

# SDELPRESNO?Honly.Res

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• CELL CREATION • 9/21/2005•6:51 PM •.....

Name of token file: /s/ deletion  
 Name of condition file: SDELPRESNO?.Cnd

```
(
(1 (s (COL 1 s))
    (h (COL 1 h))
    (o (COL 1 o))
    (o (COL 1 ?)))
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)
(11)
)
```

```
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)
(11)
)
Number of cells: 495
Application value(s): h
Total no. of factors: 42
```

| Group |   | Apps | Non-apps | Total | %  |
|-------|---|------|----------|-------|----|
| ----- |   |      |          |       |    |
| 1 (2) |   |      |          |       |    |
| 1     | N | 533  | 213      | 746   | 63 |
|       | % | 71   | 29       |       |    |
| i     | N | 97   | 227      | 324   | 28 |
|       | % | 30   | 70       |       |    |
| a     | N | 31   | 77       | 108   | 9  |
|       | % | 29   | 71       |       |    |
| Total | N | 661  | 517      | 1178  |    |
|       | % | 56   | 44       |       |    |
| ----- |   |      |          |       |    |
| 2 (3) |   |      |          |       |    |
| n     | N | 100  | 151      | 251   | 21 |
|       | % | 40   | 60       |       |    |
| d     | N | 66   | 25       | 91    | 8  |
|       | % | 73   | 27       |       |    |
| a     | N | 55   | 65       | 120   | 10 |
|       | % | 46   | 54       |       |    |
| m     | N | 30   | 16       | 46    | 4  |
|       | % | 65   | 35       |       |    |
| v     | N | 93   | 75       | 168   | 14 |
|       | % | 55   | 45       |       |    |

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|       |   |     |     |      |    |
|-------|---|-----|-----|------|----|
| e     | N | 97  | 22  | 119  | 10 |
|       | % | 82  | 18  |      |    |
| t     | N | 120 | 16  | 136  | 12 |
|       | % | 88  | 12  |      |    |
| u     | N | 16  | 13  | 29   | 2  |
|       | % | 55  | 45  |      |    |
| o     | N | 21  | 13  | 34   | 3  |
|       | % | 62  | 38  |      |    |
| b     | N | 36  | 26  | 62   | 5  |
|       | % | 58  | 42  |      |    |
| h     | N | 1   | 27  | 28   | 2  |
|       | % | 4   | 96  |      |    |
| k     | N | 3   | 49  | 52   | 4  |
|       | % | 6   | 94  |      |    |
| i     | N | 8   | 3   | 11   | 1  |
|       | % | 73  | 27  |      |    |
| s     | N | 6   | 13  | 19   | 2  |
|       | % | 32  | 68  |      |    |
| p     | N | 7   | 2   | 9    | 1  |
|       | % | 78  | 22  |      |    |
| c     | N | 2   | 1   | 3    | 0  |
|       | % | 67  | 33  |      |    |
| Total | N | 661 | 517 | 1178 |    |
|       | % | 56  | 44  |      |    |
| ----- |   |     |     |      |    |
| 3 (4) |   |     |     |      |    |
| u     | N | 57  | 103 | 160  | 14 |
|       | % | 36  | 64  |      |    |
| c     | N | 563 | 266 | 829  | 70 |
|       | % | 68  | 32  |      |    |
| s     | N | 19  | 45  | 64   | 5  |
|       | % | 30  | 70  |      |    |
| p     | N | 22  | 103 | 125  | 11 |
|       | % | 18  | 82  |      |    |
| Total | N | 661 | 517 | 1178 |    |
|       | % | 56  | 44  |      |    |
| ----- |   |     |     |      |    |
| 4 (5) |   |     |     |      |    |
| p     | N | 425 | 418 | 843  | 72 |
|       | % | 50  | 50  |      |    |

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|       |   |     |     |      |    |
|-------|---|-----|-----|------|----|
| m     | N | 236 | 99  | 335  | 28 |
|       | % | 70  | 30  |      |    |
| Total | N | 661 | 517 | 1178 |    |
|       | % | 56  | 44  |      |    |
|       |   |     |     |      |    |
| 5 (6) |   |     |     |      |    |
| a     | N | 470 | 334 | 804  | 68 |
|       | % | 58  | 42  |      |    |
| u     | N | 191 | 183 | 374  | 32 |
|       | % | 51  | 49  |      |    |
| Total | N | 661 | 517 | 1178 |    |
|       | % | 56  | 44  |      |    |
|       |   |     |     |      |    |
| 6 (7) |   |     |     |      |    |
| a     | N | 325 | 374 | 699  | 59 |
|       | % | 46  | 54  |      |    |
| t     | N | 336 | 143 | 479  | 41 |
|       | % | 70  | 30  |      |    |
| Total | N | 661 | 517 | 1178 |    |
|       | % | 56  | 44  |      |    |
|       |   |     |     |      |    |
| 7 (8) |   |     |     |      |    |
| k     | N | 89  | 142 | 231  | 20 |
|       | % | 39  | 61  |      |    |
| b     | N | 88  | 65  | 153  | 13 |
|       | % | 58  | 42  |      |    |
| j     | N | 135 | 57  | 192  | 16 |
|       | % | 70  | 30  |      |    |
| c     | N | 69  | 102 | 171  | 15 |
|       | % | 40  | 60  |      |    |
| d     | N | 132 | 76  | 208  | 18 |
|       | % | 63  | 37  |      |    |
| i     | N | 148 | 75  | 223  | 19 |
|       | % | 66  | 34  |      |    |
| Total | N | 661 | 517 | 1178 |    |
|       | % | 56  | 44  |      |    |
|       |   |     |     |      |    |
| 8 (9) |   |     |     |      |    |
| m     | N | 309 | 283 | 592  | 50 |
|       | % | 52  | 48  |      |    |
| f     | N | 352 | 234 | 586  | 50 |
|       | % | 60  | 40  |      |    |

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Total N      661      517      1178  
           %        56        44

9 (10)  
   i    N      504      350      854    72  
       %        59        41

  u    N      157      167      324    28  
       %        48        52

Total N      661      517      1178  
           %        56        44

10 (11)  
   c    N      557      433      990    84  
       %        56        44

  r    N      59        54       113    10  
       %        52        48

  n    N      45        30        75    6  
       %        60        40

Total N      661      517      1178  
           %        56        44

TOTAL N      661      517      1178  
           %        56        44

Name of new cell file: SDELPRESNO?.Cel

• BINOMIAL VARBRUL, 1 step • 9/21/2005•6:52 PM .....  
 Name of cell file: SDELPRESNO?.Cel

Using fast, less accurate method.  
 Averaging by weighting factors.  
 One-level binomial analysis..

