045** | **1.38** | **1.01 - 1.89** |
| *NVQ3/A level* | |  |  |  |  | - | 0.14 | 0.17 | 0.81 | 0.420 | 1.14 | 0.82 - 1.59 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  | - | **0.25** | **0.12** | **2.08** | **0.038** | **1.29** | **1.01 - 1.63** |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | 0.27 | 0.54 | 0.50 | 0.616 | 1.31 | 0.45 - 3.82 |
| Economic activity | |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* | |  |  |  |  | - | 0.03 | 0.17 | 0.20 | 0.845 | 1.03 | 0.74 - 1.44 |
| *Retired/other inactive* | | |  |  |  | - | **-0.57** | **0.13** | **-4.24** | **<0.001** | **0.57** | **0.44 - 0.74** |
| *In work/student (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -0.21 | 0.83 | -0.25 | 0.803 | 0.81 | 0.16 - 4.16 |
| Relationship status | |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  | - | **0.58** | **0.15** | **3.93** | **<0.001** | **1.79** | **1.34 - 2.40** |
| *Widowed/separated/divorced* | | |  |  |  | - | **0.40** | **0.17** | **2.38** | **0.017** | **1.50** | **1.07 - 2.09** |
| *Single (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | | |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* | | |  |  |  | - | **0.59** | **0.13** | **4.42** | **<0.001** | **1.80** | **1.39 - 2.33** |
| *Non-limiting longstanding illness* | | | |  |  | - | **0.73** | **0.16** | **4.44** | **<0.001** | **2.07** | **1.50 - 2.86** |
| *Limiting longstanding illness (ref)* | | | |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -11.93 | 0.55 | -21.65 | 0 | 0 | 0 |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  | - | **0.32** | **0.14** | **2.19** | **0.029** | **1.37** | **1.03 - 1.82** |
| *Overweight* | |  |  |  |  | - | **0.39** | **0.13** | **3.11** | **0.002** | **1.48** | **1.16 - 1.89** |
| *Underweight* | |  |  |  |  | - | 0.00 | 0.37 | 0.00 | 0.998 | 1.00 | 0.49 - 2.05 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -0.14 | 0.16 | -0.88 | 0.380 | 0.87 | 0.64 - 1.19 |
| Cigarette smoking status | | |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | | |  |  |  | - | **-0.34** | **0.12** | **-2.91** | **0.004** | **0.71** | **0.56 - 0.89** |
| *Used to smoke* | |  |  |  |  | - | **-0.31** | **0.14** | **-2.30** | **0.022** | **0.73** | **0.56 - 0.96** |
| *Current smoker (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  | - | -0.10 | 0.38 | -0.26 | 0.795 | 0.91 | 0.43 - 1.92 |
| Year |  |  |  |  |  |  |  |  |  |  |  |  |
| *2012* |  |  |  |  |  | - | -0.18 | 0.11 | -1.68 | 0.093 | 0.83 | 0.67 - 1.03 |
| *2008 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.28 |  |  |  |  |  | -1.75 |  |  |  |  |  |
| N | 2926 |  |  |  |  |  | 2926 |  |  |  |  |  |
| Households | 1947 |  |  |  |  |  | 1947 |  |  |  |  |  |
| AIC | 3277.39 |  |  |  |  |  | 3086.57 |  |  |  |  |  |
| Cox & Snell *pseudo-R2 (%)* | 0.73 |  |  |  |  |  | 9.21 |  |  |  |  |  |

Table 33 Sample counts for accelerometry measured PA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Full model sample | | PA guidelines met | | PA guidelines not met | |
| categories | Unweighted N | Weighted %age | Unweighted N | Weighted %age | Unweighted N | Weighted %age |
| Accelerometry PA Guidelines |  |  |  |  |  |  |
| *Meets Guidelines* | 270 | 16.68 | 270 | 100.00 | 0 | 0.00 |
| *Guidelines not met* | 1504 | 83.32 | 0 | 0.00 | 1504 | 100.00 |
| Self-report PA Guidelines |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |
| *Guidelines met* | 1014 | 59.05 | 211 | 22.50 | 803 | 77.50 |
| *Guidelines not met* | 760 | 40.95 | 59 | 8.29 | 701 | 91.71 |
| Sport+exercise |  |  |  |  |  |  |
| *Guidelines met* | 302 | 19.41 | 82 | 28.97 | 220 | 71.03 |
| *Guidelines not met* | 1472 | 80.59 | 188 | 13.72 | 1284 | 86.28 |
| Walking |  |  |  |  |  |  |
| *Guidelines met* | 374 | 23.33 | 118 | 33.08 | 256 | 66.92 |
| *Guidelines not met* | 1398 | 76.67 | 152 | 11.70 | 1246 | 88.30 |
| Non-recreational |  |  |  |  |  |  |
| *Guidelines met* | 562 | 31.36 | 93 | 17.47 | 469 | 82.53 |
| *Guidelines not met* | 1212 | 68.64 | 177 | 16.31 | 1035 | 83.69 |
| **Environmental variables** |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |
| *80 - 100 %* | 125 | 6.67 | 16 | 13.38 | 109 | 86.62 |
| *60 - <80 %* | 236 | 12.79 | 42 | 19.31 | 194 | 80.69 |
| *40 - <60 %* | 294 | 15.41 | 39 | 15.66 | 255 | 84.34 |
| *20 - <40 %* | 522 | 28.61 | 69 | 14.39 | 453 | 85.61 |
