**Online supplement to**

**On Modeling Future Workplace Location Decisions: An Analysis of Texas Employees**

By Katherine E. Asmussen, Aupal Mondal, Chandra R. Bhat (corresponding author), and Ram Pendyala

In this online supplement, we provide a table with descriptive statistics for the sample and the results of our aggregate comparison of the performance of the panel MMDCEV model proposed in the paper with that of a constants-only model (in which we only allow constants in the baseline preferences and in the satiation parameters of the alternatives). In addition, we also present an expanded set of ATEs corresponding to six gendered lifecycle categories, and for full-time (=22 work days a month) as well as part-time (=11 work days a month) workers.

**Sample Descriptive Statistics**

Due to the significant length of the study’s manuscript, descriptive statistics of the sample are present in Table 1 below.

**Aggregate Data Fit**

To evaluate and compare the performance of the proposed model with the constants-only model, we examine the non-likelihood based aggregate fit measures. To do so, we use the forecasting technique for multiple discrete-continuous models as provided in Pinjari and Bhat (2021). For the aggregate fit measures at the discrete level, we predict the number of occasions of choice for each of the eight possible combinations of WPL (based on whether or not an individual selects each of the three WPLs at least once; there are a total of 23 = 8 combinations) (see these values recorded in Table 2). Then, these figures are compared with the observed numbers in each of these eight combinations, and a weighted absolute percentage error (WAPE) metric is computed (the weighting being based on the actual observed share of individuals in each combination).

Next, we compare the performance of the two models in terms of the aggregate count predictions of work days from each WPL. Since different individuals would be working different numbers of days, we focus on the fractional splits of WPL locations. Further, since the fractional split of work days from the third WPL is very low, for the aggregate fit comparison, we only consider individuals who never work from the third WPL. For these individuals, we compute the fraction of work days from home and fraction of work days from the work office (with these two fractions adding up to one). We then develop a matrix of the number of individuals falling into each of four combinations, based on two bins of fractional count; (0,0.5] and (0.5,1]; for each of the home and work office locations. The predicted numbers of individuals in each of the four cells are compared to the observed numbers of individual in each of the four cells, to compute a WAPE value (the weighting here is based on the actual observed share of individuals in each of the four combinations for each third WPL group).

The results for the discrete data fit are provided in Table 2, which shows that the WAPE for the proposed model is 5.23%, relative to 6.77% for the constants-only model. The results for the count data fit is provided in Table 3, which shows a WAPE for the proposed model of 23.64% relative to the constants-only WAPE of 25.15%. At both the discrete and count levels, our model outperforms the constants-only model.

**Expanded Set of ATE Tables**

Tables 4, 5, 6, and 7 provide an expanded set of ATE tables, corresponding to Tables 4, 5, 6, and 7 respectively, in the main paper. The expanded set includes six gendered life cycle categories (as opposed to only three in the main paper); the expanded set also includes the ATEs for both part-time workers (number of work days in the month=11) as well as for full-time workers (number of work days in the month=22).

**Reference**

Pinjari, A.R., and Bhat, C.R. (2021). Computationally efficient forecasting procedures for Kuhn-Tucker consumer demand model systems: application to residential energy consumption analysis. *Journal of Choice Modelling*, *39*, 100283.

**Table 1: Sample Distribution of Exogenous Variables**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Count | % | Variable | Count | % |
| *Individual and Household-level Demographics* |  |  | *Residential Characteristics* |  |  |
| **Gendered Lifestyle Variables** |  |  | **Community Region Type** |  |  |
| Men with partner | 333 | 29.3 | Rural | 236 | 20.8 |
| Men without partner | 129 | 11.4 | Suburban | 644 | 56.7 |
| Women with young child with partner | 32 | 2.8 | Urban | 256 | 22.5 |
| Women with young child without partner | 8 | 0.7 | **Household Ownership Status** |  |  |
| Women without young child with partner | 414 | 36.4 | Rent | 188 | 16.5 |
| Women without young child without partner | 220 | 19.4 | Own | 948 | 83.5 |
| **Presence of Children (including ages)** |  |  | **Private Study** |  |  |
| No kids | 842 | 74.1 | Yes | 868 | 76.4 |
| Child(ren) aged 0 to 4 | 57\* | 5.0 | No | 268 | 23.6 |
| Child(ren) aged 5 to 12 | 164\* | 14.4 | *Work Office Characteristics* |  |  |
| Child(ren) aged 13 to 17 | 152\* | 13.3 | **Employment Density** |  |  |
| **Age** |  |  | Medium to low | 910 | 19.9 |
| 18 to 29 | 63 | 5.5 | High | 226 | 80.1 |
| 30 to 39 | 139 | 12.2 | **Congestion Level of Commute** |  |  |
| 40 to 49 | 259 | 22.8 | Congestion to the workplace is intolerable | 461 | 40.6 |
| 50 to 64 | 504 | 44.4 | *Employment Characteristics* |  |  |
| 65 or older | 171 | 15.1 | **Employment Status and Structure** |  |  |
| **Household Annual Income** |  |  | Full-time, self-employed | 160 | 14.1 |
| Less than $25,000 | 14 | 1.2 | Part-time, self-employed | 31 | 2.7 |
| $25,000 to $49,999 | 74 | 6.5 | Full-time, not self-employed | 901 | 79.3 |
| $50,000 to $74,999 | 154 | 13.6 | Part-time, not self-employed | 44 | 3.9 |
| $75,000 to $99,999 | 163 | 14.4 | **Occupation** |  |  |
| $100,000 to $149,999 | 287 | 25.3 | Healthcare | 64 | 5.6 |
| $150,000 to $249,999 | 297 | 26.1 | Retail Sales/Food Services | 24 | 2.1 |
| $250,000 or more | 147 | 12.9 | Education/Social Services | 421 | 37.1 |
| *COVID-19 Threat* |  |  | Public Administration | 58 | 5.1 |
| **Immunocompromised Status** |  |  | Information/Finance | 108 | 9.5 |
| Someone frequently seen is immunocompromised | 426 | 37.5 | Professional/Managerial/Technical | 461 | 40.6 |
| Individual is immunocompromised | 191 | 16.8 |  |  |  |

