

The SAS System

The LIFEREG Procedure

| Model Information | |
|--------------------------|--------------|
| Data Set | WORK.WEEK9 |
| Dependent Variable | Log(l_durat) |
| Censoring Variable | l_cens |
| Censoring Value(s) | 1 |
| Number of Observations | 1445 |
| Noncensored Values | 552 |
| Right Censored Values | 893 |
| Left Censored Values | 0 |
| Interval Censored Values | 0 |
| Number of Parameters | 12 |
| Name of Distribution | Lognormal |
| Log Likelihood | -1597.058956 |

| | |
|-----------------------------|------|
| Number of Observations Read | 1445 |
| Number of Observations Used | 1445 |

| Fit Statistics | |
|--------------------------|----------|
| -2 Log Likelihood | 3194.118 |
| AIC (smaller is better) | 3218.118 |
| AICC (smaller is better) | 3218.336 |
| BIC (smaller is better) | 3281.428 |

| Fit Statistics (Unlogged Response) | |
|------------------------------------|----------|
| -2 Log Likelihood | 6312.271 |
| Lognormal AIC (smaller is better) | 6336.271 |
| Lognormal AICC (smaller is better) | 6336.488 |
| Lognormal BIC (smaller is better) | 6399.581 |

Algorithm converged.

| Type III Analysis of Effects | | | |
|------------------------------|----|--------------------|------------|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| l_black | 1 | 21.3548 | <.0001 |
| l_drugs | 1 | 5.0457 | 0.0247 |
| l_workprg | 1 | 0.2717 | 0.6022 |
| l_priors | 1 | 40.9108 | <.0001 |
| l_terved | 1 | 42.1368 | <.0001 |
| l_felon | 1 | 9.3649 | 0.0022 |
| l_alcohol | 1 | 19.3817 | <.0001 |
| l_marry | 1 | 5.9350 | 0.0148 |

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| Type III Analysis of Effects | | | |
|------------------------------|----|--------------------|------------|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| I_educ | 1 | 0.8144 | 0.3668 |
| I_age | 1 | 41.6081 | <.0001 |

| Analysis of Maximum Likelihood Parameter Estimates | | | | | | | |
|----------------------------------------------------|----|----------|-------------------|-----------------------------|---------|------------|------------|
| Parameter | DF | Estimate | Standard Error | 95% Confidence Limits | | Chi-Square | Pr > ChiSq |
| Intercept | 1 | 4.0994 | 0.3475 | 3.4182 | 4.7805 | 139.14 | <.0001 |
| I_black | 1 | -0.5427 | 0.1174 | -0.7729 | -0.3125 | 21.35 | <.0001 |
| I_drugs | 1 | -0.2982 | 0.1327 | -0.5583 | -0.0380 | 5.05 | 0.0247 |
| I_workprg | 1 | -0.0626 | 0.1200 | -0.2978 | 0.1727 | 0.27 | 0.6022 |
| I_priors | 1 | -0.1373 | 0.0215 | -0.1793 | -0.0952 | 40.91 | <.0001 |
| I_tsserved | 1 | -0.0193 | 0.0030 | -0.0252 | -0.0135 | 42.14 | <.0001 |
| I_felon | 1 | 0.4440 | 0.1451 | 0.1596 | 0.7284 | 9.36 | 0.0022 |
| I_alcohol | 1 | -0.6349 | 0.1442 | -0.9176 | -0.3522 | 19.38 | <.0001 |
| I_marry | 1 | 0.3407 | 0.1398 | 0.0666 | 0.6148 | 5.94 | 0.0148 |
| I_educ | 1 | 0.0229 | 0.0254 | -0.0269 | 0.0727 | 0.81 | 0.3668 |
| I_age | 1 | 0.0039 | 0.0006 | 0.0027 | 0.0051 | 41.61 | <.0001 |
| Scale | 1 | 1.8105 | 0.0623 | 1.6924 | 1.9368 | | |

