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# Zero Inflated Poisson Regression in AI\_Total:

<https://github.com/meettyj/MSM-Discrimination-on-Twitter/blob/master/results/regression/AI_Total.md#zero-inflated-poisson-regression>

## (1.1) General

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -0.39463 | 0.52842 | -0.747 | 0.4552 |
| agef1y | 0.13007 | 0.01958 | 6.643 | 3.08e-11 \*\*\* |
| eduf1 | 0.33057 | 0.03434 | 9.628 | < 2e-16 \*\*\* |
| race\_hispanic | 0.04319 | 0.03860 | 1.119 | 0.2633 |
| race\_black | -0.41454 | 0.04574 | -9.062 | < 2e-16 \*\*\* |
| race\_asian | -0.51684 | 0.06692 | -7.723 | 1.13e-14 \*\*\* |
| race\_mixed\_or\_other | 0.02438 | 0.05830 | 0.418 | 0.6758 |
| income\_high | -0.02923 | 0.04191 | -0.697 | 0.4856 |
| income\_medium | 0.08946 | 0.03997 | 2.238 | 0.0252 \* |
| Zero-inflation model | (Intercept) | -2.057e+00 | 7.411e+00 | -0.278 | 0.7813 |
| agef1y | 4.239e-03 | 2.752e-01 | 0.015 | 0.9877 |
| eduf1 | -1.631e-01 | 5.167e-01 | -0.316 | 0.7522 |
| race\_hispanic | 2.429e-02 | 6.328e-01 | 0.038 | 0.9694 |
| race\_black | 4.885e-01 | 6.115e-01 | 0.799 | 0.4244 |
| race\_asian | 1.182e+00 | 6.980e-01 | 1.694 | 0.0904 . |
| race\_mixed\_or\_other | -1.537e+01 | 1.678e+03 | -0.009 | 0.9927 |
| income\_high | -4.780e-01 | 5.886e-01 | -0.812 | 0.4167 |
| income\_medium | -1.602e-01 | 5.188e-01 | -0.309 | 0.7575 |

## (1.2) AWM\_SSSOM\_Rac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 1.33341 | 0.59054 | 2.258 | 0.02395 \* |
| agef1y | 0.12088 | 0.01971 | 6.133 | 8.64e-10 \*\*\* |
| eduf1 | 0.31731 | 0.03443 | 9.215 | < 2e-16 \*\*\* |
| race\_hispanic | 0.06967 | 0.03880 | 1.796 | 0.07256 . |
| race\_black | -0.34048 | 0.04700 | -7.244 | 4.35e-13 \*\*\* |
| race\_asian | -0.44712 | 0.06774 | -6.601 | 4.09e-11 \*\*\* |
| race\_mixed\_or\_other | 0.03652 | 0.05829 | 0.626 | 0.53102 |
| income\_high | -0.01437 | 0.04203 | -0.342 | 0.73242 |
| income\_medium | 0.11020 | 0.04011 | 2.747 | 0.00601 \*\* |
| AWM\_SSSOM\_Rac | -2.96656 | 0.45171 | -6.567 | 5.12e-11 \*\*\* |
| Zero-inflation model | (Intercept) | 1.56035 | 8.24066 | 0.189 | 0.8498 |
| agef1y | -0.01970 | 0.27695 | -0.071 | 0.9433 |
| eduf1 | -0.17425 | 0.51853 | -0.336 | 0.7368 |
| race\_hispanic | 0.07199 | 0.63534 | 0.113 | 0.9098 |
| race\_black | 0.61987 | 0.62520 | 0.991 | 0.3215 |
| race\_asian | 1.29734 | 0.70857 | 1.831 | 0.0671 . |
| race\_mixed\_or\_other | -15.34751 | 1672.46869 | -0.009 | 0.9927 |
| income\_high | -0.48757 | 0.58989 | -0.827 | 0.4085 |
| income\_medium | -0.14193 | 0.52029 | -0.273 | 0.7850 |
| AWM\_SSSOM\_Rac | -5.92359 | 5.94848 | -0.996 | 0.3193 |

## (1.3) AWM\_SSSOM\_Hom

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 0.89417 | 0.58400 | 1.531 | 0.1257 |
| agef1y | 0.12001 | 0.01967 | 6.102 | 1.05e-09 \*\*\* |
| eduf1 | 0.31139 | 0.03452 | 9.020 | < 2e-16 \*\*\* |
| race\_hispanic | 0.08292 | 0.03933 | 2.108 | 0.0350 \* |
| race\_black | -0.37617 | 0.04627 | -8.130 | 4.30e-16 \*\*\* |
| race\_asian | -0.53056 | 0.06697 | -7.923 | 2.32e-15 \*\*\* |
| race\_mixed\_or\_other | 0.09288 | 0.05963 | 1.558 | 0.1193 |
| income\_high | -0.04639 | 0.04195 | -1.106 | 0.2689 |
| income\_medium | 0.10256 | 0.04006 | 2.560 | 0.0105 \* |
| AWM\_SSSOM\_Hom | -0.67710 | 0.13123 | -5.160 | 2.47e-07 \*\*\* |
| Zero-inflation model | (Intercept) | -10.90712 | 8.58236 | -1.271 | 0.2038 |
| agef1y | 0.11002 | 0.27887 | 0.395 | 0.6932 |
| eduf1 | -0.03511 | 0.52529 | -0.067 | 0.9467 |
| race\_hispanic | -0.30323 | 0.66230 | -0.458 | 0.6471 |
| race\_black | 0.23115 | 0.63319 | 0.365 | 0.7151 |
| race\_asian | 1.27031 | 0.70724 | 1.796 | 0.0725 . |
| race\_mixed\_or\_other | -15.74953 | 1642.81447 | -0.010 | 0.9924 |
| income\_high | -0.41124 | 0.59556 | -0.691 | 0.4899 |
| income\_medium | -0.22121 | 0.52714 | -0.420 | 0.6748 |
| AWM\_SSSOM\_Hom | 3.92643 | 1.90699 | 2.059 | 0.0395 \* |