\*294 households have children in them. The children categories do not add up to this number because some households have more than one child, who are in multiple age groups.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Discrete Predictions** | | | **Model** | | | **APEs** | |
| **Observed** | **Proposed MMDCEV[[1]](#footnote-1)** | **Constants-only** | **Proposed MMDCEV** | **Constants-only** |
| **Home** | **Work Office** | **Third Workplace** |
| 0 | 0 | 1 | 29 | 28 | 32 | -3.45% | 10.34% |
| 0 | 1 | 0 | 572 | 555 | 534 | -2.97% | -6.64% |
| 1 | 0 | 0 | 599 | 604 | 612 | 0.83% | 2.17% |
| 0 | 1 | 1 | 36 | 58 | 63 | 61.11% | 75.00% |
| 1 | 0 | 1 | 83 | 89 | 90 | 7.23% | 8.43% |
| 1 | 1 | 0 | 771 | 797 | 798 | 3.50% | 3.50% |
| 1 | 1 | 1 | 182 | 141 | 143 | -22.53% | -21.43% |
|  |  |  |  |  | **WAPE** | **5.23%** | **6.78%** |

**Table 2: Discrete Fractional Splits**

**Table 3: Number of Individuals in each Fractional Split Bin (for the group of individuals with no participation in the third WPL)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Fraction of the Month at Work Office** | **Fraction of the Month at Home** | | | | | | **APEs** | | | |
| **0 to 0.5** | | | **0.5 to 1.0** | | | **0 to 0.5** | | **0.5 to 1.0** | |
| Observed | MMDCEV | Constants-only | Observed | MMDCEV | Constants-only | MMD  CEV | Constants-only | MMD  CEV | Constants-only |
| **0 to 0.5** | 146 | 117 | 126 | 56 | 88 | 96 | 19.9% | 13.7% | 57.1% | 71.4% |
| **0.5 to 1.0** | 128 | 111 | 105 | 0 | 0 | 0 | 13.3% | 18.0% | 0% | 0% |
|  |  |  |  |  |  |  |  | **WAPE** | **23.6%** | **25.1%** |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gendered Lifestyle**  **Table 4: Sociodemographic ATEs** | **Work Struct.** |  | **Only Gendered Lifestyle Treatment** (days) | **Attribute Levels**  Alternative split (days) | | | **Overall % change** | **Attribute Levels**  Alternative split (days) | | | **Overall % change** |
| **Age (years)** | | | **18 to 29 to**  **65 and older** | **Income** | | | **< $100K to**  **≥ $250K** |
| **WPL** | **18 to 29** | **30 to 64** | **65 and older** | **<$100K** | **$100 to $250K** | **≥ $250K** |
| **Men with partner** | Part Time | Home | 4.8 | 5.2 | 4.8 | 4.5 | **-14.3%** | 4.3 | 5.0 | 5.1 | **19.6%** |
| In-person | 5.5 | 4.9 | 5.4 | 6.0 | **22.9%** | 6.0 | 5.1 | 5.3 | **-10.5%** |
| Third WPL | 0.8 | 0.9 | 0.8 | 0.5 | **-40.6%** | 0.8 | 0.8 | 0.5 | **-28.3%** |
| Full Time | Home | 9.8 | 10.5 | 9.9 | 8.9 | **-15.2%** | 9.0 | 10.3 | 10.4 | **15.2%** |
| In-person | 11.4 | 10.6 | 11.3 | 12.6 | **18.8%** | 12.2 | 10.9 | 11.1 | **-9.2%** |
| Third WPL | 0.7 | 0.9 | 0.8 | 0.5 | **-43.7%** | 0.8 | 0.8 | 0.5 | **-31.2%** |
| **Men without partner** | Part Time | Home | 4.6 | 5.1 | 4.7 | 4.4 | **-13.5%** | 4.2 | 4.9 | 5.0 | **20.6%** |
| In-person | 5.4 | 4.7 | 5.3 | 5.9 | **24.3%** | 5.8 | 5.0 | 5.2 | **-10.0%** |