| *0 - <20 % (ref)* | 597 | 36.52 | 104 | 18.58 | 493 | 81.42 |
| Freshwater coverage |  |  |  |  |  |  |
| *>5 - 100 %* | 39 | 1.74 | 6 | 18.05 | 33 | 81.95 |
| *>1 - 5 %* | 121 | 7.02 | 25 | 20.54 | 96 | 79.46 |
| *>0 - 1 %* | 85 | 4.83 | 12 | 19.42 | 73 | 80.58 |
| *0% (ref)* | 1529 | 86.41 | 227 | 16.18 | 1302 | 83.82 |
| Coastal proximity |  |  |  |  |  |  |
| *0 - 5 km* | 370 | 20.21 | 55 | 16.61 | 315 | 83.39 |
| *5 - 20 km* | 253 | 12.72 | 33 | 14.67 | 220 | 85.33 |
| *>20 km (ref)* | 1151 | 67.07 | 182 | 17.08 | 969 | 82.92 |
| **LSOA level covariates** | |  |  |  |  |  |
| IMD |  |  |  |  |  |  |
| *Least deprived* | 374 | 20.49 | 54 | 14.71 | 320 | 85.29 |
| *2nd least deprived* | 325 | 16.46 | 53 | 17.28 | 272 | 82.72 |
| *Medium deprived* | 333 | 19.55 | 49 | 16.25 | 284 | 83.75 |
| *2nd most deprived* | 388 | 23.58 | 61 | 17.58 | 327 | 82.42 |
| *Most deprived (ref)* | 354 | 19.92 | 53 | 17.55 | 301 | 82.45 |
| **Household level covariates** |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |
| *Highest Quintile* | 329 | 17.30 | 63 | 19.25 | 266 | 80.75 |
| *Second highest Quintile* | 328 | 19.84 | 62 | 19.86 | 266 | 80.14 |
| *Middle Quintile* | 297 | 16.64 | 43 | 15.40 | 254 | 84.60 |
| *Second lowest Quintile* | 288 | 15.93 | 35 | 14.56 | 253 | 85.44 |
| *Lowest Quintile (ref)* | 251 | 14.49 | 26 | 12.61 | 225 | 87.39 |
| *Missing data* | 281 | 15.80 | 41 | 17.07 | 240 | 82.93 |
| Children in household |  |  |  |  |  |  |
| *>=1* | 367 | 28.84 | 60 | 16.68 | 307 | 83.32 |
| *None (ref)* | 1407 | 71.16 | 210 | 16.68 | 1197 | 83.32 |
| Access to a car/van |  |  |  |  |  |  |
| *No* | 311 | 16.72 | 62 | 23.68 | 249 | 76.32 |
| *Yes (ref)* | 1462 | 83.18 | 208 | 15.29 | 1254 | 84.71 |
| *Missing data* | 1 | 0.10 | 0 | 0.00 | 1 | 100.00 |
| Individual level covariates |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| *75+* | 200 | 8.75 | 5 | 2.13 | 195 | 97.87 |
| *55 - 74* | 611 | 25.02 | 71 | 11.79 | 540 | 88.21 |
| *35 - 54* | 588 | 36.52 | 109 | 17.14 | 479 | 82.86 |
| *16 - 34 (ref)* | 375 | 29.72 | 85 | 24.51 | 290 | 75.49 |
| Sex |  |  |  |  |  |  |
| *Male* | 806 | 48.62 | 141 | 19.19 | 665 | 80.81 |
| *Female (ref)* | 968 | 51.38 | 129 | 14.30 | 839 | 85.70 |
| Highest qualification |  |  |  |  |  |  |
| *Higher ed/Degree* | 571 | 32.91 | 114 | 20.56 | 457 | 79.44 |
| *NVQ3/A level* | 227 | 15.80 | 42 | 19.44 | 185 | 80.56 |
| *NVQ1/NVQ2/GCSE* | 445 | 26.06 | 66 | 15.74 | 379 | 84.26 |
| *Foreign/other/none (ref)* | 531 | 25.24 | 48 | 10.85 | 483 | 89.15 |
| Economic activity |  |  |  |  |  |  |
| *ILO unemployed* | 32 | 2.63 | 7 | 20.67 | 25 | 79.33 |
| *Retired/other inactive* | 693 | 30.77 | 73 | 11.20 | 620 | 88.80 |
| *In work/student (ref)* | 1049 | 66.61 | 190 | 19.05 | 859 | 80.95 |
| Relationship status |  |  |  |  |  |  |
| *Living with partner* | 1161 | 63.96 | 163 | 14.00 | 998 | 86.00 |
| *Widowed/separated/divorced* | 328 | 15.32 | 30 | 9.78 | 298 | 90.22 |
| *Single (ref)* | 285 | 20.72 | 77 | 30.04 | 208 | 69.96 |
| Longstanding illness presence |  |  |  |  |  |  |
| *No longstanding illness* | 914 | 56.52 | 172 | 20.08 | 742 | 79.92 |
| *Non-limiting longstanding illness* | 376 | 18.91 | 50 | 14.49 | 326 | 85.51 |
| *Limiting longstanding illness (ref)* | 484 | 24.57 | 48 | 10.52 | 436 | 89.48 |
| BMI |  |  |  |  |  |  |
| *Obese* | 424 | 22.37 | 28 | 7.03 | 396 | 92.97 |
| *Overweight* | 643 | 36.05 | 96 | 16.20 | 547 | 83.80 |
| *Underweight* | 21 | 1.69 | 5 | 37.81 | 16 | 62.19 |
| *Normal weight (ref)* | 517 | 31.06 | 115 | 23.30 | 402 | 76.70 |
| *Missing data* | 169 | 8.84 | 26 | 15.71 | 143 | 84.29 |
| Cigarette smoking status |  |  |  |  |  |  |
| *Never smoked at all* | 796 | 46.35 | 134 | 16.97 | 662 | 83.03 |
| *Used to smoke* | 582 | 30.16 | 87 | 17.35 | 495 | 82.65 |
| *Current smoker (ref)* | 392 | 22.96 | 47 | 14.32 | 345 | 85.68 |
| *Missing data* | 4 | 0.53 | 2 | 55.39 | 2 | 44.61 |

Table 34 Unadjusted and adjusted model results predicting meeting physical activity guidelines for accelerometer measured PA

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.51 | 0.34 | -1.49 | 0.135 | 0.60 | 0.31 - 1.17 | -0.17 | 0.36 | -0.47 | 0.642 | 0.85 | 0.42 - 1.72 |
| *60 - <80 %* | -0.03 | 0.25 | -0.14 | 0.892 | 0.97 | 0.60 - 1.57 | -0.09 | 0.26 | -0.34 | 0.736 | 0.92 | 0.55 - 1.53 |