## (1.4) AWM\_Rac\_grid

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -0.18095 | 0.52780 | -0.343 | 0.7317 |
| agef1y | 0.12764 | 0.01951 | 6.542 | 6.08e-11 \*\*\* |
| eduf1 | 0.30576 | 0.03464 | 8.827 | < 2e-16 \*\*\* |
| race\_hispanic | 0.09482 | 0.03916 | 2.422 | 0.0155 \* |
| race\_black | -0.36184 | 0.04605 | -7.858 | 3.92e-15 \*\*\* |
| race\_asian | -0.48529 | 0.06727 | -7.215 | 5.41e-13 \*\*\* |
| race\_mixed\_or\_other | 0.07002 | 0.05840 | 1.199 | 0.2305 |
| income\_high | -0.08053 | 0.04213 | -1.911 | 0.0560 . |
| income\_medium | 0.06576 | 0.04005 | 1.642 | 0.1006 |
| AWM\_Rac\_grid | -0.52889 | 0.06532 | -8.097 | 5.64e-16 \*\*\* |
| Zero-inflation model | (Intercept) | -2.30182 | 7.42416 | -0.310 | 0.7565 |
| agef1y | 0.01012 | 0.27552 | 0.037 | 0.9707 |
| eduf1 | -0.16914 | 0.51805 | -0.326 | 0.7440 |
| race\_hispanic | -0.02974 | 0.64102 | -0.046 | 0.9630 |
| race\_black | 0.44247 | 0.61927 | 0.715 | 0.4749 |
| race\_asian | 1.16451 | 0.69830 | 1.668 | 0.0954 . |
| race\_mixed\_or\_other | -15.42039 | 1672.38474 | -0.009 | 0.9926 |
| income\_high | -0.46533 | 0.59008 | -0.789 | 0.4304 |
| income\_medium | -0.16832 | 0.51934 | -0.324 | 0.7459 |
| AWM\_Rac\_grid | 0.37130 | 0.71122 | 0.522 | 0.6016 |

## (1.5) AWM\_Hom\_grid

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -0.22086 | 0.52960 | -0.417 | 0.6767 |
| agef1y | 0.12431 | 0.01963 | 6.332 | 2.42e-10 \*\*\* |
| eduf1 | 0.34173 | 0.03431 | 9.960 | < 2e-16 \*\*\* |
| race\_hispanic | 0.04554 | 0.03880 | 1.174 | 0.2406 |
| race\_black | -0.39807 | 0.04574 | -8.703 | < 2e-16 \*\*\* |
| race\_asian | -0.51035 | 0.06830 | -7.472 | 7.90e-14 \*\*\* |
| race\_mixed\_or\_other | 0.02219 | 0.05839 | 0.380 | 0.7039 |
| income\_high | -0.04013 | 0.04205 | -0.955 | 0.3398 |
| income\_medium | 0.07635 | 0.03996 | 1.911 | 0.0561 . |
| AWM\_Hom\_grid | -0.01392 | 0.03145 | -0.443 | 0.6581 |
| Zero-inflation model | (Intercept) | -2.019e+00 | 7.511e+00 | -0.269 | 0.7881 |
| agef1y | 6.931e-03 | 2.789e-01 | 0.025 | 0.9802 |
| eduf1 | -7.150e-02 | 5.203e-01 | -0.137 | 0.8907 |
| race\_hispanic | 2.999e-02 | 6.338e-01 | 0.047 | 0.9623 |
| race\_black | 3.868e-01 | 6.232e-01 | 0.621 | 0.5348 |
| race\_asian | 1.201e+00 | 7.045e-01 | 1.705 | 0.0883 . |
| race\_mixed\_or\_other | -1.540e+01 | 1.676e+03 | -0.009 | 0.9927 |
| income\_high | -5.230e-01 | 5.927e-01 | -0.882 | 0.3775 |
| income\_medium | -2.954e-01 | 5.302e-01 | -0.557 | 0.5774 |
| AWM\_Hom\_grid | -8.905e-02 | 3.870e-01 | -0.230 | 0.8180 |