Run # 1, 495 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.567

Input probability para la aspiración: 57% de probabilidad que cualquier /s/ se aspire en esta comunidad de habla.

Group Factor Weight App/Total Input&Weight

|    |   |       |      |      |
|----|---|-------|------|------|
| 1: | l | 0.650 | 0.71 | 0.71 |
|    | i | 0.298 | 0.30 | 0.36 |
|    | a | 0.153 | 0.29 | 0.19 |
| 2: | n | 0.440 | 0.40 | 0.51 |
|    | d | 0.637 | 0.73 | 0.70 |
|    | a | 0.438 | 0.46 | 0.51 |
|    | m | 0.402 | 0.65 | 0.47 |
|    | v | 0.725 | 0.55 | 0.77 |

Probabilidad (weights): influencia que cada factor tiene en la presencia o ausencia de la variable dependiente. l=léxica, i=inflección, a= (-amoes/-es) En este caso la probabilidad de aspiración es más alta si la /s/ es léxica y no inflección.

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|     |   |       |      |      |
|-----|---|-------|------|------|
|     | e | 0.616 | 0.82 | 0.68 |
|     | t | 0.814 | 0.88 | 0.85 |
|     | u | 0.174 | 0.55 | 0.22 |
|     | o | 0.432 | 0.62 | 0.50 |
|     | b | 0.283 | 0.58 | 0.34 |
|     | h | 0.007 | 0.04 | 0.01 |
|     | k | 0.133 | 0.06 | 0.17 |
|     | i | 0.767 | 0.73 | 0.81 |
|     | s | 0.205 | 0.32 | 0.25 |
|     | p | 0.465 | 0.78 | 0.53 |
|     | c | 0.353 | 0.67 | 0.42 |
| 3:  | u | 0.318 | 0.36 | 0.38 |
|     | c | 0.612 | 0.68 | 0.67 |
|     | s | 0.260 | 0.30 | 0.32 |
|     | p | 0.182 | 0.18 | 0.22 |
| 4:  | p | 0.450 | 0.50 | 0.52 |
|     | m | 0.624 | 0.70 | 0.68 |
| 5:  | a | 0.453 | 0.58 | 0.52 |
|     | u | 0.600 | 0.51 | 0.66 |
| 6:  | a | 0.487 | 0.46 | 0.55 |
|     | t | 0.519 | 0.70 | 0.59 |
| 7:  | k | 0.315 | 0.39 | 0.38 |
|     | b | 0.446 | 0.58 | 0.51 |
|     | j | 0.668 | 0.70 | 0.72 |
|     | c | 0.295 | 0.40 | 0.35 |
|     | d | 0.603 | 0.63 | 0.67 |
|     | i | 0.652 | 0.66 | 0.71 |
| 8:  | m | 0.491 | 0.52 | 0.56 |
|     | f | 0.509 | 0.60 | 0.58 |
| 9:  | i | 0.509 | 0.59 | 0.58 |
|     | u | 0.477 | 0.48 | 0.54 |
| 10: | c | 0.507 | 0.56 | 0.57 |
|     | r | 0.497 | 0.52 | 0.56 |
|     | n | 0.416 | 0.60 | 0.48 |

Muy cerca de .5 (50-50). Este paso nos ayuda a determinar qué factores eliminar y qué factores combinar o continuar estudiando.

| Cell        | Total | App'ns | Expected | Error |
|-------------|-------|--------|----------|-------|
| lvupaaifc   | 1     | 0      | 0.798    | 3.955 |
| lvcpuakmin  | 1     | 1      | 0.793    | 0.261 |
| lvcpuajfic  | 2     | 2      | 1.926    | 0.077 |
| lvcpuaifc   | 1     | 1      | 0.960    | 0.041 |
| lvcpuadmin  | 1     | 1      | 0.927    | 0.079 |
| lvcpuadmics | 3     | 3      | 2.844    | 0.164 |
| lvcpuacfuc  | 3     | 3      | 2.479    | 0.630 |
| lvcpuabmuc  | 2     | 2      | 1.790    | 0.235 |
| lvcpatkmics | 1     | 1      | 0.777    | 0.288 |
| lvcpatjfir  | 1     | 1      | 0.940    | 0.064 |
| lvcpatjfin  | 1     | 1      | 0.919    | 0.088 |