| Third WPL | 1.0 | 1.2 | 1.0 | 0.7 | **-39.2%** | 1.0 | 1.1 | 0.7 | **-27.7%** |
| Full Time | Home | 9.7 | 10.3 | 9.8 | 8.8 | **-14.8%** | 8.9 | 10.2 | 10.3 | **15.7%** |
| In-person | 11.3 | 10.5 | 11.1 | 12.5 | **19.5%** | 12.1 | 10.7 | 11.0 | **-8.9%** |
| Third WPL | 1.0 | 1.2 | 1.0 | 0.7 | **-42.7%** | 1.0 | 1.1 | 0.7 | **-30.8%** |
| **Women with young child with partner** | Part Time | Home | 5.3 | 5.6 | 5.4 | 5.2 | **-7.9%** | 4.9 | 5.6 | 5.8 | **18.6%** |
| In-person | 4.1 | 3.7 | 4.1 | 4.7 | **27.8%** | 4.5 | 3.8 | 4.1 | **-10.6%** |
| Third WPL | 1.5 | 1.7 | 1.6 | 1.1 | **-34.1%** | 1.6 | 1.6 | 1.1 | **-28.0%** |
| Full Time | Home | 11.6 | 11.9 | 11.7 | 10.8 | **-9.3%** | 10.8 | 12.0 | 12.3 | **13.4%** |
| In-person | 8.8 | 8.3 | 8.6 | 10.1 | **21.8%** | 9.5 | 8.3 | 8.6 | **-9.7%** |
| Third WPL | 1.6 | 1.8 | 1.7 | 1.1 | **-38.2%** | 1.7 | 1.7 | 1.1 | **-31.4%** |
| **Women with young child without partner** | Part Time | Home | 10.0 | 10.0 | 10.0 | 9.9 | **-1.2%** | 9.8 | 10.1 | 10.1 | **3.2%** |
| In-person | 0.8 | 0.7 | 0.8 | 1.0 | **28.5%** | 1.0 | 0.7 | 0.7 | **-23.5%** |
| Third WPL | 0.2 | 0.2 | 0.2 | 0.2 | **-37.2%** | 0.2 | 0.2 | 0.1 | **-37.3%** |
| Full Time | Home | 19.9 | 20.0 | 20.0 | 19.7 | **-1.4%** | 19.7 | 20.1 | 20.2 | **2.5%** |
| In-person | 1.9 | 1.8 | 1.8 | 2.2 | **21.8%** | 2.1 | 1.7 | 1.7 | **-19.4%** |
| Third WPL | 0.2 | 0.3 | 0.2 | 0.2 | **-40.0%** | 0.2 | 0.2 | 0.1 | **-37.3%** |
| **Women without young child with partner** | Part Time | Home | 5.5 | 5.8 | 5.6 | 5.3 | **-8.6%** | 5.1 | 5.8 | 5.9 | **17.0%** |
| In-person | 4.5 | 4.1 | 4.5 | 5.0 | **21.6%** | 5.0 | 4.2 | 4.4 | **-11.8%** |
| Third WPL | 0.9 | 1.1 | 1.0 | 0.7 | **-36.2%** | 0.9 | 1.0 | 0.7 | **-29.2%** |
| Full Time | Home | 11.4 | 11.7 | 11.5 | 10.6 | **-9.6%** | 10.6 | 11.9 | 12.0 | **13.0%** |
| In-person | 9.7 | 9.2 | 9.5 | 10.8 | **16.9%** | 10.5 | 9.1 | 9.4 | **-10.3%** |
| Third WPL | 0.9 | 1.1 | 1.0 | 0.6 | **-39.7%** | 1.0 | 1.0 | 0.6 | **-31.9%** |
| **Women without young child without partner** | Part Time | Home | 5.4 | 5.7 | 5.4 | 5.2 | **-7.9%** | 4.9 | 5.6 | 5.8 | **18.1%** |
| In-person | 4.4 | 3.9 | 4.3 | 4.9 | **23.7%** | 4.8 | 4.0 | 4.3 | **-11.2%** |
| Third WPL | 1.2 | 1.4 | 1.3 | 0.9 | **-34.8%** | 1.3 | 1.3 | 0.9 | **-28.5%** |
| Full Time | Home | 11.3 | 11.6 | 11.4 | 10.6 | **-9.3%** | 10.5 | 11.8 | 12.0 | **13.6%** |
| In-person | 9.4 | 8.9 | 9.3 | 10.6 | **18.5%** | 10.2 | 8.9 | 9.2 | **-10.0%** |
| Third WPL | 1.3 | 1.4 | 1.3 | 0.9 | **-38.8%** | 1.3 | 1.4 | 0.9 | **-31.5%** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gendered Lifestyle**  **Table 5: Commute Time ATEs** | **Work Struct.** |  | **Attribute Levels**  Alternative split (days) | | | **Overall % change** | **Attribute Levels**  Alternative split (days) | | **Overall % change** |
| **In-Person WP Commute Time (minutes)** | | | **50% shorter to 50% longer** | **Third WP Commute Time (minutes)** | | **Short to Same** |