## (1.6) AWM\_Zip\_Rac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1. Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 0.18349 | 0.53830 | 0.341 | 0.73320 |
| agef1y | 0.12494 | 0.01968 | 6.349 | 2.17e-10 \*\*\* |
| eduf1 | 0.29887 | 0.03475 | 8.602 | < 2e-16 \*\*\* |
| race\_hispanic | 0.12535 | 0.04056 | 3.091 | 0.00200 \*\* |
| race\_black | -0.36265 | 0.04638 | -7.819 | 5.32e-15 \*\*\* |
| race\_asian | -0.50505 | 0.06705 | -7.533 | 4.97e-14 \*\*\* |
| race\_mixed\_or\_other | 0.09615 | 0.05911 | 1.627 | 0.10382 |
| income\_high | -0.05155 | 0.04201 | -1.227 | 0.21982 |
| income\_medium | 0.11277 | 0.04016 | 2.808 | 0.00499 \*\* |
| AWM\_Zip\_Rac | -0.49442 | 0.07770 | -6.363 | 1.98e-10 \*\*\* |
| Zero-inflation model | (Intercept) | -5.28042 | 7.72560 | -0.683 | 0.4943 |
| agef1y | 0.07498 | 0.27738 | 0.270 | 0.7869 |
| eduf1 | -0.08471 | 0.52131 | -0.163 | 0.8709 |
| race\_hispanic | -0.29837 | 0.68420 | -0.436 | 0.6628 |
| race\_black | 0.29906 | 0.63252 | 0.473 | 0.6364 |
| race\_asian | 1.15838 | 0.69946 | 1.656 | 0.0977 . |
| race\_mixed\_or\_other | -15.61915 | 1651.41937 | -0.009 | 0.9925 |
| income\_high | -0.48255 | 0.58998 | -0.818 | 0.4134 |
| income\_medium | -0.25691 | 0.52610 | -0.488 | 0.6253 |
| AWM\_Zip\_Rac | 1.47511 | 1.08212 | 1.363 | 0.1728 |

## (1.7) AWM\_Zip\_Hom

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 0.79324 | 0.55750 | 1.423 | 0.15478 |
| agef1y | 0.12426 | 0.01967 | 6.317 | 2.66e-10 \*\*\* |
| eduf1 | 0.29737 | 0.03475 | 8.557 | < 2e-16 \*\*\* |
| race\_hispanic | 0.12162 | 0.04012 | 3.032 | 0.00243 \*\* |
| race\_black | -0.36472 | 0.04621 | -7.893 | 2.94e-15 \*\*\* |
| race\_asian | -0.50437 | 0.06702 | -7.525 | 5.25e-14 \*\*\* |
| race\_mixed\_or\_other | 0.08423 | 0.05875 | 1.434 | 0.15165 |
| income\_high | -0.05925 | 0.04215 | -1.406 | 0.15978 |
| income\_medium | 0.09054 | 0.04002 | 2.262 | 0.02369 \* |
| AWM\_Zip\_Hom | -0.62035 | 0.08990 | -6.901 | 5.18e-12 \*\*\* |
| Zero-inflation model | (Intercept) | -5.3245 | 7.9120 | -0.673 | 0.5010 |
| agef1y | 0.0403 | 0.2744 | 0.147 | 0.8832 |
| eduf1 | -0.1173 | 0.5174 | -0.227 | 0.8207 |
| race\_hispanic | -0.1740 | 0.6612 | -0.263 | 0.7924 |
| race\_black | 0.3937 | 0.6200 | 0.635 | 0.5254 |
| race\_asian | 1.1773 | 0.7004 | 1.681 | 0.0928 . |
| race\_mixed\_or\_other | -15.4885 | 1664.2114 | -0.009 | 0.9926 |
| income\_high | -0.4524 | 0.5880 | -0.769 | 0.4417 |
| income\_medium | -0.1852 | 0.5204 | -0.356 | 0.7220 |
| AWM\_Zip\_Hom | 1.3696 | 1.2330 | 1.111 | 0.2667 |

# Zero Inflated Poisson Regression in AI\_Condom:

<https://github.com/meettyj/MSM-Discrimination-on-Twitter/blob/master/results/regression/AI_Condom.md#zero-inflated-poisson-regression>

## (2.1) General

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 4.07818 | 0.90146 | 4.524 | 6.07e-06 \*\*\* |
| agef1y | -0.07695 | 0.03371 | -2.283 | 0.022440 \* |
| eduf1 | -0.01269 | 0.06893 | -0.184 | 0.853882 |
| race\_hispanic | 0.45095 | 0.07305 | 6.174 | 6.68e-10 \*\*\* |
| race\_black | 0.11477 | 0.08339 | 1.376 | 0.168704 |
| race\_asian | 0.44476 | 0.10802 | 4.118 | 3.83e-05 \*\*\* |
| race\_mixed\_or\_other | 0.07075 | 0.12497 | 0.566 | 0.571280 |
| income\_high | 0.27739 | 0.07478 | 3.709 | 0.000208 \*\*\* |
| income\_medium | -0.05627 | 0.07598 | -0.741 | 0.458962 |
| Zero-inflation model | (Intercept) | -4.5525 | 4.9790 | -0.914 | 0.3605 |
| agef1y | 0.1174 | 0.1845 | 0.637 | 0.5243 |
| eduf1 | 0.1154 | 0.3434 | 0.336 | 0.7368 |
| race\_hispanic | 0.4417 | 0.4048 | 1.091 | 0.2753 |
| race\_black | 0.6305 | 0.4177 | 1.510 | 0.1312 |
| race\_asian | 1.1365 | 0.5378 | 2.113 | 0.0346 \* |
| race\_mixed\_or\_other | 0.4877 | 0.6121 | 0.797 | 0.4256 |
| income\_high | 0.4142 | 0.3976 | 1.042 | 0.2976 |
| income\_medium | 0.5782 | 0.3781 | 1.529 | 0.1262 |