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|             |    |    |        |        |
|-------------|----|----|--------|--------|
| lvcpatjfic  | 5  | 4  | 4.712  | 1.871  |
| lvcpatific  | 1  | 1  | 0.938  | 0.066  |
| lvcpatcfur  | 1  | 1  | 0.742  | 0.348  |
| lvcpatcfuc  | 2  | 2  | 1.499  | 0.668  |
| lvcpatbmur  | 4  | 4  | 3.349  | 0.777  |
| lvcpatbmuc  | 4  | 4  | 3.371  | 0.746  |
| lvcpaakmic  | 10 | 9  | 7.529  | 1.163  |
| lvcpaaajfic | 7  | 6  | 6.544  | 0.696  |
| lvcpaaific  | 4  | 3  | 3.721  | 2.005  |
| lvcpaadmir  | 1  | 1  | 0.906  | 0.103  |
| lvcpaadmic  | 4  | 4  | 3.639  | 0.397  |
| lvcpaacfuc  | 1  | 1  | 0.724  | 0.381  |
| lvcpaabmur  | 1  | 1  | 0.819  | 0.221  |
| lvcpaabmuc  | 3  | 3  | 2.474  | 0.638  |
| luumutkmic  | 1  | 0  | 0.234  | 0.305  |
| luumutjfic  | 2  | 2  | 1.179  | 1.392  |
| luumutific  | 2  | 2  | 1.143  | 1.499  |
| luumutcfuc  | 1  | 0  | 0.208  | 0.263  |
| lusmutcfuc  | 1  | 0  | 0.165  | 0.198  |
| lusmutbmuc  | 1  | 0  | 0.262  | 0.354  |
| lupmutjfic  | 1  | 0  | 0.406  | 0.683  |
| lupmutific  | 1  | 1  | 0.388  | 1.576  |
| lupmutdmir  | 1  | 0  | 0.315  | 0.460  |
| lucmutkmic  | 5  | 4  | 2.535  | 1.718  |
| lucmutjfin  | 3  | 3  | 2.312  | 0.893  |
| lucmutjfic  | 3  | 1  | 2.487  | 5.198  |
| lucmutific  | 2  | 1  | 1.637  | 1.363  |
| lucmutcfuc  | 2  | 1  | 0.940  | 0.007  |
| lucmutbmur  | 1  | 0  | 0.604  | 1.523  |
| lucmutbmuc  | 2  | 1  | 1.227  | 0.108  |
| ltupaaific  | 2  | 0  | 1.736  | 13.177 |
| ltcpuakmic  | 1  | 1  | 0.902  | 0.109  |
| ltcpaakmir  | 1  | 1  | 0.830  | 0.205  |
| ltcpaakmic  | 18 | 16 | 15.038 | 0.374  |
| ltcpaaajfin | 3  | 3  | 2.829  | 0.181  |
| ltcpaaajfic | 14 | 14 | 13.438 | 0.585  |
| ltcpaaafir  | 5  | 4  | 4.776  | 2.820  |
| ltcpaaific  | 33 | 32 | 31.580 | 0.130  |
| ltcpaadmin  | 9  | 9  | 8.287  | 0.774  |
| ltcpaadmic  | 13 | 13 | 12.269 | 0.775  |
| ltcpaacfur  | 3  | 1  | 2.423  | 4.347  |
| ltcpaacfuc  | 8  | 7  | 6.512  | 0.197  |
| ltcpaabmur  | 4  | 4  | 3.531  | 0.532  |
| ltcpaabmuc  | 14 | 13 | 12.415 | 0.244  |
| lsupuakmic  | 1  | 0  | 0.138  | 0.161  |
| lsupuaajfir | 1  | 1  | 0.421  | 1.375  |
| lsupuaific  | 2  | 2  | 0.826  | 2.842  |
| lsspuaific  | 2  | 2  | 0.693  | 3.770  |
| lspuacfur   | 1  | 0  | 0.059  | 0.063  |
| lscpuakmic  | 2  | 0  | 0.703  | 1.085  |
| lscpuajfic  | 1  | 0  | 0.719  | 2.556  |
| lscpuafir   | 1  | 1  | 0.695  | 0.438  |
| lscpuaific  | 2  | 0  | 1.407  | 4.750  |
| lpcputific  | 2  | 2  | 1.802  | 0.219  |
| lpcputdmic  | 1  | 1  | 0.873  | 0.145  |

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|            |    |    |        |       |
|------------|----|----|--------|-------|
| lpcputcfuc | 2  | 0  | 1.284  | 3.586 |
| lpcputbmuc | 4  | 4  | 3.050  | 1.246 |
| loupuabmuc | 1  | 0  | 0.422  | 0.731 |
| loumutkmic | 1  | 1  | 0.523  | 0.911 |
| loumutific | 2  | 2  | 1.656  | 0.416 |
| loumutdmic | 1  | 1  | 0.784  | 0.276 |
| loumutcfur | 1  | 0  | 0.476  | 0.908 |
| locmutkmin | 1  | 0  | 0.720  | 2.566 |
| locmutkmic | 10 | 8  | 7.874  | 0.010 |
| locmutjfic | 2  | 1  | 1.892  | 7.757 |
| locmutific | 2  | 2  | 1.884  | 0.123 |
| lnupuacfuc | 1  | 0  | 0.297  | 0.422 |
| lnupatkmic | 1  | 0  | 0.236  | 0.308 |
| lnupaakmic | 1  | 0  | 0.213  | 0.270 |
| lnupaajfic | 1  | 1  | 0.560  | 0.785 |
| lnupaaific | 2  | 0  | 1.084  | 2.367 |
| lnupaadmuc | 3  | 0  | 1.415  | 2.680 |
| lnumatific | 2  | 1  | 1.466  | 0.553 |
| lnspatdmic | 1  | 1  | 0.434  | 1.303 |
| lnsmatdmic | 1  | 1  | 0.609  | 0.641 |
| lnppatdmic | 2  | 0  | 0.652  | 0.968 |
| lnppaakmir | 1  | 0  | 0.110  | 0.123 |
| lnppaaific | 1  | 0  | 0.360  | 0.562 |
| lnppaadmir | 2  | 0  | 0.579  | 0.815 |
| lnpmatjfic | 2  | 1  | 1.168  | 0.058 |
| lnpmatbmuc | 1  | 0  | 0.315  | 0.459 |
| lncpatkmir | 2  | 0  | 0.999  | 1.997 |
| lncpatkmic | 5  | 3  | 2.549  | 0.163 |
| lncpatjfic | 3  | 3  | 2.492  | 0.612 |
| lncpatific | 4  | 4  | 3.280  | 0.878 |
| lncpatdmir | 1  | 1  | 0.767  | 0.303 |
| lncpatdmic | 5  | 3  | 3.873  | 0.874 |
| lncpatcfur | 2  | 1  | 0.925  | 0.011 |
| lncpatcfun | 1  | 1  | 0.383  | 1.611 |
| lncpatcfuc | 4  | 3  | 1.890  | 1.235 |
| lncpatbmuc | 4  | 4  | 2.464  | 2.494 |
| lncpaakmic | 11 | 6  | 5.246  | 0.207 |
| lncpaajfir | 1  | 0  | 0.805  | 4.126 |
| lncpaajfic | 6  | 5  | 4.867  | 0.019 |
| lncpaaifir | 3  | 3  | 2.379  | 0.782 |
| lncpaaific | 13 | 12 | 10.396 | 1.235 |
| lncpaadmuc | 1  | 1  | 0.743  | 0.345 |
| lncpaadmin | 2  | 1  | 1.352  | 0.284 |
| lncpaadmuc | 10 | 6  | 7.509  | 1.217 |
| lncpaacfur | 2  | 1  | 0.860  | 0.040 |
| lncpaacfuc | 1  | 1  | 0.440  | 1.273 |
| lncpaabmur | 1  | 1  | 0.575  | 0.740 |
| lncpaabmuc | 6  | 5  | 3.507  | 1.530 |
| lncmutcfuc | 1  | 0  | 0.767  | 3.301 |
| lncmuacfuc | 1  | 0  | 0.743  | 2.894 |
| lncmatkmic | 3  | 0  | 2.036  | 6.338 |
| lncmatjfic | 2  | 2  | 1.817  | 0.201 |
| lncmatific | 2  | 1  | 1.805  | 3.680 |
| lncmatcfuc | 1  | 1  | 0.645  | 0.549 |
| lncmatbmuc | 1  | 1  | 0.765  | 0.307 |