| *40 - <60 %* | -0.26 | 0.25 | -1.01 | 0.311 | 0.77 | 0.47 - 1.27 | -0.16 | 0.26 | -0.60 | 0.548 | 0.85 | 0.51 - 1.43 |
| *20 - <40 %* | -0.31 | 0.20 | -1.57 | 0.117 | 0.73 | 0.49 - 1.08 | -0.22 | 0.22 | -1.01 | 0.314 | 0.80 | 0.53 - 1.23 |
| 0 - <20 % (ref) |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.23 | 0.54 | 0.42 | 0.678 | 1.25 | 0.43 - 3.64 | 0.15 | 0.52 | 0.30 | 0.767 | 1.17 | 0.42 - 3.21 |
| *>1 - 5 %* | 0.32 | 0.33 | 0.98 | 0.328 | 1.38 | 0.73 - 2.61 | 0.02 | 0.37 | 0.05 | 0.959 | 1.02 | 0.50 - 2.09 |
| *>0 - 1 %* | 0.36 | 0.36 | 1.01 | 0.315 | 1.44 | 0.71 - 2.92 | 0.21 | 0.37 | 0.57 | 0.570 | 1.24 | 0.60 - 2.56 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | 0.01 | 0.19 | 0.04 | 0.970 | 1.01 | 0.69 - 1.47 | 0.18 | 0.22 | 0.84 | 0.401 | 1.20 | 0.78 - 1.84 |
| *5 - 20 km* | -0.19 | 0.24 | -0.79 | 0.428 | 0.83 | 0.51 - 1.33 | -0.16 | 0.26 | -0.63 | 0.530 | 0.85 | 0.51 - 1.41 |
| *>20 km (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | -0.21 | 0.29 | -0.72 | 0.471 | 0.81 | 0.46 - 1.43 |
| *2nd least deprived* | |  |  |  |  |  | -0.02 | 0.28 | -0.07 | 0.942 | 0.98 | 0.56 - 1.71 |
| *Medium deprived* | |  |  |  |  |  | -0.21 | 0.27 | -0.80 | 0.423 | 0.81 | 0.48 - 1.36 |
| *2nd most deprived* | | |  |  |  |  | -0.09 | 0.25 | -0.36 | 0.715 | 0.91 | 0.56 - 1.50 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Household income |  |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* |  |  |  |  |  |  | 0.60 | 0.35 | 1.70 | 0.089 | 1.82 | 0.91 - 3.63 |
| *Second highest Quintile* | |  |  |  |  |  | 0.61 | 0.34 | 1.82 | 0.070 | 1.84 | 0.95 - 3.56 |
| *Middle Quintile* |  |  |  |  |  |  | 0.43 | 0.33 | 1.29 | 0.199 | 1.54 | 0.80 - 2.95 |
| *Second lowest Quintile* | |  |  |  |  |  | 0.42 | 0.34 | 1.24 | 0.216 | 1.53 | 0.78 - 2.98 |
| *Lowest Quintile (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.34 | 0.34 | 1.01 | 0.314 | 1.41 | 0.72 - 2.75 |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.15 | 0.22 | -0.71 | 0.475 | 0.86 | 0.56 - 1.31 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **0.96** | **0.23** | **4.14** | **<0.001** | **2.61** | **1.66 - 4.11** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -12.45 | 1.12 | -11.17 | 0 | 0 | 0 |
| Individual level covariates | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-2.51** | **0.56** | **-4.52** | **<0.001** | **0.08** | **0.03 - 0.24** |
| *55 - 74* |  |  |  |  |  |  | -0.35 | 0.30 | -1.14 | 0.253 | 0.71 | 0.39 - 1.28 |
| *35 - 54* |  |  |  |  |  |  | 0.15 | 0.20 | 0.73 | 0.467 | 1.16 | 0.78 - 1.73 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.30 | 0.17 | 1.78 | 0.075 | 1.35 | 0.97 - 1.88 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  |  | 0.30 | 0.26 | 1.19 | 0.236 | 1.35 | 0.82 - 2.23 |
| *NVQ3/A level* |  |  |  |  |  |  | 0.07 | 0.32 | 0.23 | 0.817 | 1.08 | 0.58 - 2.02 |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  |  | 0.11 | 0.27 | 0.39 | 0.698 | 1.11 | 0.65 - 1.89 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  |  | 0.29 | 0.43 | 0.67 | 0.503 | 1.34 | 0.57 - 3.13 |
| *Retired/other inactive* | |  |  |  |  |  | 0.29 | 0.27 | 1.08 | 0.282 | 1.34 | 0.79 - 2.26 |
| *In work/student (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  |  | **-0.67** | **0.22** | **-3.11** | **0.002** | **0.51** | **0.33 - 0.78** |
| *Widowed/separated/divorced* | |  |  |  |  |  | **-0.84** | **0.30** | **-2.81** | **0.005** | **0.43** | **0.24 - 0.78** |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence | |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | **0.48** | **0.21** | **2.30** | **0.022** | **1.62** | **1.07 - 2.46** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | 0.25 | 0.26 | 0.98 | 0.329 | 1.29 | 0.78 - 2.13 |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-1.27** | **0.28** | **-4.53** | **<0.001** | **0.28** | **0.16 - 0.49** |
| *Overweight* | |  |  |  |  |  | **-0.39** | **0.20** | **-2.00** | **0.046** | **0.68** | **0.46 - 0.99** |
| *Underweight* | |  |  |  |  |  | 0.55 | 0.60 | 0.92 | 0.359 | 1.74 | 0.53 - 5.64 |
| *Normal weight (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | | |  |  |  |  | -0.33 | 0.29 | -1.14 | 0.255 | 0.72 | 0.40 - 1.27 |
| Cigarette smoking status | |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | |  |  |  |  |  | **0.46** | **0.22** | **2.09** | **0.037** | **1.59** | **1.03 - 2.45** |