## (2.2) AWM\_SSSOM\_Rac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 5.723955 | 1.021179 | 5.605 | 2.08e-08 \*\*\* |
| agef1y | -0.090623 | 0.033931 | -2.671 | 0.007566 \*\* |
| eduf1 | -0.008318 | 0.069055 | -0.120 | 0.904126 |
| race\_hispanic | 0.472684 | 0.073455 | 6.435 | 1.23e-10 \*\*\* |
| race\_black | 0.166746 | 0.084795 | 1.966 | 0.049246 \* |
| race\_asian | 0.487490 | 0.108903 | 4.476 | 7.59e-06 \*\*\* |
| race\_mixed\_or\_other | 0.095058 | 0.125356 | 0.758 | 0.448269 |
| income\_high | 0.299410 | 0.075415 | 3.970 | 7.18e-05 \*\*\* |
| income\_medium | -0.042120 | 0.076241 | -0.552 | 0.580639 |
| AWM\_SSSOM\_Rac | -2.554835 | 0.753270 | -3.392 | 0.000695 \*\*\* |
| Zero-inflation model | (Intercept) | -1.9498 | 5.4374 | -0.359 | 0.7199 |
| agef1y | 0.1079 | 0.1852 | 0.582 | 0.5604 |
| eduf1 | 0.1072 | 0.3443 | 0.311 | 0.7555 |
| race\_hispanic | 0.4625 | 0.4063 | 1.138 | 0.2550 |
| race\_black | 0.7355 | 0.4283 | 1.717 | 0.0859 . |
| race\_asian | 1.2123 | 0.5450 | 2.224 | 0.0261 \* |
| race\_mixed\_or\_other | 0.4960 | 0.6131 | 0.809 | 0.4185 |
| income\_high | 0.4121 | 0.3983 | 1.035 | 0.3008 |
| income\_medium | 0.5970 | 0.3793 | 1.574 | 0.1155 |
| AWM\_SSSOM\_Rac | -4.6570 | 3.9058 | -1.192 | 0.2331 |

## (2.3) AWM\_SSSOM\_Hom

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 6.49539 | 0.98985 | 6.562 | 5.31e-11 \*\*\* |
| agef1y | -0.09067 | 0.03396 | -2.670 | 0.007586 \*\* |
| eduf1 | -0.04194 | 0.06904 | -0.607 | 0.543563 |
| race\_hispanic | 0.53612 | 0.07414 | 7.231 | 4.80e-13 \*\*\* |
| race\_black | 0.19189 | 0.08396 | 2.286 | 0.022279 \* |
| race\_asian | 0.41615 | 0.10859 | 3.832 | 0.000127 \*\*\* |
| race\_mixed\_or\_other | 0.17137 | 0.12555 | 1.365 | 0.172260 |
| income\_high | 0.25923 | 0.07440 | 3.484 | 0.000493 \*\*\* |
| income\_medium | 0.03481 | 0.07785 | 0.447 | 0.654821 |
| AWM\_SSSOM\_Hom | -1.38526 | 0.22854 | -6.061 | 1.35e-09 \*\*\* |
| Zero-inflation model | (Intercept) | -4.9053 | 5.4891 | -0.894 | 0.3715 |
| agef1y | 0.1201 | 0.1855 | 0.647 | 0.5174 |
| eduf1 | 0.1188 | 0.3445 | 0.345 | 0.7302 |
| race\_hispanic | 0.4308 | 0.4122 | 1.045 | 0.2959 |
| race\_black | 0.6222 | 0.4220 | 1.474 | 0.1404 |
| race\_asian | 1.1425 | 0.5391 | 2.119 | 0.0341 \* |
| race\_mixed\_or\_other | 0.4761 | 0.6180 | 0.770 | 0.4411 |
| income\_high | 0.4215 | 0.3999 | 1.054 | 0.2918 |
| income\_medium | 0.5771 | 0.3786 | 1.524 | 0.1274 |
| AWM\_SSSOM\_Hom | 0.1849 | 1.1927 | 0.155 | 0.8768 |

## (2.4) AWM\_Rac\_grid

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 4.157038 | 0.902081 | 4.608 | 4.06e-06 \*\*\* |
| agef1y | -0.084995 | 0.033829 | -2.513 | 0.012 \* |
| eduf1 | -0.021152 | 0.069248 | -0.305 | 0.760 |
| race\_hispanic | 0.369568 | 0.074133 | 4.985 | 6.19e-07 \*\*\* |
| race\_black | 0.008574 | 0.086166 | 0.100 | 0.921 |
| race\_asian | 0.433587 | 0.107867 | 4.020 | 5.83e-05 \*\*\* |
| race\_mixed\_or\_other | 0.011109 | 0.126010 | 0.088 | 0.930 |
| income\_high | 0.324466 | 0.075542 | 4.295 | 1.75e-05 \*\*\* |
| income\_medium | -0.071441 | 0.076018 | -0.940 | 0.347 |
| AWM\_Rac\_grid | 0.563239 | 0.085339 | 6.600 | 4.11e-11 \*\*\* |
| Zero-inflation model | (Intercept) | -4.4506 | 4.9868 | -0.892 | 0.3721 |
| agef1y | 0.1164 | 0.1846 | 0.631 | 0.5281 |
| eduf1 | 0.1093 | 0.3441 | 0.318 | 0.7507 |
| race\_hispanic | 0.4763 | 0.4105 | 1.160 | 0.2460 |
| race\_black | 0.6607 | 0.4223 | 1.565 | 0.1177 |
| race\_asian | 1.1508 | 0.5384 | 2.137 | 0.0326 \* |
| race\_mixed\_or\_other | 0.5080 | 0.6139 | 0.828 | 0.4079 |
| income\_high | 0.3923 | 0.3998 | 0.981 | 0.3266 |
| income\_medium | 0.5722 | 0.3787 | 1.511 | 0.1308 |
| AWM\_Rac\_grid | -0.2841 | 0.5424 | -0.524 | 0.6004 |