| **WPL** | 50% shorter (13.2) | Average (26.4) | 50% longer (39.6) | 50% shorter than comm. to IP WP | Same as comm. to IP WP |
| **Men with partner** | Part Time | Home | 4.6 | 4.8 | 5.0 | **8.3%** | 4.7 | 4.8 | **0.7%** |
| In-person | 5.7 | 5.4 | 5.2 | **-7.9%** | 5.5 | 5.5 | **0.5%** |
| Third WPL | 0.7 | 0.8 | 0.8 | **9.3%** | 0.8 | 0.7 | **-7.5%** |
| Full Time | Home | 9.5 | 9.9 | 10.3 | **8.3%** | 9.8 | 9.8 | **0.3%** |
| In-person | 11.8 | 11.4 | 10.9 | **-7.3%** | 11.4 | 11.4 | **0.3%** |
| Third WPL | 0.7 | 0.8 | 0.8 | **9.9%** | 0.8 | 0.7 | **-7.8%** |
| **Men without partner** | Part Time | Home | 4.5 | 4.7 | 4.8 | **8.1%** | 4.6 | 4.7 | **0.9%** |
| In-person | 5.5 | 5.3 | 5.1 | **-8.1%** | 5.3 | 5.4 | **0.7%** |
| Third WPL | 1.0 | 1.0 | 1.1 | **9.0%** | 1.0 | 1.0 | **-7.3%** |
| Full Time | Home | 9.4 | 9.8 | 10.1 | **8.2%** | 9.7 | 9.7 | **0.4%** |
| In-person | 11.7 | 11.2 | 10.8 | **-7.4%** | 11.3 | 11.3 | **0.3%** |
| Third WPL | 1.0 | 1.0 | 1.1 | **9.6%** | 1.1 | 1.0 | **-7.7%** |
| **Women with young child with partner** | Part Time | Home | 5.1 | 5.4 | 5.7 | **11.1%** | 5.3 | 5.4 | **2.2%** |
| In-person | 4.4 | 4.0 | 3.7 | **-17.0%** | 4.1 | 4.2 | **1.7%** |
| Third WPL | 1.5 | 1.6 | 1.7 | **12.5%** | 1.6 | 1.4 | **-11.4%** |
| Full Time | Home | 11.1 | 11.7 | 12.3 | **11.3%** | 11.5 | 11.6 | **1.1%** |
| In-person | 9.4 | 8.6 | 7.9 | **-15.6%** | 8.8 | 8.8 | **0.9%** |
| Third WPL | 1.6 | 1.7 | 1.8 | **13.6%** | 1.7 | 1.5 | **-12.2%** |
| **Women with young child without partner** | Part Time | Home | 9.9 | 10.0 | 10.1 | **2.3%** | 10.0 | 10.0 | **0.2%** |
| In-person | 0.9 | 0.8 | 0.7 | **-26.2%** | 0.8 | 0.8 | **0.2%** |
| Third WPL | 0.2 | 0.2 | 0.2 | **3.3%** | 0.2 | 0.2 | **-12.2%** |
| Full Time | Home | 19.8 | 20.1 | 20.3 | **2.5%** | 19.9 | 20.0 | **0.1%** |
| In-person | 2.0 | 1.7 | 1.5 | **-25.4%** | 1.9 | 1.9 | **0.1%** |
| Third WPL | 0.2 | 0.2 | 0.2 | **4.0%** | 0.2 | 0.2 | **-12.4%** |
| **Women without young child with partner** | Part Time | Home | 5.3 | 5.6 | 5.9 | **12.4%** | 5.5 | 5.6 | **1.4%** |
| In-person | 4.8 | 4.4 | 4.1 | **-16.1%** | 4.5 | 4.6 | **1.0%** |
| Third WPL | 0.9 | 1.0 | 1.0 | **14.3%** | 1.0 | 0.9 | **-12.3%** |
| Full Time | Home | 10.8 | 11.5 | 12.2 | **12.7%** | 11.3 | 11.4 | **0.7%** |
| In-person | 10.3 | 9.5 | 8.8 | **-14.7%** | 9.7 | 9.7 | **0.5%** |
| Third WPL | 0.9 | 1.0 | 1.0 | **15.6%** | 1.0 | 0.9 | **-13.0%** |
| **Women without young child without partner** | Part Time | Home | 5.1 | 5.5 | 5.8 | **12.0%** | 5.3 | 5.4 | **1.8%** |
| In-person | 4.7 | 4.3 | 3.9 | **-16.6%** | 4.3 | 4.4 | **1.4%** |
| Third WPL | 1.2 | 1.3 | 1.3 | **13.5%** | 1.3 | 1.2 | **-11.9%** |
| Full Time | Home | 10.8 | 11.5 | 12.1 | **12.4%** | 11.3 | 11.4 | **0.9%** |
| In-person | 10.0 | 9.2 | 8.5 | **-15.1%** | 9.4 | 9.5 | **0.7%** |
| Third WPL | 1.2 | 1.3 | 1.4 | **14.9%** | 1.4 | 1.2 | **-12.6%** |