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|             |   |   |       |        |
|-------------|---|---|-------|--------|
| lmupatific  | 1 | 0 | 0.536 | 1.155  |
| lmumatkmic  | 1 | 1 | 0.349 | 1.866  |
| lmumatjfic  | 3 | 2 | 2.149 | 0.037  |
| lmumatifir  | 1 | 0 | 0.693 | 2.254  |
| lmumatific  | 1 | 1 | 0.701 | 0.426  |
| lmumatcfuc  | 1 | 0 | 0.316 | 0.462  |
| lmsmatifir  | 1 | 0 | 0.629 | 1.699  |
| lmpmatjfic  | 2 | 2 | 1.091 | 1.666  |
| lmpmatdmic  | 1 | 0 | 0.457 | 0.842  |
| lmpmatcfuc  | 3 | 0 | 0.540 | 0.659  |
| lmpmatbmur  | 1 | 0 | 0.274 | 0.377  |
| lmpmatbmuc  | 1 | 1 | 0.282 | 2.544  |
| lcmutbmuc   | 2 | 2 | 1.670 | 0.395  |
| lcmatkmic   | 1 | 1 | 0.556 | 0.798  |
| lcmatkmic   | 4 | 2 | 2.576 | 0.361  |
| lcmatjfin   | 1 | 1 | 0.855 | 0.169  |
| lcmatjfic   | 6 | 6 | 5.370 | 0.704  |
| lcmatific   | 2 | 2 | 1.776 | 0.253  |
| lcmatdmic   | 2 | 0 | 1.713 | 11.959 |
| lcmatcfuc   | 5 | 5 | 3.046 | 3.208  |
| lcmatbmur   | 1 | 1 | 0.728 | 0.373  |
| lcmatbmuc   | 5 | 3 | 3.681 | 0.477  |
| licputkmic  | 2 | 2 | 1.775 | 0.254  |
| licputjfic  | 2 | 2 | 1.948 | 0.054  |
| licputific  | 1 | 1 | 0.972 | 0.029  |
| licputdmic  | 2 | 2 | 1.926 | 0.077  |
| lhupujfic   | 1 | 1 | 0.021 | 46.628 |
| lhupuaific  | 2 | 0 | 0.039 | 0.040  |
| lhupuadmin  | 1 | 0 | 0.010 | 0.010  |
| lhupuacfuc  | 1 | 0 | 0.004 | 0.004  |
| lhspuakmic  | 2 | 0 | 0.007 | 0.007  |
| lhppuakmic  | 2 | 0 | 0.004 | 0.004  |
| lhppujfic   | 2 | 0 | 0.020 | 0.021  |
| lhppuaific  | 1 | 0 | 0.009 | 0.010  |
| lhcpuakmic  | 1 | 0 | 0.015 | 0.015  |
| lhcpuajfin  | 1 | 0 | 0.048 | 0.050  |
| lhcpuajfic  | 1 | 0 | 0.068 | 0.072  |
| lhcpuaifir  | 1 | 0 | 0.061 | 0.065  |
| lhcpuaific  | 8 | 0 | 0.505 | 0.539  |
| lhcpuadmuc  | 4 | 0 | 0.193 | 0.203  |
| leupaaajfic | 1 | 1 | 0.722 | 0.386  |
| leumatkmir  | 1 | 1 | 0.550 | 0.818  |
| leumatkmic  | 2 | 1 | 1.120 | 0.029  |
| leumatjfin  | 1 | 0 | 0.806 | 4.160  |
| leumatjfic  | 2 | 2 | 1.714 | 0.333  |
| leumatific  | 4 | 2 | 3.392 | 3.758  |
| leumatdmic  | 1 | 1 | 0.808 | 0.237  |
| leumatcfuc  | 2 | 2 | 1.047 | 1.822  |
| leumatbmuc  | 2 | 2 | 1.326 | 1.018  |
| lesmatjfin  | 1 | 0 | 0.758 | 3.135  |
| lesmatjfic  | 2 | 1 | 1.638 | 1.373  |
| lesmatific  | 1 | 1 | 0.808 | 0.238  |
| lesmatdmin  | 1 | 0 | 0.687 | 2.199  |
| lesmatdmic  | 1 | 1 | 0.760 | 0.315  |
| lesmatcfuc  | 1 | 1 | 0.453 | 1.209  |