## (2.5) AWM\_Hom\_grid

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 4.17735 | 0.90053 | 4.639 | 3.51e-06 \*\*\* |
| agef1y | -0.08510 | 0.03367 | -2.527 | 0.011489 \* |
| eduf1 | -0.02070 | 0.06987 | -0.296 | 0.767034 |
| race\_hispanic | 0.43431 | 0.07326 | 5.928 | 3.06e-09 \*\*\* |
| race\_black | 0.11461 | 0.08344 | 1.374 | 0.169580 |
| race\_asian | 0.34936 | 0.11349 | 3.078 | 0.002081 \*\* |
| race\_mixed\_or\_other | 0.12073 | 0.12606 | 0.958 | 0.338202 |
| income\_high | 0.29095 | 0.07462 | 3.899 | 9.66e-05 \*\*\* |
| income\_medium | -0.05250 | 0.07626 | -0.688 | 0.491221 |
| AWM\_Hom\_grid | 0.16932 | 0.04923 | 3.439 | 0.000583 \*\*\* |
| Zero-inflation model | (Intercept) | -4.1338 | 5.0054 | -0.826 | 0.4089 |
| agef1y | 0.1110 | 0.1852 | 0.599 | 0.5490 |
| eduf1 | 0.1630 | 0.3456 | 0.472 | 0.6371 |
| race\_hispanic | 0.4716 | 0.4060 | 1.162 | 0.2453 |
| race\_black | 0.6236 | 0.4216 | 1.479 | 0.1391 |
| race\_asian | 1.2221 | 0.5459 | 2.239 | 0.0252 \* |
| race\_mixed\_or\_other | 0.4450 | 0.6126 | 0.726 | 0.4676 |
| income\_high | 0.3569 | 0.3989 | 0.895 | 0.3709 |
| income\_medium | 0.5067 | 0.3808 | 1.330 | 0.1834 |
| AWM\_Hom\_grid | -0.3051 | 0.2831 | -1.078 | 0.2810 |

## (2.6) AWM\_Zip\_Rac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 4.78739 | 0.91969 | 5.205 | 1.94e-07 \*\*\* |
| agef1y | -0.07966 | 0.03405 | -2.340 | 0.019309 \* |
| eduf1 | -0.05649 | 0.06959 | -0.812 | 0.416983 |
| race\_hispanic | 0.58137 | 0.07644 | 7.605 | 2.84e-14 \*\*\* |
| race\_black | 0.19843 | 0.08451 | 2.348 | 0.018871 \* |
| race\_asian | 0.43148 | 0.10852 | 3.976 | 7.01e-05 \*\*\* |
| race\_mixed\_or\_other | 0.17421 | 0.12587 | 1.384 | 0.166341 |
| income\_high | 0.25048 | 0.07476 | 3.350 | 0.000807 \*\*\* |
| income\_medium | 0.01214 | 0.07718 | 0.157 | 0.875003 |
| AWM\_Zip\_Rac | -0.74326 | 0.13815 | -5.380 | 7.45e-08 \*\*\* |
| Zero-inflation model | (Intercept) | -5.3722 | 5.1076 | -1.052 | 0.2929 |
| agef1y | 0.1298 | 0.1856 | 0.699 | 0.4844 |
| eduf1 | 0.1405 | 0.3457 | 0.407 | 0.6843 |
| race\_hispanic | 0.3509 | 0.4233 | 0.829 | 0.4071 |
| race\_black | 0.5804 | 0.4238 | 1.370 | 0.1708 |
| race\_asian | 1.1411 | 0.5392 | 2.116 | 0.0343 \* |
| race\_mixed\_or\_other | 0.4383 | 0.6172 | 0.710 | 0.4777 |
| income\_high | 0.4393 | 0.3998 | 1.099 | 0.2719 |
| income\_medium | 0.5605 | 0.3794 | 1.477 | 0.1396 |
| AWM\_Zip\_Rac | 0.5303 | 0.6961 | 0.762 | 0.4461 |