**Table 6: Distraction Level ATEs**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gendered Lifestyle** | **Work Struct.** |  | **Attribute Levels**  Alternative split (days) | | | **Overall % change** | **Attribute Levels**  Alternative split (days) | | | **Overall % change** | **Attribute Levels**  Alternative split (days) | | | **Overall % change** |
| **Distraction Level HOME** | | | **No to High** | **Distraction Level In-Person WP** | | | **No to High** | **Distraction Level Third WP** | | | **No to High** |
| **WPL** | **No** | **Low** | **High** | **No** | **Low** | **High** | **No** | **Low** | **High** |
| **Men with partner** | Part Time | Home | 5.2 | 4.9 | 4.3 | **-16.9%** | 4.6 | 5.2 | 5.2 | **13.3%** | 4.6 | 4.8 | 4.9 | **5.1%** |
| In-person | 5.1 | 5.4 | 5.9 | **14.5%** | 5.7 | 5.0 | 5.0 | **-12.7%** | 5.4 | 5.6 | 5.6 | **4.6%** |
| Third WPL | 0.7 | 0.7 | 0.8 | **18.7%** | 0.7 | 0.8 | 0.8 | **15.1%** | 1.0 | 0.6 | 0.5 | **-49.5%** |
| Full Time | Home | 10.6 | 10.0 | 8.9 | **-15.8%** | 9.5 | 10.7 | 10.7 | **13.3%** | 9.7 | 9.9 | 9.9 | **2.5%** |
| In-person | 10.7 | 11.3 | 12.3 | **14.4%** | 11.8 | 10.4 | 10.4 | **-11.6%** | 11.3 | 11.5 | 11.6 | **2.2%** |
| Third WPL | 0.7 | 0.7 | 0.8 | **19.5%** | 0.7 | 0.8 | 0.8 | **16.0%** | 1.0 | 0.6 | 0.5 | **-50.8%** |
| **Men without partner** | Part Time | Home | 5.1 | 4.7 | 4.2 | **-17.3%** | 4.5 | 5.1 | 5.1 | **12.9%** | 4.5 | 4.7 | 4.8 | **6.7%** |
| In-person | 5.0 | 5.3 | 5.7 | **14.2%** | 5.6 | 4.8 | 4.8 | **-13.0%** | 5.2 | 5.5 | 5.5 | **6.1%** |
| Third WPL | 0.9 | 1.0 | 1.1 | **17.9%** | 1.0 | 1.1 | 1.1 | **14.6%** | 1.3 | 0.8 | 0.7 | **-48.4%** |
| Full Time | Home | 10.5 | 9.9 | 8.8 | **-16.0%** | 9.4 | 10.6 | 10.6 | **13.1%** | 9.5 | 9.9 | 9.9 | **3.3%** |
| In-person | 10.6 | 11.1 | 12.1 | **14.2%** | 11.7 | 10.3 | 10.3 | **-11.8%** | 11.1 | 11.5 | 11.5 | **3.0%** |
| Third WPL | 0.9 | 1.0 | 1.1 | **19.0%** | 1.0 | 1.1 | 1.1 | **15.7%** | 1.3 | 0.6 | 0.7 | **-50.2%** |
| **Women with young child with partner** | Part Time | Home | 5.8 | 5.4 | 4.9 | **-15.4%** | 5.0 | 5.7 | 5.7 | **12.7%** | 5.1 | 5.5 | 5.6 | **9.8%** |
| In-person | 3.8 | 4.1 | 4.5 | **16.0%** | 4.5 | 3.7 | 3.7 | **-18.7%** | 4.0 | 4.3 | 4.3 | **9.6%** |
| Third WPL | 1.4 | 1.5 | 1.7 | **19.5%** | 1.4 | 1.6 | 1.6 | **14.8%** | 1.9 | 1.2 | 1.0 | **-46.0%** |
| Full Time | Home | 12.4 | 11.8 | 10.7 | **-13.5%** | 10.9 | 12.3 | 12.3 | **12.9%** | 11.3 | 11.8 | 11.9 | **5.1%** |
| In-person | 8.2 | 8.7 | 9.5 | **16.6%** | 9.6 | 8.0 | 8.0 | **-17.1%** | 8.6 | 9.0 | 9.0 | **5.0%** |
| Third WPL | 1.5 | 1.6 | 1.8 | **21.4%** | 1.5 | 1.7 | 1.7 | **16.1%** | 2.1 | 1.2 | 1.1 | **-48.5%** |
| **Women with young child without partner** | Part Time | Home | 10.1 | 10.0 | 9.8 | **-3.3%** | 9.8 | 10.1 | 10.1 | **2.8%** | 9.9 | 10.0 | 10.0 | **1.2%** |
| In-person | 0.7 | 0.8 | 1.0 | **37.4%** | 1.0 | 0.7 | 0.7 | **-28.8%** | 0.8 | 0.8 | 0.8 | **1.7%** |
| Third WPL | 0.2 | 0.2 | 0.2 | **40.9%** | 0.2 | 0.2 | 0.2 | **4.1%** | 0.3 | 0.2 | 0.1 | **-51.9%** |
| Full Time | Home | 20.2 | 20.0 | 19.6 | **-3.2%** | 19.7 | 20.2 | 20.2 | **3.0%** | 19.9 | 20.0 | 20.0 | **0.6%** |
| In-person | 1.6 | 1.8 | 2.2 | **36.4%** | 2.1 | 1.5 | 1.5 | **-27.9%** | 1.8 | 1.9 | 1.9 | **0.9%** |
| Third WPL | 0.2 | 0.2 | 0.2 | **-40.7%** | 0.2 | 0.2 | 0.2 | **4.9%** | 0.3 | 0.2 | 0.1 | **-52.3%** |