| *Used to smoke* |  |  |  |  |  |  | **0.81** | **0.24** | **3.40** | **<0.001** | **2.24** | **1.41 - 3.58** |
| *Current smoker (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 1.80 | 1.36 | 1.32 | 0.187 | 6.03 | 0.42 - 86.77 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.47 |  |  |  |  |  | -2.20 |  |  |  |  |  |
| N | 1774 |  |  |  |  |  | 1774 |  |  |  |  |  |
| Households | 1382 |  |  |  |  |  | 1382 |  |  |  |  |  |
| AIC | 1615.76 |  |  |  |  |  | 1519.58 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* (%) | 0.53 |  |  |  |  |  | 10.40 |  |  |  |  |  |

Table 35 Model results predicting meeting PA guidelines through total self-reported PA for the same index as used in accelerometer analyses

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.17 | 0.23 | 0.74 | 0.458 | 1.19 | 0.75 - 1.88 | 0.32 | 0.26 | 1.22 | 0.223 | 1.37 | 0.82 - 2.28 |
| *60 - <80 %* | **0.53** | **0.20** | **2.66** | **0.008** | **1.69** | **1.15 - 2.49** | **0.51** | **0.21** | **2.39** | **0.017** | **1.67** | **1.10 - 2.54** |
| *40 - <60 %* | -0.12 | 0.17 | -0.70 | 0.483 | 0.89 | 0.63 - 1.24 | -0.05 | 0.18 | -0.25 | 0.803 | 0.96 | 0.67 - 1.36 |
| *20 - <40 %* | -0.15 | 0.14 | -1.02 | 0.308 | 0.86 | 0.65 - 1.15 | -0.12 | 0.16 | -0.76 | 0.447 | 0.89 | 0.65 - 1.21 |
| 0 - <20 % (ref) |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.35 | 0.37 | 0.94 | 0.345 | 1.42 | 0.68 - 2.97 | 0.43 | 0.36 | 1.19 | 0.235 | 1.54 | 0.76 - 3.11 |
| *>1 - 5 %* | 0.06 | 0.23 | 0.26 | 0.792 | 1.06 | 0.68 - 1.66 | -0.09 | 0.26 | -0.36 | 0.715 | 0.91 | 0.55 - 1.51 |
| *>0 - 1 %* | -0.02 | 0.28 | -0.06 | 0.955 | 0.98 | 0.56 - 1.72 | -0.03 | 0.31 | -0.10 | 0.923 | 0.97 | 0.53 - 1.78 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | 0.09 | 0.14 | 0.66 | 0.511 | 1.10 | 0.83 - 1.45 | 0.24 | 0.16 | 1.49 | 0.135 | 1.27 | 0.93 - 1.75 |
| *5 - 20 km* | -0.18 | 0.17 | -1.03 | 0.303 | 0.84 | 0.60 - 1.17 | -0.18 | 0.18 | -0.97 | 0.333 | 0.84 | 0.58 - 1.20 |
| *>20 km (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | 0.28 | 0.21 | 1.34 | 0.180 | 1.33 | 0.88 - 2.01 |
| *2nd least deprived* | |  |  |  |  |  | 0.26 | 0.21 | 1.21 | 0.227 | 1.29 | 0.85 - 1.96 |
| *Medium deprived* | |  |  |  |  |  | 0.02 | 0.20 | 0.10 | 0.917 | 1.02 | 0.69 - 1.51 |
| *2nd most deprived* | | |  |  |  |  | 0.25 | 0.20 | 1.24 | 0.214 | 1.28 | 0.87 - 1.89 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Household income | |  |  |  |  |  |  |  |  |  |  |  |
| *Highest Quintile* | |  |  |  |  |  | 0.15 | 0.24 | 0.60 | 0.549 | 1.16 | 0.72 - 1.87 |
| *Second highest Quintile* | |  |  |  |  |  | -0.04 | 0.24 | -0.19 | 0.851 | 0.96 | 0.60 - 1.52 |
| *Middle Quintile* |  |  |  |  |  |  | 0.13 | 0.23 | 0.59 | 0.558 | 1.14 | 0.73 - 1.80 |
| *Second lowest Quintile* | |  |  |  |  |  | 0.22 | 0.22 | 1.00 | 0.320 | 1.25 | 0.81 - 1.92 |
| *Lowest Quintile (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.20 | 0.23 | -0.88 | 0.380 | 0.82 | 0.52 - 1.28 |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | -0.32 | 0.17 | -1.87 | 0.061 | 0.72 | 0.51 - 1.02 |
| *None (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van |  |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | 0.27 | 0.18 | 1.49 | 0.137 | 1.31 | 0.92 - 1.88 |
| *Yes (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 12.21 | 1.06 | 11.54 | 0 | NA | NA |
| Individual level covariates | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | **-1.71** | **0.28** | **-6.12** | **<0.001** | **0.18** | **0.10 - 0.31** |
| *55 - 74* |  |  |  |  |  |  | -0.55 | 0.20 | -2.71 | 0.007 | 0.58 | 0.39 - 0.86 |
| *35 - 54* |  |  |  |  |  |  | -0.20 | 0.18 | -1.10 | 0.270 | 0.82 | 0.58 - 1.16 |
| *16 - 34 (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | **0.25** | **0.12** | **1.98** | **0.048** | **1.28** | **1.00 - 1.63** |
| *Female (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  |  | 0.21 | 0.18 | 1.16 | 0.245 | 1.23 | 0.87 - 1.75 |
| *NVQ3/A level* |  |  |  |  |  |  | 0.23 | 0.23 | 1.00 | 0.317 | 1.26 | 0.80 - 1.96 |
| *NVQ1/NVQ2/GCSE* | |  |  |  |  |  | 0.23 | 0.17 | 1.31 | 0.190 | 1.25 | 0.89 - 1.75 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| *ILO unemployed* |  |  |  |  |  |  | **1.15** | **0.53** | **2.16** | **0.031** | **3.15** | **1.11 - 8.92** |
