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Supplementary Table S1. U.S. and U.K. Average Treatment Effects (ATE)

|  | U.S. |  |  | U.K. |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Odds Ratio | $95 \%$ CI |  | Odds Ratio | $95 \%$ CI |  |
| Smoking at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.439 | 1.097 | 1.887 | 1.595 | 1.258 | 2.024 |
| Single Parent at Age 2/3 | 1.916 | 1.416 | 2.591 | 1.624 | 1.261 | 2.092 |
| Single Parent at Age 4/5 | 1.613 | 1.175 | 2.214 | 1.230 | 0.942 | 1.606 |
| Single Parent at Age 6 | 1.151 | 0.823 | 1.610 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.444 | 1.026 | 2.030 | 1.659 | 1.279 | 2.151 |
| Single Parent at Age 10 | 1.306 | 0.937 | 1.821 | --- | --- | --- |
| Single Parent at Age 11/12 | 0.991 | 0.707 | 1.390 | 1.499 | 1.252 | 1.795 |
| Single Parent at Age 14 | 1.620 | 1.176 | 2.231 | 1.195 | 0.921 | 1.550 |
| Drinking at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.222 | 0.927 | 1.610 | 1.136 | 0.954 | 1.353 |
| Single Parent at Age 2/3 | 1.422 | 1.050 | 1.925 | 1.220 | 0.981 | 1.517 |
| Single Parent at Age 4/5 | 1.427 | 1.041 | 1.956 | 1.446 | 1.172 | 1.784 |
| Single Parent at Age 6 | 1.075 | 0.785 | 1.474 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.371 | 0.973 | 1.931 | 1.238 | 1.004 | 1.528 |
| Single Parent at Age 10 | 1.528 | 1.106 | 2.113 | --- | --- | -- |
| Single Parent at Age 11/12 | 1.211 | 0.858 | 1.710 | 1.212 | 1.031 | 1.424 |
| Single Parent at Age 14 | 1.588 | 1.160 | 2.175 | 1.444 | 1.216 | 1.716 |
| Marijuana Use at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.486 | 1.036 | 2.132 | 1.768 | 1.226 | 2.549 |
| Single Parent at Age 2/3 | 1.690 | 1.114 | 2.564 | 1.742 | 1.136 | 2.673 |
| Single Parent at Age 4/5 | 2.195 | 1.428 | 3.373 | 1.310 | 0.812 | 2.111 |
| Single Parent at Age 6 | 1.508 | 0.979 | 2.321 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.553 | 0.977 | 2.470 | 2.455 | 1.662 | 3.625 |
| Single Parent at Age 10 | 1.390 | 0.868 | 2.224 | --- | --- | --- |
| Single Parent at Age 11/12 | 1.629 | 1.019 | 2.604 | 1.787 | 1.317 | 2.423 |
| Single Parent at Age 14 | 1.950 | 1.258 | 3.023 | 0.854 | 0.601 | 1.214 |

Note: Youth's mother's partnership status is measured at ages $0,2,4,6,8,10,12$, and 14 in the U.S. and ages $0,3,5,7,11$, and 14 in the U.K.

Supplementary Table S2. Comparison of U.S. and U.K. Beta Coefficients

|  | U.S. |  | U.K. |  | Comparison |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Beta | SE | Beta | SE | Z | P-Value |
| Smoking at Age 14 |  |  |  |  |  |  |
| $\quad$ Single Parent at Age 0 | 0.364 | 0.138 | 0.467 | 0.121 | -0.563 | 0.574 |
| Single Parent at Age 14 | 0.482 | 0.163 | 0.178 | 0.132 | 1.448 | 0.148 |
| Drinking at Age 14 |  |  |  |  |  |  |
| $\quad$ Single Parent at Age 0 | 0.201 | 0.141 | 0.128 | 0.089 | 0.437 | 0.662 |
| $\quad$ Single Parent at Age 14 | 0.463 | 0.160 | 0.368 | 0.088 | 0.520 | 0.603 |
| Marijuana Use at Age 14 |  |  |  |  |  |  |
| $\quad$ Single Parent at Age 0 | 0.396 | 0.184 | 0.570 | 0.186 | -0.664 | 0.507 |
| Single Parent at Age 14 | 0.668 | 0.224 | -0.158 | 0.178 | 2.887 | 0.004 |

Note: All coefficients and standard errors are based on the average treatment effect estimates.