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|             |    |    |        |       |
|-------------|----|----|--------|-------|
| lesmatbmuc  | 3  | 2  | 1.791  | 0.061 |
| lepmatjfic  | 2  | 1  | 1.481  | 0.602 |
| lepmatific  | 2  | 2  | 1.452  | 0.754 |
| lepmatdmic  | 1  | 0  | 0.667  | 2.002 |
| lecpaaajfic | 1  | 1  | 0.897  | 0.114 |
| lecpaacfun  | 3  | 0  | 1.577  | 3.323 |
| lecpaacfuc  | 1  | 1  | 0.615  | 0.626 |
| lecmatkmic  | 3  | 3  | 2.434  | 0.698 |
| lecmatjfin  | 3  | 3  | 2.801  | 0.214 |
| lecmatjfic  | 4  | 3  | 3.812  | 3.675 |
| lecmatifir  | 1  | 1  | 0.948  | 0.055 |
| lecmatific  | 15 | 15 | 14.243 | 0.797 |
| lecmatdmin  | 2  | 1  | 1.816  | 3.973 |
| lecmatdmic  | 17 | 17 | 15.882 | 1.196 |
| lecmatcfur  | 2  | 0  | 1.561  | 7.114 |
| lecmatcfuc  | 19 | 18 | 14.961 | 2.904 |
| lecmatbmur  | 2  | 1  | 1.729  | 2.262 |
| lecmatbmuc  | 13 | 12 | 11.296 | 0.334 |
| ldpputific  | 1  | 1  | 0.722  | 0.385 |
| ldcputkmic  | 1  | 1  | 0.808  | 0.238 |
| ldcputjfir  | 1  | 1  | 0.950  | 0.052 |
| ldcputjfic  | 11 | 10 | 10.472 | 0.443 |
| ldcputific  | 1  | 1  | 0.949  | 0.054 |
| ldcputdmir  | 1  | 1  | 0.930  | 0.075 |
| ldcputdmin  | 1  | 1  | 0.906  | 0.104 |
| ldcputdmic  | 3  | 2  | 2.799  | 3.399 |
| ldcputcfur  | 2  | 1  | 1.554  | 0.884 |
| ldcputcfuc  | 2  | 1  | 1.568  | 0.951 |
| ldcputbmuc  | 3  | 3  | 2.600  | 0.462 |
| lcpputdmic  | 1  | 0  | 0.378  | 0.608 |
| lccpuaific  | 1  | 1  | 0.834  | 0.199 |
| lccpuadmuc  | 1  | 1  | 0.791  | 0.264 |
| lbuputcfuc  | 1  | 1  | 0.194  | 4.142 |
| lbupuakmic  | 1  | 0  | 0.197  | 0.246 |
| lbupuadmuc  | 1  | 0  | 0.448  | 0.812 |
| lbspuaajfic | 1  | 1  | 0.466  | 1.146 |
| lbspuadmuc  | 2  | 1  | 0.759  | 0.123 |
| lbspatkmic  | 1  | 0  | 0.104  | 0.116 |
| lbspaakmic  | 1  | 0  | 0.093  | 0.102 |
| lbsmutcfuc  | 1  | 1  | 0.270  | 2.705 |
| lbpputjfic  | 2  | 2  | 0.771  | 3.187 |
| lbpputific  | 1  | 1  | 0.368  | 1.715 |
| lbppuacfuc  | 1  | 0  | 0.091  | 0.101 |
| lbcputkmic  | 1  | 0  | 0.486  | 0.945 |
| lbcputjfic  | 1  | 0  | 0.817  | 4.455 |
| lbcputifir  | 1  | 0  | 0.799  | 3.975 |
| lbcputific  | 1  | 0  | 0.805  | 4.140 |
| lbcputdmin  | 2  | 0  | 1.368  | 4.331 |
| lbcputdmic  | 5  | 3  | 3.788  | 0.676 |
| lbcputcfuc  | 1  | 0  | 0.449  | 0.815 |
| lbcputbmur  | 1  | 0  | 0.583  | 1.400 |
| lbcputbmuc  | 2  | 0  | 1.186  | 2.917 |
| lbcpuakmin  | 1  | 0  | 0.365  | 0.574 |
| lbcpuakmic  | 2  | 2  | 0.906  | 2.413 |
| lbcpuajfic  | 3  | 3  | 2.389  | 0.768 |