| *Retired/other inactive* | |  |  |  |  |  | -0.22 | 0.17 | -1.29 | 0.199 | 0.81 | 0.58 - 1.12 |
| *In work/student (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* | |  |  |  |  |  | 0.20 | 0.19 | 1.10 | 0.273 | 1.23 | 0.85 - 1.77 |
| *Widowed/separated/divorced* | |  |  |  |  |  | 0.03 | 0.21 | 0.15 | 0.880 | 1.03 | 0.69 - 1.55 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | **0.83** | **0.15** | **5.52** | **<0.001** | **2.30** | **1.71 - 3.08** |
| *Non-limiting longstanding illness* | |  |  |  |  |  | **0.65** | **0.18** | **3.70** | **<0.001** | **1.91** | **1.36 - 2.70** |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-0.37** | **0.17** | **-2.17** | **0.030** | **0.69** | **0.49 - 0.97** |
| *Overweight* |  |  |  |  |  |  | -0.14 | 0.16 | -0.90 | 0.367 | 0.87 | 0.64 - 1.18 |
| *Underweight* |  |  |  |  |  |  | -0.39 | 0.57 | -0.67 | 0.501 | 0.68 | 0.22 - 2.09 |
| *Normal weight (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | -0.17 | 0.22 | -0.76 | 0.450 | 0.85 | 0.55 - 1.30 |
| Cigarette smoking status | |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | |  |  |  |  |  | 0.22 | 0.16 | 1.35 | 0.178 | 1.24 | 0.91 - 1.71 |
| *Used to smoke* |  |  |  |  |  |  | 0.30 | 0.17 | 1.76 | 0.078 | 1.35 | 0.97 - 1.87 |
| *Current smoker (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* | |  |  |  |  |  | 0.48 | 1.74 | 0.28 | 0.780 | 1.62 | 0.05 - 48.72 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | 0.35 |  |  |  |  |  | -0.49 |  |  |  |  |  |
| N | 1774 |  |  |  |  |  | 1774 |  |  |  |  |  |
| Households | 1382 |  |  |  |  |  | 1382 |  |  |  |  |  |
| AIC | 2402.24 |  |  |  |  |  | 2262.62 |  |  |  |  |  |
| Cox & Snell *pseudo-R2* % | 1.20 |  |  |  |  |  | 13.18 |  |  |  |  |  |

Table 36 Unadjusted and adjusted model results for predicting meeting objective physical activity Guidelines (≥150 moderate to vigorous physical activity mins per week) compared to not meeting them (<150 moderate to vigorous physical activity mins per week) for those in the highest income tertile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | -0.03 | 0.44 | -0.07 | 0.946 | 0.97 | 0.41 - 2.29 | 0.25 | 0.50 | 0.51 | 0.611 | 1.29 | 0.48 - 3.44 |
| *60 - <80 %* | -0.53 | 0.38 | -1.37 | 0.171 | 0.59 | 0.28 - 1.25 | -0.48 | 0.41 | -1.19 | 0.236 | 0.62 | 0.28 - 1.37 |
| *40 - <60 %* | -0.39 | 0.36 | -1.09 | 0.278 | 0.68 | 0.33 - 1.37 | -0.26 | 0.39 | -0.67 | 0.503 | 0.77 | 0.36 - 1.66 |
| *20 - <40 %* | -0.28 | 0.32 | -0.88 | 0.378 | 0.76 | 0.41 - 1.41 | -0.03 | 0.36 | -0.09 | 0.929 | 0.97 | 0.48 - 1.96 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 1.15 | 0.85 | 1.35 | 0.176 | 3.16 | 0.60 - 16.71 | 1.10 | 0.89 | 1.23 | 0.220 | 2.99 | 0.52 - 17.14 |
| *>1 - 5 %* | 0.12 | 0.47 | 0.25 | 0.804 | 1.12 | 0.45 - 2.82 | -0.28 | 0.54 | -0.52 | 0.604 | 0.76 | 0.26 - 2.17 |
| *>0 - 1 %* | 0.70 | 0.44 | 1.57 | 0.116 | 2.01 | 0.84 - 4.79 | 0.76 | 0.45 | 1.69 | 0.091 | 2.14 | 0.89 - 5.17 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | 0.04 | 0.30 | 0.14 | 0.891 | 1.04 | 0.58 - 1.87 | 0.25 | 0.37 | 0.67 | 0.503 | 1.28 | 0.62 - 2.62 |
| *5 - 20 km* | -0.68 | 0.44 | -1.56 | 0.120 | 0.51 | 0.22 - 1.19 | -0.72 | 0.44 | -1.66 | 0.098 | 0.49 | 0.21 - 1.14 |
| *>20 km (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariate** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  | - | 0.14 | 0.51 | 0.27 | 0.788 | 1.15 | 0.42 - 3.09 |
| *2nd least deprived* | |  |  |  |  | - | 0.84 | 0.52 | 1.61 | 0.108 | 2.33 | 0.83 - 6.49 |
| *Medium deprived* | |  |  |  |  | - | -0.03 | 0.54 | -0.05 | 0.960 | 0.97 | 0.34 - 2.79 |
| *2nd most deprived* | | |  |  |  | - | 0.54 | 0.52 | 1.04 | 0.297 | 1.71 | 0.62 - 4.72 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  | - | -0.55 | 0.38 | -1.44 | 0.151 | 0.58 | 0.28 - 1.22 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  | - | 0.56 | 0.56 | 1.00 | 0.316 | 1.75 | 0.59 - 5.23 |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  | - | -1.30 | 0.88 | -1.47 | 0.143 | 0.27 | 0.05 - 1.54 |
| *55 - 74* |  |  |  |  |  | - | -0.79 | 0.40 | -1.95 | 0.052 | 0.46 | 0.21 - 1.01 |
| *35 - 54* |  |  |  |  |  | - | 0.40 | 0.30 | 1.34 | 0.180 | 1.50 | 0.83 - 2.69 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  | - | 0.13 | 0.25 | 0.53 | 0.600 | 1.14 | 0.70 - 1.84 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  | - | 1.02 | 0.65 | 1.57 | 0.117 | 2.77 | 0.78 - 9.83 |