Supplementary Table S3. U.S. and U.K. Average Treatment Effects on the Treated (ATT)

|  | U.S. |  |  | U.K. |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Odds Ratio | $95 \%$ CI |  | Odds Ratio | $95 \%$ CI |  |
| Smoking at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.147 | 0.938 | 1.402 | 1.201 | 0.989 | 1.459 |
| Single Parent at Age 2/3 | 1.064 | 0.840 | 1.348 | 1.106 | 0.845 | 1.447 |
| Single Parent at Age 4/5 | 1.232 | 0.922 | 1.647 | 1.103 | 0.814 | 1.495 |
| Single Parent at Age 6 | 0.764 | 0.573 | 1.018 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.018 | 0.742 | 1.397 | 1.248 | 0.896 | 1.737 |
| Single Parent at Age 10 | 0.608 | 0.430 | 0.858 | --- | --- | --- |
| Single Parent at Age 11/12 | 0.702 | 0.488 | 1.011 | 1.389 | 1.077 | 1.791 |
| Single Parent at Age 14 | 1.208 | 0.839 | 1.740 | 0.937 | 0.724 | 1.213 |
| Drinking at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.096 | 0.895 | 1.343 | 1.058 | 0.891 | 1.257 |
| Single Parent at Age 2/3 | 1.025 | 0.808 | 1.299 | 1.027 | 0.822 | 1.283 |
| Single Parent at Age 4/5 | 0.960 | 0.727 | 1.268 | 0.986 | 0.779 | 1.246 |
| Single Parent at Age 6 | 0.930 | 0.693 | 1.248 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.029 | 0.744 | 1.423 | 1.201 | 0.956 | 1.510 |
| Single Parent at Age 10 | 0.858 | 0.601 | 1.224 | --- | --- | --- |
| Single Parent at Age 11/12 | 0.720 | 0.505 | 1.027 | 1.025 | 0.842 | 1.248 |
| Single Parent at Age 14 | 0.987 | 0.693 | 1.406 | 0.923 | 0.764 | 1.115 |
| Marijuana Use at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.143 | 0.862 | 1.516 | 1.086 | 0.782 | 1.508 |
| Single Parent at Age 2/3 | 1.173 | 0.835 | 1.650 | 1.401 | 0.882 | 2.224 |
| Single Parent at Age 4/5 | 1.646 | 1.057 | 2.562 | 1.133 | 0.675 | 1.901 |
| Single Parent at Age 6 | 1.095 | 0.734 | 1.633 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.349 | 0.818 | 2.225 | 1.602 | 0.928 | 2.763 |
| Single Parent at Age 10 | 0.735 | 0.462 | 1.170 | --- | --- | --- |
| Single Parent at Age 11/12 | 0.924 | 0.540 | 1.581 | 1.575 | 1.011 | 2.455 |
| Single Parent at Age 14 | 1.777 | 1.107 | 2.854 | 0.758 | 0.533 | 1.079 |

Note: Youth's mother's partnership status is measured at ages $0,2,4,6,8,10,12$, and 14 in the U.S. and ages $0,3,5,7,11$, and 14 in the U.K.

Supplementary Table S4. U.S. and U.K. Average Treatment Effects on the Untreated (ATU)