## (2.7) AWM\_Zip\_Hom

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | 5.28546 | 0.94657 | 5.584 | 2.35e-08 \*\*\* |
| agef1y | -0.07920 | 0.03398 | -2.331 | 0.019771 \* |
| eduf1 | -0.03236 | 0.06937 | -0.467 | 0.640824 |
| race\_hispanic | 0.54061 | 0.07549 | 7.161 | 8.00e-13 \*\*\* |
| race\_black | 0.16648 | 0.08401 | 1.982 | 0.047520 \* |
| race\_asian | 0.43746 | 0.10853 | 4.031 | 5.56e-05 \*\*\* |
| race\_mixed\_or\_other | 0.11702 | 0.12519 | 0.935 | 0.349944 |
| income\_high | 0.24906 | 0.07522 | 3.311 | 0.000929 \*\*\* |
| income\_medium | -0.03107 | 0.07652 | -0.406 | 0.684669 |
| AWM\_Zip\_Hom | -0.69588 | 0.15503 | -4.489 | 7.17e-06 \*\*\* |
| Zero-inflation model | (Intercept) | -4.0407 | 5.2326 | -0.772 | 0.4400 |
| agef1y | 0.1147 | 0.1847 | 0.621 | 0.5345 |
| eduf1 | 0.1079 | 0.3443 | 0.313 | 0.7539 |
| race\_hispanic | 0.4733 | 0.4168 | 1.136 | 0.2562 |
| race\_black | 0.6452 | 0.4204 | 1.535 | 0.1248 |
| race\_asian | 1.1359 | 0.5377 | 2.112 | 0.0346 \* |
| race\_mixed\_or\_other | 0.4996 | 0.6136 | 0.814 | 0.4155 |
| income\_high | 0.4017 | 0.3996 | 1.005 | 0.3148 |
| income\_medium | 0.5785 | 0.3784 | 1.529 | 0.1263 |
| AWM\_Zip\_Hom | -0.2613 | 0.8147 | -0.321 | 0.7484 |

# Zero Inflated Poisson Regression in AI\_Condomless:

<https://github.com/meettyj/MSM-Discrimination-on-Twitter/blob/master/results/regression/AI_Condomless.md#zero-inflated-poisson-regression>

## (3.1) General

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -5.18916 | 0.67627 | -7.673 | 1.68e-14 \*\*\* |
| agef1y | 0.30079 | 0.02477 | 12.142 | < 2e-16 \*\*\* |
| eduf1 | 0.48590 | 0.04004 | 12.137 | < 2e-16 \*\*\* |
| race\_hispanic | 0.12092 | 0.04522 | 2.674 | 0.00750 \*\* |
| race\_black | -0.39766 | 0.05470 | -7.270 | 3.59e-13 \*\*\* |
| race\_asian | -0.82585 | 0.08646 | -9.551 | < 2e-16 \*\*\* |
| race\_mixed\_or\_other | 0.21544 | 0.06573 | 3.278 | 0.00105 \*\* |
| income\_high | -0.12481 | 0.04988 | -2.502 | 0.01234 \* |
| income\_medium | 0.02489 | 0.04724 | 0.527 | 0.59820 |
| Zero-inflation model | (Intercept) | -2.08856 | 5.17120 | -0.404 | 0.6863 |
| agef1y | 0.04179 | 0.19211 | 0.218 | 0.8278 |
| eduf1 | 0.05617 | 0.35561 | 0.158 | 0.8745 |
| race\_hispanic | 0.57463 | 0.43150 | 1.332 | 0.1830 |
| race\_black | 0.76591 | 0.44136 | 1.735 | 0.0827 . |
| race\_asian | 0.96741 | 0.55534 | 1.742 | 0.0815 . |
| race\_mixed\_or\_other | 0.15486 | 0.67880 | 0.228 | 0.8195 |
| income\_high | -0.20645 | 0.39567 | -0.522 | 0.6018 |
| income\_medium | -0.61555 | 0.38208 | -1.611 | 0.1072 |

## (3.2) AWM\_SSSOM\_Rac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -4.08191 | 0.75765 | -5.388 | 7.14e-08 \*\*\* |
| agef1y | 0.29301 | 0.02496 | 11.740 | < 2e-16 \*\*\* |
| eduf1 | 0.46825 | 0.04041 | 11.587 | < 2e-16 \*\*\* |
| race\_hispanic | 0.14539 | 0.04583 | 3.173 | 0.00151 \*\* |
| race\_black | -0.34923 | 0.05658 | -6.172 | 6.72e-10 \*\*\* |
| race\_asian | -0.76808 | 0.08827 | -8.701 | < 2e-16 \*\*\* |
| race\_mixed\_or\_other | 0.21457 | 0.06569 | 3.266 | 0.00109 \*\* |
| income\_high | -0.10709 | 0.05015 | -2.135 | 0.03274 \* |
| income\_medium | 0.04381 | 0.04757 | 0.921 | 0.35708 |
| AWM\_SSSOM\_Rac | -1.81438 | 0.56069 | -3.236 | 0.00121 \*\* |
| Zero-inflation model | (Intercept) | -2.39428 | 5.72958 | -0.418 | 0.6760 |
| agef1y | 0.04393 | 0.19287 | 0.228 | 0.8198 |
| eduf1 | 0.05708 | 0.35575 | 0.160 | 0.8725 |
| race\_hispanic | 0.57139 | 0.43235 | 1.322 | 0.1863 |
| race\_black | 0.75495 | 0.45014 | 1.677 | 0.0935 . |
| race\_asian | 0.95986 | 0.55875 | 1.718 | 0.0858 . |
| race\_mixed\_or\_other | 0.15363 | 0.67894 | 0.226 | 0.8210 |
| income\_high | -0.20736 | 0.39578 | -0.524 | 0.6003 |
| income\_medium | -0.61727 | 0.38243 | -1.614 | 0.1065 |
| AWM\_SSSOM\_Rac | 0.49142 | 3.95974 | 0.124 | 0.9012 |