## SDELPRESNO?Honly.Res

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|            |    |   |       |       |
|------------|----|---|-------|-------|
| lbcpuaifir | 1  | 1 | 0.777 | 0.287 |
| lbcpuaific | 3  | 2 | 2.352 | 0.244 |
| lbcpuadmin | 2  | 2 | 1.310 | 1.053 |
| lbcpuadmuc | 11 | 9 | 8.059 | 0.411 |
| lbcpuacfuc | 1  | 0 | 0.417 | 0.714 |
| lbcpuabmur | 1  | 1 | 0.551 | 0.814 |
| lbcpuabmuc | 3  | 2 | 1.684 | 0.135 |
| lbcpatkmic | 1  | 1 | 0.343 | 1.918 |
| lbcpatcfuc | 1  | 0 | 0.310 | 0.449 |
| lbcpaaific | 2  | 2 | 1.334 | 0.999 |
| lbcpaadmuc | 1  | 0 | 0.602 | 1.512 |
| lbcmatbmur | 1  | 1 | 0.611 | 0.637 |
| lauputific | 1  | 0 | 0.708 | 2.427 |
| laupatbmuc | 1  | 0 | 0.320 | 0.472 |
| laumatkmic | 2  | 0 | 0.766 | 1.242 |
| laumatjfic | 1  | 1 | 0.745 | 0.342 |
| laumatific | 1  | 1 | 0.731 | 0.368 |
| laumatcfuc | 2  | 1 | 0.697 | 0.202 |
| laumatbmuc | 1  | 0 | 0.489 | 0.958 |
| laspatkmic | 2  | 0 | 0.374 | 0.461 |
| lasmatkmic | 1  | 0 | 0.319 | 0.468 |
| lasmatcfur | 1  | 0 | 0.279 | 0.387 |
| lasmatbmuc | 1  | 0 | 0.419 | 0.722 |
| lapputific | 1  | 0 | 0.536 | 1.153 |
| lappatkmic | 1  | 0 | 0.127 | 0.145 |
| lappatific | 2  | 0 | 0.778 | 1.273 |
| lappatbmuc | 1  | 0 | 0.183 | 0.224 |
| lappaacfuc | 1  | 0 | 0.099 | 0.110 |
| lapmatkmic | 1  | 0 | 0.228 | 0.295 |
| lapmatjfic | 1  | 0 | 0.582 | 1.392 |
| lapmatdmic | 1  | 1 | 0.494 | 1.024 |
| lapmatcfuc | 1  | 0 | 0.203 | 0.254 |
| lapmatbmur | 1  | 1 | 0.304 | 2.286 |
| lacputjfir | 1  | 1 | 0.894 | 0.118 |
| lacputjfic | 1  | 1 | 0.898 | 0.113 |
| lacputbmuc | 1  | 1 | 0.743 | 0.347 |
| lacpuakmic | 2  | 2 | 1.242 | 1.220 |
| lacpuajfic | 2  | 2 | 1.771 | 0.259 |
| lacpatjfic | 1  | 1 | 0.829 | 0.206 |
| lacpatific | 2  | 2 | 1.638 | 0.443 |
| lacpatdmir | 2  | 2 | 1.532 | 0.611 |
| lacpatcfur | 1  | 1 | 0.460 | 1.172 |
| lacpatcfuc | 1  | 1 | 0.471 | 1.125 |
| lacpatbmur | 1  | 1 | 0.604 | 0.654 |
| lacpaakmir | 1  | 1 | 0.465 | 1.151 |
| lacpaakmic | 3  | 1 | 1.425 | 0.241 |
| lacpaaific | 3  | 2 | 2.395 | 0.324 |
| lacpaadmur | 1  | 1 | 0.742 | 0.348 |
| lacpaadmuc | 1  | 1 | 0.749 | 0.334 |
| lacpaacfur | 1  | 1 | 0.428 | 1.336 |
| lacpaabmuc | 1  | 0 | 0.583 | 1.396 |
| lacmatkmic | 2  | 0 | 1.354 | 4.192 |
| lacmatific | 6  | 6 | 5.411 | 0.654 |
| lacmatdmin | 1  | 1 | 0.828 | 0.208 |
| lacmatdmic | 4  | 4 | 3.496 | 0.577 |

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## SDELPRESNO?Honly.Res

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|             |   |   |       |        |
|-------------|---|---|-------|--------|
| lacmatcfuc  | 3 | 1 | 1.931 | 1.260  |
| lacmatbmuc  | 3 | 1 | 2.291 | 3.082  |
| ivupaakmic  | 2 | 0 | 0.343 | 0.414  |
| ivupaaajfin | 1 | 1 | 0.403 | 1.480  |
| ivupaadmuc  | 2 | 0 | 0.812 | 1.368  |
| ivupaacfur  | 2 | 0 | 0.292 | 0.342  |
| ivupaabmuc  | 1 | 0 | 0.242 | 0.319  |
| ivumatkmic  | 1 | 1 | 0.324 | 2.087  |
| ivumatjfin  | 2 | 2 | 1.220 | 1.278  |
| ivumatjfic  | 3 | 2 | 2.080 | 0.010  |
| ivsmutkmic  | 1 | 0 | 0.396 | 0.655  |
| ivsmatjfic  | 1 | 1 | 0.630 | 0.587  |
| ivppaaajfic | 1 | 0 | 0.317 | 0.463  |
| ivppaadmic  | 1 | 0 | 0.245 | 0.325  |
| ivppaacfuc  | 1 | 0 | 0.078 | 0.085  |
| ivpmatcfuc  | 1 | 0 | 0.164 | 0.196  |
| ivcpaakmir  | 1 | 1 | 0.401 | 1.492  |
| ivcpaakmic  | 3 | 0 | 1.233 | 2.094  |
| ivcpaaajfin | 2 | 2 | 1.390 | 0.877  |
| ivcpaaajfic | 5 | 5 | 3.834 | 1.520  |
| ivcpaaific  | 1 | 1 | 0.754 | 0.327  |
| ivcpaadmic  | 1 | 1 | 0.698 | 0.433  |
| ivcpaacfuc  | 3 | 1 | 1.127 | 0.023  |
| ivcpaabmuc  | 3 | 0 | 1.556 | 3.231  |
| ivcmatjfic  | 1 | 1 | 0.884 | 0.131  |
| ivcmatific  | 1 | 1 | 0.876 | 0.141  |
| ivcmatcfuc  | 1 | 1 | 0.582 | 0.717  |
| itupatkmic  | 1 | 0 | 0.282 | 0.393  |
| itupatjfin  | 1 | 1 | 0.562 | 0.779  |
| itcpatific  | 1 | 0 | 0.853 | 5.807  |
| itcpaakmic  | 1 | 1 | 0.538 | 0.860  |
| ioupuajfic  | 1 | 1 | 0.338 | 1.956  |
| ioupuacfuc  | 2 | 0 | 0.171 | 0.187  |
| ioumutdmic  | 1 | 1 | 0.454 | 1.203  |
| iosmutcfuc  | 1 | 0 | 0.140 | 0.163  |
| iosmutbmur  | 1 | 0 | 0.219 | 0.281  |
| ioppuabmuc  | 1 | 0 | 0.074 | 0.080  |
| iocmutjfic  | 1 | 1 | 0.800 | 0.250  |
| iocmutdmir  | 1 | 1 | 0.729 | 0.371  |
| iocmutdmic  | 1 | 1 | 0.737 | 0.357  |
| iocmutbmur  | 1 | 1 | 0.557 | 0.796  |
| iocmutbmuc  | 1 | 0 | 0.567 | 1.309  |
| inupatkmic  | 1 | 0 | 0.066 | 0.071  |
| inupaakmir  | 2 | 0 | 0.112 | 0.119  |
| inupaakmic  | 6 | 0 | 0.350 | 0.371  |
| inupaaajfic | 4 | 2 | 0.903 | 1.720  |
| inupaaific  | 2 | 0 | 0.426 | 0.542  |
| inupaadmuc  | 1 | 0 | 0.164 | 0.196  |
| inupaadmin  | 1 | 0 | 0.124 | 0.142  |
| inupaadmuc  | 3 | 1 | 0.510 | 0.569  |
| inupaacfur  | 1 | 0 | 0.049 | 0.051  |
| inupaacfuc  | 1 | 1 | 0.051 | 18.746 |
| inupaabmuc  | 4 | 1 | 0.349 | 1.333  |
| inspaakmic  | 1 | 0 | 0.045 | 0.047  |
| inspaaajfic | 1 | 0 | 0.180 | 0.220  |