|  | U.S. |  |  | U.K. |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Odds Ratio | $95 \%$ CI |  | Odds Ratio | $95 \%$ CI |  |
| Smoking at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.626 | 1.245 | 2.124 | 1.725 | 1.323 | 2.249 |
| Single Parent at Age 2/3 | 2.113 | 1.588 | 2.813 | 1.899 | 1.446 | 2.494 |
| Single Parent at Age 4/5 | 1.865 | 1.354 | 2.569 | 1.285 | 0.946 | 1.745 |
| Single Parent at Age 6 | 1.451 | 1.040 | 2.024 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.678 | 1.216 | 2.315 | 1.816 | 1.377 | 2.395 |
| Single Parent at Age 10 | 1.809 | 1.285 | 2.545 | --- | --- | --- |
| Single Parent at Age 11/12 | 1.172 | 0.814 | 1.688 | 1.569 | 1.283 | 1.920 |
| Single Parent at Age 14 | 1.800 | 1.254 | 2.584 | 1.375 | 1.036 | 1.823 |
| Drinking at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.292 | 0.988 | 1.689 | 1.148 | 0.950 | 1.387 |
| Single Parent at Age 2/3 | 1.419 | 1.063 | 1.893 | 1.287 | 1.027 | 1.614 |
| Single Parent at Age 4/5 | 1.588 | 1.160 | 2.174 | 1.559 | 1.235 | 1.969 |
| Single Parent at Age 6 | 1.223 | 0.882 | 1.696 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.437 | 1.027 | 2.010 | 1.275 | 1.009 | 1.611 |
| Single Parent at Age 10 | 1.839 | 1.311 | 2.580 | --- | --- | --- |
| Single Parent at Age 11/12 | 1.426 | 0.995 | 2.045 | 1.284 | 1.072 | 1.539 |
| Single Parent at Age 14 | 1.830 | 1.281 | 2.614 | 1.597 | 1.301 | 1.961 |
| Marijuana Use at Age 14 |  |  |  |  |  |  |
| Single Parent at Age 0 | 1.649 | 1.158 | 2.347 | 2.015 | 1.348 | 3.011 |
| Single Parent at Age 2/3 | 1.711 | 1.148 | 2.550 | 1.870 | 1.208 | 2.896 |
| Single Parent at Age 4/5 | 2.327 | 1.528 | 3.543 | 1.395 | 0.797 | 2.444 |
| Single Parent at Age 6 | 1.795 | 1.146 | 2.812 | --- | --- | --- |
| Single Parent at Age 7/8 | 1.703 | 1.093 | 2.653 | 2.661 | 1.789 | 3.957 |
| Single Parent at Age 10 | 1.945 | 1.215 | 3.115 | --- | --- | --- |
| Single Parent at Age 11/12 | 2.031 | 1.243 | 3.319 | 1.883 | 1.352 | 2.624 |
| Single Parent at Age 14 | 1.935 | 1.153 | 3.245 | 0.983 | 0.608 | 1.588 |

Note: Youth's mother's partnership status is measured at ages $0,2,4,6,8,10,12$, and 14 in the U.S. and ages $0,3,5,7,11$, and 14 in the U.K.

## Supplementary Figures

The following supplementary figures show the distribution of background characteristics before and after applying each of our weighting strategies. Figures S1 and S2 show the U.S. sample and respectively use weights constructed to estimate effects at the first and final time-points. Figures S3 and S4 show the U.K. sample with their weights for the first and final time-points. These figures demonstrate how the populations that our estimates refer to are different for the different weighting strategies. There are more variables shown in Figures S2 and S4 because the weighting refers to a later time-point and has to account for a richer background history. The distribution of population characteristics for the ATE and ATU weighting strategies remains very similar to the observed population. This is because the ATE weighting is intended to resemble the general population, and because single parenthood is a minority experience so the population living with two parents has largely similar characteristics to the general population. Clear differences emerge for the ATT weighting strategy, which is intended to resemble the population of adolescents who actually do live with single parents. This population tended to be more likely to be black, have less maternal education, have younger mothers, and have more consistent histories of poverty and single parenthood.

Figure S1. Sample Description with Age 0 Weighting, U.S. Sample


Note: ATT = average treatment effect on treated; ATU = average treatment effect on untreated; ATE = average treatment effect.

Figure S2. Sample Description with Age 14 Weighting, U.S. Sample


Note: ATT = average treatment effect on treated; ATU = average treatment effect on untreated; ATE = average treatment effect.

Figure S3. Sample Description with Wave 1 Weighting, U.K. Sample


Note: ATT = average treatment effect on treated; ATU $=$ average treatment effect on untreated; ATE $=$ average treatment effect.

Figure S4. Sample Description with Wave 6 Weighting, U.K. Sample


Note: ATT = average treatment effect on treated; ATU = average treatment effect on untreated; ATE = average treatment effect.