| *NVQ3/A level* |  |  |  |  |  | - | 1.10 | 0.70 | 1.58 | 0.116 | 2.99 | 0.77 - 11.71 |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  | - | 1.01 | 0.66 | 1.52 | 0.129 | 2.74 | 0.75 - 10.06 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| ILO unemployed |  |  |  |  |  | - | -11.89 | 0.92 | -12.92 | 0 | 0 | 0 |
| *Retired/other inactive* |  |  |  |  |  | - | **1.07** | **0.41** | **2.61** | **0.009** | **2.91** | **1.31 - 6.49** |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  | - | -0.35 | 0.37 | -0.94 | 0.348 | 0.71 | 0.34 - 1.46 |
| *Widowed/separated/divorced* |  |  |  |  |  | - | -0.62 | 0.59 | -1.06 | 0.292 | 0.54 | 0.17 - 1.70 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  | - | 0.42 | 0.36 | 1.17 | 0.242 | 1.52 | 0.75 - 3.08 |
| *Non-limiting longstanding illness* | |  |  |  |  | - | 0.30 | 0.43 | 0.70 | 0.487 | 1.34 | 0.58 - 3.10 |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  | - | **-2.17** | **0.56** | **-3.85** | **<0.001** | **0.11** | **0.04 - 0.34** |
| *Overweight* | |  |  |  |  | - | -0.34 | 0.29 | -1.18 | 0.238 | 0.71 | 0.40 - 1.25 |
| *Underweight* | |  |  |  |  | - | -0.83 | 1.03 | -0.81 | 0.420 | 0.44 | 0.06 - 3.27 |
| *Normal weight (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | 0.12 | 0.47 | 0.27 | 0.789 | 1.13 | 0.46 - 2.82 |
| Cigarette smoking status | |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | |  |  |  |  | - | 0.42 | 0.38 | 1.11 | 0.269 | 1.52 | 0.72 - 3.19 |
| *Used to smoke* |  |  |  |  |  | - | 0.79 | 0.41 | 1.95 | 0.052 | 2.21 | 1.00 - 4.92 |
| *Current smoker (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.22 |  |  |  |  |  | -2.88 |  |  |  |  |  |
| N | 545 |  |  |  |  |  | 545 |  |  |  |  |  |
| Households | 404 |  |  |  |  |  | 404 |  |  |  |  |  |
| AIC | 550.66 |  |  |  |  |  | 537.96 |  |  |  |  |  |
| Cox & Snell pseudo-*R2*(%) | 1.79 |  |  |  |  |  | 12.76 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 37 Unadjusted and adjusted model results for predicting meeting objective physical activity Guidelines (≥150 moderate to vigorous physical activity mins per week) compared to not meeting them (<150 moderate to vigorous physical activity mins per week) for those in the middle income tertile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjuted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | **-2.49** | **1.06** | **-2.35** | **0.019** | **0.08** | **0.01 - 0.66** | -2.28 | 1.19 | -1.91 | 0.057 | 0.10 | 0.01 - 1.06 |
| *60 - <80 %* | 0.16 | 0.42 | 0.39 | 0.697 | 1.18 | 0.52 - 2.68 | 0.11 | 0.43 | 0.25 | 0.802 | 1.11 | 0.48 - 2.58 |
| *40 - <60 %* | -0.48 | 0.47 | -1.02 | 0.308 | 0.62 | 0.25 - 1.55 | -0.44 | 0.46 | -0.96 | 0.338 | 0.64 | 0.26 - 1.59 |
| *20 - <40 %* | -0.61 | 0.32 | -1.92 | 0.056 | 0.55 | 0.29 - 1.01 | -0.68 | 0.38 | -1.78 | 0.075 | 0.51 | 0.24 - 1.07 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage | |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | 0.90 | 1.02 | 0.87 | 0.383 | 2.45 | 0.33 - 18.24 | 0.37 | 0.92 | 0.40 | 0.689 | 1.45 | 0.24 - 8.85 |
| *>1 - 5 %* | -0.13 | 0.54 | -0.24 | 0.811 | 0.88 | 0.30 - 2.55 | -0.46 | 0.60 | -0.77 | 0.442 | 0.63 | 0.19 - 2.04 |
| *>0 - 1 %* | -0.90 | 1.05 | -0.86 | 0.391 | 0.40 | 0.05 - 3.18 | -0.68 | 1.24 | -0.55 | 0.582 | 0.50 | 0.04 - 5.75 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | 0.12 | 0.31 | 0.39 | 0.694 | 1.13 | 0.62 - 2.07 | -0.02 | 0.37 | -0.07 | 0.948 | 0.98 | 0.47 - 2.02 |
| *5 - 20 km* | -0.14 | 0.39 | -0.35 | 0.725 | 0.87 | 0.40 - 1.88 | -0.02 | 0.37 | -0.04 | 0.966 | 0.98 | 0.48 - 2.03 |
| *>20 km (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariate** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  |  | -0.78 | 0.48 | -1.62 | 0.105 | 0.46 | 0.18 - 1.17 |
| *2nd least deprived* | |  |  |  |  |  | -0.68 | 0.49 | -1.38 | 0.169 | 0.51 | 0.19 - 1.33 |
| *Medium deprived* | |  |  |  |  |  | **-0.82** | **0.39** | **-2.10** | **0.036** | **0.44** | **0.21 - 0.95** |
| *2nd most deprived* | | |  |  |  |  | -0.82 | 0.46 | -1.79 | 0.075 | 0.44 | 0.18 - 1.08 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  |  | 0.22 | 0.36 | 0.61 | 0.544 | 1.24 | 0.62 - 2.50 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  |  | **1.64** | **0.45** | **3.65** | **<0.001** | **5.14** | **2.14 - 12.37** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  |  | -16.37 | 0.78 | -21.07 | 0 | 0 | 0 |