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| Censoring Value(s) | 1 |
| Number of Observations | 1445 |
| Noncensored Values | 552 |
| Right Censored Values | 893 |
| Left Censored Values | 0 |
| Interval Censored Values | 0 |
| Number of Parameters | 11 |
| Name of Distribution | Exponential |
| Log Likelihood | -1649.753126 |

| | |
|-----------------------------|------|
| Number of Observations Read | 1445 |
| Number of Observations Used | 1445 |

| Fit Statistics | |
|--------------------------|----------|
| -2 Log Likelihood | 3299.506 |
| AIC (smaller is better) | 3321.506 |
| AICC (smaller is better) | 3321.690 |
| BIC (smaller is better) | 3379.541 |

| Fit Statistics (Unlogged Response) | |
|--------------------------------------|----------|
| -2 Log Likelihood | 6417.659 |
| Exponential AIC (smaller is better) | 6439.659 |
| Exponential AICC (smaller is better) | 6439.843 |
| Exponential BIC (smaller is better) | 6497.693 |

Algorithm converged.

| Type III Analysis of Effects | | | |
|------------------------------|----|--------------------|------------|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| l_black | 1 | 29.0885 | <.0001 |
| l_drugs | 1 | 9.0362 | 0.0026 |
| l_workprg | 1 | 1.1142 | 0.2912 |
| l_priors | 1 | 46.8556 | <.0001 |
| l_tservd | 1 | 75.2645 | <.0001 |
| l_felon | 1 | 8.7327 | 0.0031 |
| l_alcohol | 1 | 19.5485 | <.0001 |
| l_marry | 1 | 1.9342 | 0.1643 |

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| Type III Analysis of Effects | | | |
|------------------------------|----|--------------------|------------|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| l_educ | 1 | 1.5564 | 0.2122 |
| l_age | 1 | 54.8321 | <.0001 |

| Analysis of Maximum Likelihood Parameter Estimates | | | | | | | |
|----------------------------------------------------|----|----------|-------------------|-----------------------------|---------|------------|------------|
| Parameter | DF | Estimate | Standard Error | 95% Confidence Limits | | Chi-Square | Pr > ChiSq |
| Intercept | 1 | 4.1692 | 0.2756 | 3.6290 | 4.7094 | 228.80 | <.0001 |
| l_black | 1 | -0.4757 | 0.0882 | -0.6485 | -0.3028 | 29.09 | <.0001 |
| l_drugs | 1 | -0.2942 | 0.0979 | -0.4860 | -0.1024 | 9.04 | 0.0026 |
| l_workprg | 1 | -0.0956 | 0.0906 | -0.2731 | 0.0819 | 1.11 | 0.2912 |
| l_priors | 1 | -0.0913 | 0.0133 | -0.1175 | -0.0652 | 46.86 | <.0001 |
| l_tserved | 1 | -0.0144 | 0.0017 | -0.0177 | -0.0111 | 75.26 | <.0001 |
| l_felon | 1 | 0.3122 | 0.1057 | 0.1051 | 0.5193 | 8.73 | 0.0031 |
| l_alcohol | 1 | -0.4677 | 0.1058 | -0.6750 | -0.2604 | 19.55 | <.0001 |
| l_marry | 1 | 0.1520 | 0.1093 | -0.0622 | 0.3661 | 1.93 | 0.1643 |
| l_educ | 1 | 0.0242 | 0.0194 | -0.0138 | 0.0623 | 1.56 | 0.2122 |
| l_age | 1 | 0.0039 | 0.0005 | 0.0029 | 0.0049 | 54.83 | <.0001 |
| Scale | 0 | 1.0000 | 0.0000 | 1.0000 | 1.0000 | | |
| Weibull Shape | 0 | 1.0000 | 0.0000 | 1.0000 | 1.0000 | | |

| Lagrange Multiplier Statistics | | |
|--------------------------------|------------|------------|
| Parameter | Chi-Square | Pr > ChiSq |
| Scale | 25.9844 | <.0001 |