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## SDELPRESNO?Honly.Res

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|             |    |   |       |        |
|-------------|----|---|-------|--------|
| inspaaifc   | 1  | 0 | 0.170 | 0.204  |
| inspaacfuc  | 1  | 0 | 0.039 | 0.040  |
| inspaabmuc  | 6  | 0 | 0.403 | 0.432  |
| inpputdmic  | 1  | 1 | 0.167 | 4.975  |
| inppatbmuc  | 1  | 0 | 0.049 | 0.052  |
| inppaakmir  | 1  | 1 | 0.027 | 35.388 |
| inppaakmic  | 5  | 0 | 0.143 | 0.147  |
| inppaajfic  | 5  | 1 | 0.609 | 0.286  |
| inppaaifc   | 1  | 0 | 0.114 | 0.129  |
| inppaadmic  | 5  | 0 | 0.443 | 0.486  |
| inppaacfur  | 1  | 0 | 0.024 | 0.024  |
| inppaacfuc  | 2  | 0 | 0.049 | 0.051  |
| inppaabmuc  | 6  | 1 | 0.261 | 2.194  |
| incpaakmic  | 18 | 1 | 3.110 | 1.730  |
| incpaajfir  | 1  | 0 | 0.486 | 0.945  |
| incpaajfin  | 1  | 0 | 0.405 | 0.682  |
| incpaajfic  | 5  | 1 | 2.480 | 1.753  |
| incpaaifc   | 6  | 3 | 2.866 | 0.012  |
| incpaadmira | 1  | 0 | 0.399 | 0.663  |
| incpaadmin  | 3  | 1 | 0.971 | 0.001  |
| incpaadmica | 7  | 4 | 2.859 | 0.770  |
| incpaacfur  | 2  | 1 | 0.295 | 1.980  |
| incpaacfuc  | 5  | 0 | 0.763 | 0.900  |
| incpaabmuc  | 3  | 0 | 0.731 | 0.967  |
| ikupuakmic  | 2  | 0 | 0.043 | 0.044  |
| ikupuacfuc  | 2  | 0 | 0.037 | 0.038  |
| ikspuakmic  | 1  | 0 | 0.016 | 0.016  |
| ikppuajfic  | 1  | 0 | 0.047 | 0.049  |
| ikppuaifc   | 4  | 0 | 0.175 | 0.183  |
| ikppuadmira | 1  | 0 | 0.032 | 0.033  |
| ikppuadmin  | 2  | 0 | 0.047 | 0.048  |
| ikppuadmica | 5  | 0 | 0.167 | 0.173  |
| ikppuacfur  | 2  | 0 | 0.017 | 0.017  |
| ikppuacfuc  | 6  | 0 | 0.053 | 0.054  |
| ikppuabmuc  | 1  | 0 | 0.016 | 0.016  |
| ikcpuakmin  | 1  | 0 | 0.049 | 0.051  |
| ikcpuakmic  | 9  | 2 | 0.620 | 3.294  |
| ikcpuajfic  | 1  | 1 | 0.259 | 2.865  |
| ikcpuaifc   | 3  | 0 | 0.735 | 0.973  |
| ikcpuacfur  | 1  | 0 | 0.058 | 0.061  |
| ikcpuacfuc  | 9  | 0 | 0.540 | 0.574  |
| ikcpuabmuc  | 1  | 0 | 0.103 | 0.114  |
| iiupuakmic  | 1  | 0 | 0.319 | 0.469  |
| iippuacfuc  | 1  | 0 | 0.161 | 0.192  |
| iicpuakmic  | 1  | 0 | 0.613 | 1.583  |
| iecpaacfuc  | 1  | 0 | 0.268 | 0.366  |
| idupuakmic  | 1  | 1 | 0.200 | 3.994  |
| idumutkmica | 1  | 0 | 0.367 | 0.580  |
| idumutbmura | 1  | 1 | 0.462 | 1.163  |
| idumuajfic  | 2  | 0 | 1.411 | 4.797  |
| idsmutkmica | 2  | 2 | 0.609 | 4.573  |
| idsmutjfic  | 1  | 0 | 0.673 | 2.061  |
| idsmutdmina | 1  | 0 | 0.500 | 1.002  |
| idppuaifc   | 1  | 1 | 0.343 | 1.918  |
| idpmutcfur  | 1  | 0 | 0.186 | 0.228  |