| **Women without young child with partner** | Part Time | Home | 5.9 | 5.6 | 5.1 | **-14.9%** | 5.2 | 5.9 | 5.9 | **14.2%** | 5.4 | 5.6 | 5.7 | **6.0%** |
| In-person | 4.2 | 4.5 | 4.9 | **16.8%** | 5.0 | 4.1 | 4.1 | **-17.7%** | 4.4 | 4.6 | 4.7 | **5.8%** |
| Third WPL | 0.8 | 0.9 | 1.0 | **20.8%** | 0.9 | 1.0 | 1.0 | **16.9%** | 1.2 | 0.7 | 0.6 | **-48.7%** |
| Full Time | Home | 12.2 | 11.6 | 10.5 | **-13.8%** | 10.6 | 12.2 | 12.2 | **14.5%** | 11.2 | 11.5 | 11.6 | **3.0%** |
| In-person | 9.0 | 9.5 | 10.5 | **16.6%** | 10.5 | 8.8 | 8.8 | **-16.2%** | 9.6 | 9.8 | 9.8 | **2.8%** |
| Third WPL | 0.8 | 0.9 | 1.0 | **21.6%** | 0.8 | 1.0 | 1.0 | **18.3%** | 1.2 | 0.7 | 0.6 | **-50.3%** |
| **Women without young child without partner** | Part Time | Home | 5.8 | 5.5 | 4.9 | **-15.3%** | 5.1 | 5.8 | 5.8 | **13.7%** | 5.2 | 5.5 | 5.6 | **7.9%** |
| In-person | 4.1 | 4.3 | 4.7 | **16.4%** | 4.8 | 3.9 | 3.9 | **-18.2%** | 4.2 | 4.5 | 4.6 | **7.7%** |
| Third WPL | 1.1 | 1.2 | 1.3 | **19.9%** | 1.1 | 1.3 | 1.3 | **15.9%** | 1.6 | 1.0 | 0.8 | **-47.3%** |
| Full Time | Home | 12.1 | 11.5 | 10.4 | **-14.0%** | 10.6 | 12.1 | 12.1 | **14.1%** | 11.1 | 11.5 | 11.6 | **4.0%** |
| In-person | 8.8 | 9.3 | 10.2 | **16.6%** | 10.2 | 8.5 | 8.5 | **-16.6%** | 9.3 | 9.6 | 9.6 | **3.9%** |
| Third WPL | 1.1 | 1.2 | 1.4 | **21.1%** | 1.2 | 1.4 | 1.4 | **17.6%** | 1.6 | 1.0 | 0.8 | **-49.4%** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gendered Lifestyle**  **Table 6: Distraction Level ATEs** | | **Work Struct.** | | **Table 7: Occupation ATEs** | | **Attribute Levels**  Alternative split (days) | | | | | | | | | | | | | | | |
| **Occupation** | | | | | | | | | | | | | | | |
| **WPL** | | **Healthcare** | | **Retail Sales/**  **Food Services** | | | **Education** | | | **Public Administration** | | | **Information/**  **Finance** | | | **Professional/**  **Managerial/ Technical job** | |
| **Men with partner** | | Part Time | | Home | | 3.5 | | 3.5 | | | 4.0 | | | 5.9 | | | 7.1 | | | 5.0 | |
| In-person | | 6.9 | | 6.9 | | | 6.4 | | | 4.0 | | | 2.9 | | | 5.2 | |
| Third WPL | | 0.6 | | 0.6 | | | 0.6 | | | 1.1 | | | 1.0 | | | 0.9 | |
| Full Time | | Home | | 7.3 | | 7.2 | | | 8.3 | | | 12.3 | | | 14.6 | | | 10.2 | |
| In-person | | 14.1 | | 14.2 | | | 13.2 | | | 8.6 | | | 6.4 | | | 10.9 | |
| Third WPL | | 0.6 | | 0.6 | | | 0.6 | | | 1.1 | | | 1.0 | | | 0.9 | |
| **Men without partner** | | Part Time | | Home | | 3.5 | | 3.4 | | | 3.9 | | | 5.7 | | | 6.9 | | | 4.8 | |
| In-person | | 6.7 | | 6.8 | | | 6.3 | | | 3.9 | | | 2.8 | | | 5.0 | |
| Third WPL | | 0.8 | | 0.8 | | | 0.8 | | | 1.4 | | | 1.3 | | | 1.2 | |
| Full Time | | Home | | 7.2 | | 7.1 | | | 8.2 | | | 12.1 | | | 14.4 | | | 10.1 | |
| In-person | | 13.9 | | 14.1 | | | 13.1 | | | 8.5 | | | 6.3 | | | 10.7 | |
| Third WPL | | 0.8 | | 0.8 | | | 0.8 | | | 1.5 | | | 1.3 | | | 1.2 | |
| **Women with young child with partner** | | Part Time | | Home | | 4.3 | | 4.2 | | | 4.8 | | | 6.2 | | | 7.3 | | | 5.5 | |
| In-person | | 5.4 | | 5.5 | | | 5.0 | | | 2.8 | | | 2.0 | | | 3.8 | |
| Third WPL | | 1.3 | | 1.3 | | | 1.2 | | | 2.0 | | | 1.8 | | | 1.7 | |
| Full Time | | Home | | 9.3 | | 9.2 | | | 10.3 | | | 13.6 | | | 15.7 | | | 12.0 | |
| In-person | | 11.3 | | 11.4 | | | 10.4 | | | 6.2 | | | 4.4 | | | 8.2 | |