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| Censoring Variable | l_cens |
| Censoring Value(s) | 1 |
| Number of Observations | 1445 |
| Noncensored Values | 552 |
| Right Censored Values | 893 |
| Left Censored Values | 0 |
| Interval Censored Values | 0 |
| Number of Parameters | 12 |
| Name of Distribution | Weibull |
| Log Likelihood | -1633.032475 |

| | |
|-----------------------------|------|
| Number of Observations Read | 1445 |
| Number of Observations Used | 1445 |

| Fit Statistics | |
|--------------------------|----------|
| -2 Log Likelihood | 3266.065 |
| AIC (smaller is better) | 3290.065 |
| AICC (smaller is better) | 3290.283 |
| BIC (smaller is better) | 3353.375 |

| Fit Statistics (Unlogged Response) | |
|------------------------------------|----------|
| -2 Log Likelihood | 6384.218 |
| Weibull AIC (smaller is better) | 6408.218 |
| Weibull AICC (smaller is better) | 6408.436 |
| Weibull BIC (smaller is better) | 6471.528 |

Algorithm converged.

| Type III Analysis of Effects | | | |
|------------------------------|----|--------------------|------------|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| l_black | 1 | 25.8124 | <.0001 |
| l_drugs | 1 | 8.2119 | 0.0042 |
| l_workprg | 1 | 1.0045 | 0.3162 |
| l_priors | 1 | 41.6710 | <.0001 |
| l_tservd | 1 | 62.4133 | <.0001 |
| l_felon | 1 | 7.9266 | 0.0049 |
| l_alcohol | 1 | 17.6217 | <.0001 |
| l_marry | 1 | 1.9200 | 0.1659 |

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| Type III Analysis of Effects | | | |
|------------------------------|----|--------------------|------------|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| l_educ | 1 | 1.4373 | 0.2306 |
| l_age | 1 | 48.3314 | <.0001 |

| Analysis of Maximum Likelihood Parameter Estimates | | | | | | | |
|----------------------------------------------------|----|----------|-------------------|-----------------------------|---------|------------|------------|
| Parameter | DF | Estimate | Standard Error | 95% Confidence Limits | | Chi-Square | Pr > ChiSq |
| Intercept | 1 | 4.2217 | 0.3413 | 3.5527 | 4.8906 | 152.99 | <.0001 |
| l_black | 1 | -0.5630 | 0.1108 | -0.7802 | -0.3458 | 25.81 | <.0001 |
| l_drugs | 1 | -0.3493 | 0.1219 | -0.5881 | -0.1104 | 8.21 | 0.0042 |
| l_workprg | 1 | -0.1128 | 0.1125 | -0.3333 | 0.1078 | 1.00 | 0.3162 |
| l_priors | 1 | -0.1102 | 0.0171 | -0.1436 | -0.0767 | 41.67 | <.0001 |
| l_tserved | 1 | -0.0168 | 0.0021 | -0.0210 | -0.0127 | 62.41 | <.0001 |
| l_felon | 1 | 0.3716 | 0.1320 | 0.1129 | 0.6303 | 7.93 | 0.0049 |
| l_alcohol | 1 | -0.5551 | 0.1322 | -0.8143 | -0.2959 | 17.62 | <.0001 |
| l_marry | 1 | 0.1881 | 0.1358 | -0.0780 | 0.4542 | 1.92 | 0.1659 |
| l_educ | 1 | 0.0289 | 0.0241 | -0.0184 | 0.0762 | 1.44 | 0.2306 |
| l_age | 1 | 0.0046 | 0.0007 | 0.0033 | 0.0059 | 48.33 | <.0001 |
| Scale | 1 | 1.2409 | 0.0483 | 1.1498 | 1.3393 | | |
| Weibull Shape | 1 | 0.8059 | 0.0314 | 0.7467 | 0.8697 | | |