## (3.3) AWM\_SSSOM\_Hom

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -5.52886 | 0.75172 | -7.355 | 1.91e-13 \*\*\* |
| agef1y | 0.30454 | 0.02504 | 12.160 | < 2e-16 \*\*\* |
| eduf1 | 0.49139 | 0.04039 | 12.165 | < 2e-16 \*\*\* |
| race\_hispanic | 0.11142 | 0.04616 | 2.414 | 0.01577 \* |
| race\_black | -0.40623 | 0.05532 | -7.343 | 2.09e-13 \*\*\* |
| race\_asian | -0.82598 | 0.08648 | -9.551 | < 2e-16 \*\*\* |
| race\_mixed\_or\_other | 0.19995 | 0.06742 | 2.966 | 0.00302 \*\* |
| income\_high | -0.12225 | 0.04995 | -2.447 | 0.01439 \* |
| income\_medium | 0.02070 | 0.04740 | 0.437 | 0.66236 |
| AWM\_SSSOM\_Hom | 0.15923 | 0.15355 | 1.037 | 0.29972 |
| Zero-inflation model | (Intercept) | -7.70803 | 5.85425 | -1.317 | 0.1880 |
| agef1y | 0.09404 | 0.19554 | 0.481 | 0.6306 |
| eduf1 | 0.11872 | 0.35983 | 0.330 | 0.7414 |
| race\_hispanic | 0.39083 | 0.44436 | 0.880 | 0.3791 |
| race\_black | 0.62537 | 0.45114 | 1.386 | 0.1657 |
| race\_asian | 1.04914 | 0.56080 | 1.871 | 0.0614 . |
| race\_mixed\_or\_other | -0.07774 | 0.69668 | -0.112 | 0.9112 |
| income\_high | -0.12338 | 0.40406 | -0.305 | 0.7601 |
| income\_medium | -0.65712 | 0.38789 | -1.694 | 0.0902 . |
| AWM\_SSSOM\_Hom | 2.76196 | 1.29445 | 2.134 | 0.0329 \* |

## (3.4) AWM\_Rac\_grid

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -4.21268 | 0.68398 | -6.159 | 7.32e-10 \*\*\* |
| agef1y | 0.27634 | 0.02493 | 11.086 | < 2e-16 \*\*\* |
| eduf1 | 0.39998 | 0.04110 | 9.733 | < 2e-16 \*\*\* |
| race\_hispanic | 0.20769 | 0.04581 | 4.533 | 5.80e-06 \*\*\* |
| race\_black | -0.30448 | 0.05488 | -5.548 | 2.89e-08 \*\*\* |
| race\_asian | -0.71840 | 0.08764 | -8.197 | 2.45e-16 \*\*\* |
| race\_mixed\_or\_other | 0.33736 | 0.06635 | 5.085 | 3.68e-07 \*\*\* |
| income\_high | -0.23865 | 0.05011 | -4.762 | 1.91e-06 \*\*\* |
| income\_medium | -0.02513 | 0.04731 | -0.531 | 0.595 |
| AWM\_Rac\_grid | -1.13988 | 0.09123 | -12.494 | < 2e-16 \*\*\* |
| Zero-inflation model | (Intercept) | -2.25967 | 5.18707 | -0.436 | 0.6631 |
| agef1y | 0.04428 | 0.19257 | 0.230 | 0.8181 |
| eduf1 | 0.06112 | 0.35620 | 0.172 | 0.8637 |
| race\_hispanic | 0.52969 | 0.43678 | 1.213 | 0.2252 |
| race\_black | 0.72593 | 0.44567 | 1.629 | 0.1033 |
| race\_asian | 0.95325 | 0.55565 | 1.716 | 0.0862 . |
| race\_mixed\_or\_other | 0.12102 | 0.68218 | 0.177 | 0.8592 |
| income\_high | -0.17455 | 0.39908 | -0.437 | 0.6618 |
| income\_medium | -0.60998 | 0.38272 | -1.594 | 0.1110 |
| AWM\_Rac\_grid | 0.37672 | 0.54036 | 0.697 | 0.4857 |