| *55 - 74* |  |  |  |  |  |  | 0.17 | 0.59 | 0.29 | 0.773 | 1.18 | 0.37 - 3.75 |
| *35 - 54* |  |  |  |  |  |  | 0.06 | 0.39 | 0.15 | 0.881 | 1.06 | 0.49 - 2.28 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  |  | 0.55 | 0.29 | 1.91 | 0.057 | 1.74 | 0.98 - 3.06 |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  |  | 0.01 | 0.45 | 0.01 | 0.989 | 1.01 | 0.41 - 2.45 |
| *NVQ3/A level* |  |  |  |  |  |  | -0.05 | 0.55 | -0.10 | 0.922 | 0.95 | 0.32 - 2.78 |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  |  | -0.06 | 0.44 | -0.15 | 0.883 | 0.94 | 0.40 - 2.22 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| ILO unemployed |  |  |  |  |  |  | -0.51 | 0.92 | -0.55 | 0.580 | 0.60 | 0.10 - 3.65 |
| *Retired/other inactive* |  |  |  |  |  |  | 0.09 | 0.48 | 0.20 | 0.844 | 1.10 | 0.43 - 2.80 |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  |  | -0.30 | 0.41 | -0.74 | 0.459 | 0.74 | 0.33 - 1.64 |
| *Widowed/separated/divorced* |  |  |  |  |  |  | 0.01 | 0.57 | 0.02 | 0.987 | 1.01 | 0.33 - 3.09 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  |  | 0.76 | 0.42 | 1.82 | 0.070 | 2.15 | 0.94 - 4.89 |
| *Non-limiting longstanding illness* | |  |  |  |  |  | 0.29 | 0.50 | 0.58 | 0.562 | 1.34 | 0.50 - 3.55 |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  |  | **-1.92** | **0.42** | **-4.59** | **<0.001** | **0.15** | **0.06 - 0.33** |
| *Overweight* |  |  |  |  |  |  | **-1.02** | **0.34** | **-2.97** | **0.003** | **0.36** | **0.18 - 0.71** |
| *Underweight* |  |  |  |  |  |  | -0.79 | 0.87 | -0.90 | 0.369 | 0.46 | 0.08 - 2.53 |
| *Normal weight (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -0.68 | 0.56 | -1.21 | 0.227 | 0.51 | 0.17 - 1.53 |
| Cigarette smoking status | |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | |  |  |  |  |  | 1.93 | 1.31 | 1.48 | 0.140 | 6.89 | 0.53 - 88.92 |
| *Used to smoke* |  |  |  |  |  |  | **1.35** | **0.40** | **3.36** | **0.001** | **3.88** | **1.76 - 8.55** |
| *Current smoker (ref)* | |  |  |  |  |  | **1.26** | **0.45** | **2.80** | **0.005** | **3.52** | **1.46 - 8.50** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -1.33 |  |  |  |  |  | -1.83 |  |  |  |  |  |
| N | 508 |  |  |  |  |  | 508 |  |  |  |  |  |
| Households | 393 |  |  |  |  |  | 393 |  |  |  |  |  |
| AIC | 451.92 |  |  |  |  |  | 427.40 |  |  |  |  |  |
| Cox & Snell pseudo-*R2* (%) | 3.31 |  |  |  |  |  | 16.54 |  |  |  |  |  |

Table 38 Unadjusted and adjusted model results for predicting meeting objective physical activity Guidelines (≥150 moderate to vigorous physical activity mins per week) compared to not meeting them (<150 moderate to vigorous physical activity mins per week) for those in the lowest income tertile

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Unadjusted | | | | | | Adjusted | | | | | |
| term | Co-ef | S.E. | statistic | *p* | OR | 95 % CI | Co-ef | S.E. | statistic | *p* | OR | 95 % CI |
| **Environmental variables** |  |  |  |  |  |  |  |  |  |  |  |  |
| Greenspace coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *80 - 100 %* | 0.54 | 0.78 | 0.69 | 0.491 | 1.71 | 0.37 - 7.84 | 0.28 | 1.11 | 0.25 | 0.804 | 1.32 | 0.15 - 11.61 |
| *60 - <80 %* | 0.29 | 0.51 | 0.58 | 0.563 | 1.34 | 0.50 - 3.61 | 0.43 | 0.61 | 0.70 | 0.483 | 1.54 | 0.46 - 5.14 |
| *40 - <60 %* | -0.32 | 0.55 | -0.57 | 0.569 | 0.73 | 0.25 - 2.16 | -0.24 | 0.62 | -0.38 | 0.703 | 0.79 | 0.23 - 2.65 |
| *20 - <40 %* | 0.08 | 0.40 | 0.20 | 0.844 | 1.08 | 0.50 - 2.36 | -0.06 | 0.45 | -0.14 | 0.892 | 0.94 | 0.39 - 2.28 |
| *0 - <20 % (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Freshwater coverage |  |  |  |  |  |  |  |  |  |  |  |  |
| *>5 - 100 %* | -14.28 | 0.55 | -26.04 | 0 | 0 | 0 | -14.31 | 0.67 | -21.45 | 0 | 0 | 0 |
| *>1 - 5 %* | 0.60 | 0.69 | 0.87 | 0.382 | 1.83 | 0.47 - 7.03 | 0.62 | 0.86 | 0.72 | 0.472 | 1.85 | 0.35 - 9.93 |
| *>0 - 1 %* | -0.85 | 1.28 | -0.66 | 0.507 | 0.43 | 0.04 - 5.23 | -0.13 | 1.64 | -0.08 | 0.935 | 0.87 | 0.04 - 21.78 |
| *0% (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Coastal proximity |  |  |  |  |  |  |  |  |  |  |  |  |
| *0 - 5 km* | -0.47 | 0.44 | -1.07 | 0.286 | 0.62 | 0.26 - 1.48 | -0.22 | 0.55 | -0.40 | 0.688 | 0.80 | 0.27 - 2.35 |