| Third WPL | | 1.4 | | 1.4 | | | 1.3 | | | 2.2 | | | 1.9 | | | 1.9 | |
| **Women with young child without partner** | | Part Time | | Home | | 9.5 | | 9.5 | | | 9.8 | | | 10.3 | | | 10.6 | | | 10.1 | |
| In-person | | 1.3 | | 1.3 | | | 1.0 | | | 0.4 | | | 0.3 | | | 0.7 | |
| Third WPL | | 0.2 | | 0.2 | | | 0.2 | | | 0.2 | | | 0.2 | | | 0.2 | |
| Full Time | | Home | | 19.0 | | 19.0 | | | 19.5 | | | 20.8 | | | 21.2 | | | 20.2 | |
| In-person | | 2.8 | | 2.8 | | | 2.3 | | | 1.0 | | | 0.6 | | | 1.5 | |
| Third WPL | | 0.2 | | 0.2 | | | 0.2 | | | 0.2 | | | 0.2 | | | 0.2 | |
| **Women without young child with partner** | | Part Time | | Home | | 4.3 | | 4.3 | | | 4.9 | | | 6.6 | | | 7.7 | | | 5.7 | |
| In-person | | 5.9 | | 5.9 | | | 5.4 | | | 3.1 | | | 2.2 | | | 4.2 | |
| Third WPL | | 0.8 | | 0.8 | | | 0.7 | | | 1.3 | | | 1.1 | | | 1.1 | |
| Full Time | | Home | | 9.0 | | 8.9 | | | 9.9 | | | 13.7 | | | 15.9 | | | 11.9 | |
| In-person | | 12.3 | | 12.4 | | | 11.4 | | | 7.0 | | | 5.0 | | | 9.1 | |
| Third WPL | | 0.8 | | 0.8 | | | 0.7 | | | 1.3 | | | 1.1 | | | 1.1 | |
| **Women without young child without partner** | | Part Time | | Home | | 4.5 | | 4.5 | | | 5.0 | | | 6.9 | | | 8.0 | | | 5.6 | |
| In-person | | 6.0 | | 6.0 | | | 5.5 | | | 3.2 | | | 2.3 | | | 4.0 | |
| Third WPL | | 0.5 | | 0.5 | | | 0.5 | | | 0.9 | | | 0.8 | | | 1.4 | |
| Full Time | | Home | | 8.9 | | 8.8 | | | 9.9 | | | 13.6 | | | 15.7 | | | 11.8 | |
| In-person | | 12.0 | | 12.1 | | | 11.1 | | | 6.7 | | | 4.8 | | | 8.8 | |
| Third WPL | | 1.1 | | 1.0 | | | 1.0 | | | 1.7 | | | 1.5 | | | 1.5 | |
| **Gendered Lifestyle**  **Table 7: Occupation ATEs** | | **Work Struct.** | |  | | **Attribute Levels**  Alternative split (days) | | | | | | | **Overall % change** | **Overall % change** | | **Attribute Levels**  Alternative split (days) | | | | **Overall % change** | | **Overall % change** | |
| **Immunocompromised (IC) Complications** | | | | | | | **Indv. is not to is IC** | **Other is not to is IC** | | **COVID Risk** | | | | **None to High** | | **None to Unknown** | |
| **WPL** | | Indv. is not IC | | Indv. is IC | | Other is not IC | Other is IC | | None | High | | Unknown |
| **Men with partner**  **Table 8: Covid Risk ATEs** | | Part Time | | Home | | 4.62 | | 5.43 | | 4.52 | 5.16 | | 17.4% | 14.0% | | 4.29 | 5.51 | | 4.99 | 28.4% | | 16.2% | |
| In-person | | 5.64 | | 4.69 | | 5.76 | 5.02 | | -16.8% | -13.0% | | 5.80 | 4.78 | | 5.51 | -17.6% | | -5.1% | |
| Third WPL | | 0.73 | | 0.88 | | 0.71 | 0.83 | | 20.0% | 16.4% | | 0.90 | 0.71 | | 0.51 | -21.5% | | -44.0% | |
| Full Time | | Home | | 9.53 | | 11.20 | | 9.23 | 10.80 | | 17.5% | 17.1% | | 8.87 | 11.56 | | 10.06 | 30.3% | | 13.4% | |
| In-person | | 11.74 | | 9.92 | | 12.08 | 10.36 | | -15.5% | -14.3% | | 12.22 | 9.76 | | 11.44 | -20.1% | | -6.4% | |
| Third WPL | | 0.72 | | 0.88 | | 0.69 | 0.84 | | 21.2% | 21.3% | | 0.91 | 0.68 | | 0.50 | -25.5% | | -45.2% | |
| **Men without partner** | | Part Time | | Home | | 4.51 | | 5.27 | | 4.41 | 5.02 | | 17.0% | 13.7% | | 4.16 | 5.38 | | 4.90 | 29.3% | | 17.7% | |
| In-person | | 5.52 | | 4.57 | | 5.64 | 4.89 | | -17.2% | -13.3% | | 5.65 | 4.67 | | 5.42 | -17.2% | | -4.0% | |
| Third WPL | | 0.97 | | 1.16 | | 0.95 | 1.10 | | 19.2% | 15.7% | | 1.19 | 0.94 | | 0.68 | -20.8% | | -43.0% | |
| Full Time | | Home | | 9.42 | | 11.04 | | 9.12 | 10.65 | | 17.2% | 16.8% | | 8.73 | 11.43 | | 9.97 | 30.9% | | 14.2% | |