## (3.5) AWM\_Hom\_grid

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -5.12633 | 0.67657 | -7.577 | 3.54e-14 \*\*\* |
| agef1y | 0.30026 | 0.02474 | 12.135 | < 2e-16 \*\*\* |
| eduf1 | 0.48157 | 0.04013 | 12.000 | < 2e-16 \*\*\* |
| race\_hispanic | 0.13135 | 0.04555 | 2.884 | 0.00393 \*\* |
| race\_black | -0.39885 | 0.05468 | -7.294 | 3.02e-13 \*\*\* |
| race\_asian | -0.77893 | 0.08967 | -8.686 | < 2e-16 \*\*\* |
| race\_mixed\_or\_other | 0.21442 | 0.06578 | 3.260 | 0.00112 \*\* |
| income\_high | -0.13513 | 0.05010 | -2.697 | 0.00699 \*\* |
| income\_medium | 0.02460 | 0.04724 | 0.521 | 0.60253 |
| AWM\_Hom\_grid | -0.07041 | 0.03783 | -1.861 | 0.06272 . |
| Zero-inflation model | (Intercept) | -2.87028 | 5.22689 | -0.549 | 0.583 |
| agef1y | 0.06616 | 0.19413 | 0.341 | 0.733 |
| eduf1 | 0.02505 | 0.36169 | 0.069 | 0.945 |
| race\_hispanic | 0.56083 | 0.43292 | 1.295 | 0.195 |
| race\_black | 0.67567 | 0.44681 | 1.512 | 0.130 |
| race\_asian | 0.91942 | 0.56176 | 1.637 | 0.102 |
| race\_mixed\_or\_other | 0.17216 | 0.67971 | 0.253 | 0.800 |
| income\_high | -0.16968 | 0.40025 | -0.424 | 0.672 |
| income\_medium | -0.61975 | 0.38792 | -1.598 | 0.110 |
| AWM\_Hom\_grid | 0.15501 | 0.28927 | 0.536 | 0.592 |

## (3.6) AWM\_Zip\_Rac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -5.35543 | 0.69501 | -7.706 | 1.30e-14 \*\*\* |
| agef1y | 0.30375 | 0.02492 | 12.187 | < 2e-16 \*\*\* |
| eduf1 | 0.49315 | 0.04066 | 12.129 | < 2e-16 \*\*\* |
| race\_hispanic | 0.10509 | 0.04784 | 2.196 | 0.02806 \* |
| race\_black | -0.40566 | 0.05526 | -7.341 | 2.12e-13 \*\*\* |
| race\_asian | -0.83309 | 0.08674 | -9.605 | < 2e-16 \*\*\* |
| race\_mixed\_or\_other | 0.20186 | 0.06710 | 3.008 | 0.00263 \*\* |
| income\_high | -0.11959 | 0.05015 | -2.384 | 0.01710 \* |
| income\_medium | 0.02075 | 0.04742 | 0.438 | 0.66162 |
| AWM\_Zip\_Rac | 0.09569 | 0.09341 | 1.024 | 0.30561 |
| Zero-inflation model | (Intercept) | -4.59085 | 5.34985 | -0.858 | 0.3908 |
| agef1y | 0.08531 | 0.19401 | 0.440 | 0.6601 |
| eduf1 | 0.12802 | 0.36024 | 0.355 | 0.7223 |
| race\_hispanic | 0.30556 | 0.45786 | 0.667 | 0.5045 |
| race\_black | 0.61965 | 0.45140 | 1.373 | 0.1698 |
| race\_asian | 0.97869 | 0.55762 | 1.755 | 0.0792 . |
| race\_mixed\_or\_other | -0.02877 | 0.69539 | -0.041 | 0.9670 |
| income\_high | -0.15310 | 0.40089 | -0.382 | 0.7025 |
| income\_medium | -0.68927 | 0.38822 | -1.775 | 0.0758 . |
| AWM\_Zip\_Rac | 1.45278 | 0.75393 | 1.927 | 0.0540 . |

## (3.7) AWM\_Zip\_Hom

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Coefficients | Estimate | Std. Error | Z value | Pr(>|z|) |
| Count model | (Intercept) | -4.88727 | 0.72093 | -6.779 | 1.21e-11 \*\*\* |
| agef1y | 0.29783 | 0.02491 | 11.957 | < 2e-16 \*\*\* |
| eduf1 | 0.47464 | 0.04108 | 11.555 | < 2e-16 \*\*\* |
| race\_hispanic | 0.13744 | 0.04717 | 2.914 | 0.003569 \*\* |
| race\_black | -0.38712 | 0.05536 | -6.992 | 2.71e-12 \*\*\* |
| race\_asian | -0.81556 | 0.08688 | -9.387 | < 2e-16 \*\*\* |
| race\_mixed\_or\_other | 0.22987 | 0.06675 | 3.444 | 0.000573 \*\*\* |
| income\_high | -0.13161 | 0.05019 | -2.622 | 0.008739 \*\* |
| income\_medium | 0.02552 | 0.04724 | 0.540 | 0.589097 |
| AWM\_Zip\_Hom | -0.13329 | 0.10958 | -1.216 | 0.223840 |
| Zero-inflation model | (Intercept) | -5.20951 | 5.50631 | -0.946 | 0.3441 |
| agef1y | 0.06590 | 0.19304 | 0.341 | 0.7328 |
| eduf1 | 0.09653 | 0.35806 | 0.270 | 0.7875 |
| race\_hispanic | 0.38935 | 0.44823 | 0.869 | 0.3850 |
| race\_black | 0.68697 | 0.44666 | 1.538 | 0.1241 |
| race\_asian | 0.98485 | 0.55802 | 1.765 | 0.0776 . |
| race\_mixed\_or\_other | 0.06430 | 0.68618 | 0.094 | 0.9253 |
| income\_high | -0.14279 | 0.40057 | -0.356 | 0.7215 |
| income\_medium | -0.62736 | 0.38480 | -1.630 | 0.1030 |
| AWM\_Zip\_Hom | 1.46376 | 0.86999 | 1.682 | 0.0925 . |