**Hansen, A.R., Gram-Hanssen, K. and Knudsen, H.N. (2017). How building design and technologies influence heat-related habits. *Building Research & Information.***

**Supplemental data**

**Appendix 2**

**Table A1**. Questions on adjusting thermostats

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| How often during the last month have you adjusted the heat on the radiators or underfloor heating in the… | Several times a day (3 points) | Once or several times weekly  (2 points) | Once or several times monthly  (1 point) | I haven’t regulated the heat (0 points) | Missing | |
| Unable to regulate the heat | Non-response |
| …living room? | 9.70 % (118) | 13.16 % (160) | 26.48 % (322) | 46.63 % (567) | 1.07 % (13) | 2.96 % (36) |
| …bedroom? | 14.31 % (174) | 9.13 % (111) | 13.57 % (165) | 58.55 % (712) | 1.48 % (18) | 2.96 % (36) |
| …bathroom? | 4.93 % (60) | 4.85 % (59) | 17.02 % (207) | 68.75 % (836) | 1.48 % (18) | 2.96 % (36) |

Note: Number of responses provided in parentheses.

**Table A2.** Questions on clothing are given points according to this scheme

|  |  |  |
| --- | --- | --- |
| Dress warmer in winter time | No + 0 point | Yes + 1 point |
| More often socks in wintertime | No + 0 point | Yes + 1 point |
| More often blanket in wintertime | No + 0 point | Yes + 1 point |
| Dressing at the time of the interview  1. Short-sleeves  2. Long-sleeves  3. Warm sweater | + 0 point  + 1 point  + 2 point |  |
| Singlet under other clothing | No + 0 point | Yes + 1 point |

**Table A3.** Question on perceived temperature according to others

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1. Colder** | **2. The same** | **3. Warmer** | **Missing** | |
| **Don’t know** | **Non-response** |
| In winter: How do you consider your indoor temperature compared with others? | 17.60 % (214) | 59.54 % (724) | 14.56 % (177) | 5.35 % (65) | 2.96 % (36) |

*Note:* Number of responses provided in parentheses.

**Table A4.** Descriptive statistics for dependent variables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable: heat related habits | Range | Mean SD  in parentheses | Median | Number of  observations |
| Frequency of adjusting thermostats | [0;9] | 2.06 (2.34) | 1 | 1,082 |
| Frequency of ventilation | [6;54] | 16.24 (4.78) | 16 | 1,110 |
| Amount of clothes during winter | [0;6] | 3.60 (1.62) | 4 | 1,110 |
| Temperature compared with others - colder | [0;1] | 0.20 (0.40) |  | 1,047 |
| Temperature compared with others - warmer | [0;1] | 0.16 (0.36) |  | 1,047 |

*Note:* SD = standard deviation

**Table A5.** Descriptive statistics for independent variables

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Percentage | Number of observations | Stem from administrative data (A), survey data (S) or a combination of the two (A+S) |
| Energy efficiency of building envelope: |  |  |  |
| Before 1962 | 12.2 | 1,151 | R |
| Before 1962 ++ (extensive energy improvements) | 11.3 | 1,151 | R+S |
| 1962-1979 | 16.3 | 1,151 | R |
| 1962-1979 + (moderate energy improvements) | 20.2 | 1,151 | R+S |
| 1962-1979 ++ (extensive energy improvements) | 11.5 | 1,151 | R+S |
| 1980-1999 | 16.0 | 1,151 | R |
| After 1999 | 12.5 | 1,151 | R |
| Technical installations: |  |  |  |
| Underfloor heating in living room | 26.5 | 1,151 | S |
| Underfloor heating in bathroom | 71.5 | 1,151 | S |
| Mechanical ventilation with heat recovery | 10.5 | 1,151 | S |
| Wood-burning stove | 42.7 | 1,119 | S |
| Building layout: |  |  |  |
| Basement | 25.5 | 1,119 | S |
| Smallest area | 34.7 | 1,151 | R |
| Middle area | 32.6 | 1,151 | R |
| Largest area | 32.8 | 1,151 | R |
| Rooms: n = 4 or less | 36.4 | 1,151 | R |
| Rooms: n = 5 | 38.3 | 1,151 | R |
| Rooms: n = 6 or more | 25.3 | 1,151 | R |
| Individual socio-demographic characteristics: |  |  |  |
| Income Q1 | 24.3 | 1,151 | R |
| Income Q2 | 24.6 | 1,151 | R |
| Income Q3 | 25.7 | 1,151 | R |
| Income Q4 | 25.4 | 1,151 | R |
| Elementary school or no education | 17.4 | 1,143 | R |
| High school level | 45.0 | 1,143 | R |
| Bachelor's level | 26.3 | 1,143 | R |
| Master's level and PhD | 11.4 | 1,143 | R |
| Pensioner | 32.2 | 1,143 | R |
| Immigrant or descendant | 9.0 | 1,143 | R |
| Male | 51.2 | 1,143 | S |
| Age <45 | 25.4 | 1,149 | R |
| Age 45 to 64 | 43.5 | 1,149 | R |
| Age >64 | 31.1 | 1,149 | R |
| Child in household | 42.6 | 1,151 | R |
| Partner | 85.3 | 1,119 | S |

Note: Number of observations is those who are valid in the regression models