| *5 - 20 km* | 0.46 | 0.43 | 1.08 | 0.282 | 1.58 | 0.69 - 3.65 | 0.64 | 0.44 | 1.44 | 0.150 | 1.89 | 0.80 - 4.49 |
| *>20 km (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| **LSOA level covariate** | |  |  |  |  |  |  |  |  |  |  |  |
| IMD |  |  |  |  |  |  |  |  |  |  |  |  |
| *Least deprived* | |  |  |  |  | - | 0.33 | 0.65 | 0.51 | 0.609 | 1.39 | 0.39 - 4.99 |
| *2nd least deprived* | |  |  |  |  | - | -0.19 | 0.80 | -0.24 | 0.809 | 0.82 | 0.17 - 3.99 |
| *Medium deprived* | |  |  |  |  | - | -0.32 | 0.72 | -0.45 | 0.655 | 0.72 | 0.17 - 2.99 |
| *2nd most deprived* | | |  |  |  | - | -0.24 | 0.50 | -0.47 | 0.636 | 0.79 | 0.30 - 2.10 |
| *Most deprived (ref)* | | |  |  |  |  |  |  |  |  |  |  |
| **Household level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Children in household | |  |  |  |  |  |  |  |  |  |  |  |
| *>=1* |  |  |  |  |  | - | -0.30 | 0.50 | -0.61 | 0.543 | 0.74 | 0.28 - 1.96 |
| *None (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Access to a car/van | |  |  |  |  |  |  |  |  |  |  |  |
| *No* |  |  |  |  |  | - | **1.24** | **0.39** | **3.20** | **0.002** | **3.44** | **1.61 - 7.35** |
| *Yes (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| **Individual level covariates** | |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| *75+* |  |  |  |  |  | - | **-3.13** | **0.99** | **-3.18** | **0.002** | **0.04** | **0.01 - 0.30** |
| *55 - 74* |  |  |  |  |  | - | -1.19 | 0.69 | -1.72 | 0.087 | 0.30 | 0.08 - 1.18 |
| *35 - 54* |  |  |  |  |  | - | -0.41 | 0.54 | -0.77 | 0.443 | 0.66 | 0.23 - 1.90 |
| *16 - 34 (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| *Male* |  |  |  |  |  | - | **0.98** | **0.37** | **2.66** | **0.008** | **2.65** | **1.29 - 5.45** |
| *Female (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Highest qualification | |  |  |  |  |  |  |  |  |  |  |  |
| *Higher ed/Degree* |  |  |  |  |  | - | 0.40 | 0.57 | 0.70 | 0.487 | 1.49 | 0.49 - 4.54 |
| *NVQ3/A level* |  |  |  |  |  | - | -0.41 | 0.66 | -0.63 | 0.531 | 0.66 | 0.18 - 2.41 |
| *NVQ1/NVQ2/GCSE* |  |  |  |  |  | - | -0.28 | 0.55 | -0.51 | 0.608 | 0.75 | 0.25 - 2.23 |
| *Foreign/other/none (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| Economic activity |  |  |  |  |  |  |  |  |  |  |  |  |
| ILO unemployed |  |  |  |  |  | - | 0.15 | 0.79 | 0.19 | 0.846 | 1.17 | 0.25 - 5.47 |
| *Retired/other inactive* |  |  |  |  |  | - | 0.40 | 0.51 | 0.79 | 0.432 | 1.49 | 0.55 - 4.04 |
| *In work/student (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Relationship status |  |  |  |  |  |  |  |  |  |  |  |  |
| *Living with partner* |  |  |  |  |  | - | -0.32 | 0.49 | -0.66 | 0.507 | 0.72 | 0.28 - 1.88 |
| *Widowed/separated/divorced* |  |  |  |  |  | - | -0.77 | 0.52 | -1.50 | 0.135 | 0.46 | 0.17 - 1.27 |
| *Single (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| Longstanding illness presence |  |  |  |  |  |  |  |  |  |  |  |  |
| *No longstanding illness* |  |  |  |  |  | - | 0.19 | 0.45 | 0.42 | 0.672 | 1.21 | 0.50 - 2.89 |
| *Non-limiting longstanding illness* | |  |  |  |  | - | -0.17 | 0.54 | -0.33 | 0.745 | 0.84 | 0.29 - 2.40 |
| *Limiting longstanding illness (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
| BMI |  |  |  |  |  |  |  |  |  |  |  |  |
| *Obese* |  |  |  |  |  | - | **-1.24** | **0.52** | **-2.39** | **0.017** | **0.29** | **0.10 - 0.80** |
| *Overweight* |  |  |  |  |  | - | -0.80 | 0.42 | -1.88 | 0.060 | 0.45 | 0.20 - 1.03 |
| *Underweight* |  |  |  |  |  | - | 2.33 | 1.39 | 1.68 | 0.095 | 10.28 | 0.67 - 156.75 |
| *Normal weight (ref)* |  |  |  |  |  |  |  |  |  |  |  |  |
| *Missing data* |  |  |  |  |  |  | -1.10 | 0.78 | -1.42 | 0.156 | 0.33 | 0.07 - 1.52 |
| Cigarette smoking status | |  |  |  |  |  |  |  |  |  |  |  |
| *Never smoked at all* | |  |  |  |  | - | 0.74 | 0.47 | 1.58 | 0.115 | 2.09 | 0.84 - 5.21 |
| *Used to smoke* |  |  |  |  |  | - | 0.68 | 0.47 | 1.45 | 0.149 | 1.97 | 0.79 - 4.92 |
| *Current smoker (ref)* | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intercept | -2.03 |  |  |  |  |  | -1.91 |  |  |  |  |  |
| N | 440 |  |  |  |  |  | 440 |  |  |  |  |  |
| Households | 366 |  |  |  |  |  | 366 |  |  |  |  |  |
| AIC | 330.82 |  |  |  |  |  | 313.78 |  |  |  |  |  |
| Cox & Snell pseudo-*R2*(%) | 2.04 |  |  |  |  |  | 16.38 |  |  |  |  |  |