| In-person | | 11.61 | | 9.78 | | 11.95 | 10.22 | | -15.7% | -14.5% | | 12.05 | 9.66 | | 11.35 | -19.8% | | -5.8% | |
| Third WPL | | 0.97 | | 1.18 | | 0.94 | 1.13 | | 20.7% | 20.7% | | 1.22 | 0.91 | | 0.68 | -25.0% | | -44.5% | |
| **Women with young child with partner** | | Part Time | | Home | | 5.24 | | 5.89 | | 5.14 | 5.71 | | 12.4% | 11.0% | | 4.83 | 6.07 | | 5.71 | 25.6% | | 18.2% | |
| In-person | | 4.28 | | 3.41 | | 4.41 | 3.66 | | -20.2% | -17.1% | | 4.37 | 3.53 | | 4.23 | -19.2% | | -3.0% | |
| Third WPL | | 1.48 | | 1.70 | | 1.45 | 1.64 | | 14.4% | 12.8% | | 1.80 | 1.40 | | 1.05 | -22.3% | | -41.7% | |
| Full Time | | Home | | 11.33 | | 12.77 | | 11.03 | 12.49 | | 12.7% | 13.3% | | 10.57 | 13.27 | | 11.99 | 25.5% | | 13.4% | |
| In-person | | 9.09 | | 7.41 | | 9.45 | 7.73 | | -18.5% | -18.2% | | 9.47 | 7.32 | | 8.91 | -22.7% | | -5.8% | |
| Third WPL | | 1.57 | | 1.82 | | 1.52 | 1.78 | | 15.8% | 16.7% | | 1.96 | 1.42 | | 1.10 | -27.7% | | -44.0% | |
| **Women with young child without partner** | | Part Time | | Home | | 9.92 | | 10.18 | | 9.89 | 10.10 | | 2.6% | 2.0% | | 9.78 | 10.23 | | 10.07 | 4.7% | | 3.0% | |
| In-person | | 0.88 | | 0.61 | | 0.91 | 0.70 | | -30.3% | -22.9% | | 0.96 | 0.61 | | 0.80 | -36.8% | | -16.9% | |
| Third WPL | | 0.20 | | 0.21 | | 0.20 | 0.21 | | 3.8% | 3.1% | | 0.26 | 0.16 | | 0.13 | -38.9% | | -51.2% | |
| Full Time | | Home | | 19.85 | | 20.41 | | 19.76 | 20.27 | | 2.8% | 2.6% | | 19.57 | 20.58 | | 20.07 | 5.2% | | 2.6% | |
| In-person | | 1.95 | | 1.38 | | 2.04 | 1.52 | | -29.4% | -25.2% | | 2.17 | 1.27 | | 1.80 | -41.2% | | -16.9% | |
| Third WPL | | 0.20 | | 0.21 | | 0.20 | 0.21 | | 4.6% | 4.2% | | 0.27 | 0.15 | | 0.13 | -43.9% | | -51.4% | |
| **Women without young child with partner** | | Part Time | | Home | | 5.40 | | 6.15 | | 5.32 | 5.90 | | 13.9% | 10.9% | | 5.05 | 6.28 | | 5.81 | 24.4% | | 15.1% | |
| In-person | | 4.69 | | 3.80 | | 4.80 | 4.10 | | -19.1% | -14.5% | | 4.84 | 3.87 | | 4.57 | -20.0% | | -5.6% | |
| Third WPL | | 0.90 | | 1.05 | | 0.88 | 1.00 | | 16.5% | 13.1% | | 1.11 | 0.85 | | 0.62 | -23.6% | | -44.1% | |
| Full Time | | Home | | 11.12 | | 12.71 | | 10.85 | 12.31 | | 14.3% | 13.4% | | 10.43 | 13.12 | | 11.69 | 25.8% | | 12.1% | |
| In-person | | 9.98 | | 8.23 | | 10.28 | 8.67 | | -17.6% | -15.7% | | 10.44 | 8.07 | | 9.70 | -22.7% | | -7.1% | |
| Third WPL | | 0.90 | | 1.06 | | 0.87 | 1.02 | | 18.1% | 17.4% | | 1.13 | 0.81 | | 0.62 | -27.9% | | -45.5% | |
| **Women without young child without partner** | | Part Time | | Home | | 5.27 | | 5.98 | | 5.27 | 5.74 | | 13.4% | 8.9% | | 4.89 | 6.13 | | 5.71 | 25.4% | | 16.9% | |
| In-person | | 4.53 | | 3.64 | | 4.53 | 3.93 | | -19.7% | -13.2% | | 4.65 | 3.74 | | 4.45 | -19.5% | | -4.3% | |
| Third WPL | | 1.20 | | 1.38 | | 1.20 | 1.32 | | 15.6% | 10.4% | | 1.47 | 1.13 | | 0.84 | -22.8% | | -42.8% | |
| Full Time | | Home | | 11.06 | | 12.59 | | 10.78 | 12.22 | | 13.9% | 13.4% | | 10.33 | 13.04 | | 11.67 | 26.3% | | 13.0% | |
| In-person | | 9.72 | | 7.97 | | 10.04 | 8.39 | | -18.0% | -16.4% | | 10.14 | 7.84 | | 9.49 | -22.7% | | -6.5% | |
| Third WPL | | 1.22 | | 1.44 | | 1.18 | 1.39 | | 17.4% | 17.1% | | 1.53 | 1.11 | | 0.85 | -27.4% | | -44.6% | |

1. MMDCEV = Mixed Multiple Discrete-Continuous Extreme Value [↑](#footnote-ref-1)