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## SDELPRESNO?Honly.Res

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|             |   |   |       |        |
|-------------|---|---|-------|--------|
| idcpuakmir  | 1 | 1 | 0.448 | 1.233  |
| idcpuajfic  | 4 | 0 | 3.197 | 15.930 |
| idcpuaific  | 1 | 1 | 0.787 | 0.270  |
| idcpuadmin  | 1 | 1 | 0.659 | 0.517  |
| idcpuadmik  | 2 | 2 | 1.473 | 0.716  |
| idcmutkmir  | 1 | 0 | 0.653 | 1.880  |
| idcmutkmic  | 3 | 3 | 1.986 | 1.532  |
| idcmutjfin  | 1 | 1 | 0.865 | 0.156  |
| idcmutjfic  | 4 | 4 | 3.609 | 0.433  |
| idcmutdmin  | 2 | 2 | 1.635 | 0.446  |
| idcmutdmic  | 8 | 8 | 6.930 | 1.236  |
| idcmutcfuc  | 3 | 1 | 1.884 | 1.114  |
| idcmutbmuc  | 3 | 1 | 2.254 | 2.805  |
| iaupuajfic  | 1 | 0 | 0.344 | 0.525  |
| iaupuaadmin | 1 | 0 | 0.203 | 0.255  |
| iaupaakmin  | 1 | 0 | 0.041 | 0.042  |
| iaupaakmic  | 1 | 0 | 0.058 | 0.061  |
| iaupaaific  | 1 | 0 | 0.212 | 0.269  |
| iaupaadmin  | 1 | 0 | 0.123 | 0.141  |
| iaumutkmic  | 1 | 1 | 0.205 | 3.878  |
| iaspuabmuc  | 1 | 0 | 0.115 | 0.129  |
| iaspaakmic  | 2 | 0 | 0.088 | 0.093  |
| iaspaajfic  | 1 | 1 | 0.179 | 4.585  |
| iappuabmuc  | 1 | 0 | 0.075 | 0.082  |
| iappaakmir  | 1 | 0 | 0.027 | 0.028  |
| iappaajfic  | 1 | 0 | 0.121 | 0.138  |
| iappaaific  | 1 | 0 | 0.113 | 0.128  |
| iappaadmin  | 1 | 0 | 0.063 | 0.067  |
| iappaadmik  | 1 | 0 | 0.088 | 0.096  |
| iappaacfuc  | 1 | 0 | 0.025 | 0.025  |
| iacpuaific  | 1 | 1 | 0.622 | 0.608  |
| iacpuadmik  | 1 | 1 | 0.544 | 0.839  |
| iacpuacfuc  | 1 | 0 | 0.245 | 0.324  |
| iacpuabmuc  | 3 | 0 | 1.101 | 1.738  |
| iacpaakmir  | 2 | 0 | 0.332 | 0.398  |
| iacpaakmic  | 6 | 1 | 1.030 | 0.001  |
| iacpaajfic  | 3 | 2 | 1.482 | 0.358  |
| iacpaaific  | 5 | 4 | 2.379 | 2.108  |
| iacpaadmik  | 2 | 1 | 0.813 | 0.072  |
| iacpaacfur  | 1 | 0 | 0.146 | 0.171  |
| iacpaacfuc  | 3 | 1 | 0.455 | 0.772  |
| iacpaabmuc  | 1 | 0 | 0.242 | 0.320  |
| iacmutkmic  | 1 | 1 | 0.465 | 1.149  |
| iacmuakmic  | 1 | 1 | 0.433 | 1.310  |
| avupaakmic  | 7 | 0 | 0.564 | 0.613  |
| avupaajfin  | 1 | 1 | 0.222 | 3.497  |
| avupaajfic  | 1 | 0 | 0.292 | 0.413  |
| avupaaifir  | 1 | 0 | 0.269 | 0.368  |
| avupaaific  | 4 | 1 | 1.109 | 0.015  |
| avupaadmik  | 2 | 1 | 0.435 | 0.938  |
| avupaacfur  | 2 | 0 | 0.135 | 0.145  |
| avupaabmuc  | 1 | 0 | 0.119 | 0.135  |
| avspaakmic  | 3 | 1 | 0.186 | 3.807  |
| avspaaific  | 2 | 0 | 0.448 | 0.578  |
| avsmutkmic  | 1 | 0 | 0.217 | 0.277  |

# SDELPRESNO?Honly.Res

|             |    |   |       |        |
|-------------|----|---|-------|--------|
| avppaakmic  | 2  | 0 | 0.080 | 0.083  |
| avppaaajfic | 1  | 0 | 0.164 | 0.196  |
| avppaaific  | 1  | 0 | 0.154 | 0.182  |
| avppaacfur  | 1  | 0 | 0.033 | 0.035  |
| avcpaakmic  | 12 | 0 | 2.737 | 3.545  |
| avcpaaajfir | 1  | 1 | 0.572 | 0.748  |
| avcpaaajfic | 2  | 0 | 1.164 | 2.785  |
| avcpaaifir  | 1  | 1 | 0.554 | 0.805  |
| avcpaaific  | 7  | 4 | 3.948 | 0.002  |
| avcpaadmic  | 2  | 0 | 0.988 | 1.953  |
| avcpaacfur  | 1  | 0 | 0.196 | 0.244  |
| avcpaacfuc  | 2  | 1 | 0.406 | 1.091  |
| avcpaabmuc  | 3  | 1 | 0.939 | 0.006  |
| atupaakmic  | 1  | 0 | 0.127 | 0.146  |
| atupaaajfin | 2  | 0 | 0.645 | 0.953  |
| atupaaific  | 1  | 0 | 0.390 | 0.639  |
| asspuacfuc  | 1  | 0 | 0.010 | 0.011  |
| ascpuadmin  | 1  | 0 | 0.107 | 0.120  |
| ascpuacfuc  | 2  | 0 | 0.087 | 0.091  |
| ascpuabmur  | 1  | 0 | 0.072 | 0.078  |
| ascpuabmuc  | 1  | 0 | 0.075 | 0.081  |
| aoppuacfuc  | 1  | 0 | 0.018 | 0.019  |
| anupaaajfin | 1  | 1 | 0.079 | 11.691 |
| anupaaific  | 1  | 1 | 0.103 | 8.718  |
| anspaaific  | 1  | 0 | 0.080 | 0.086  |
| anppaaajfic | 1  | 0 | 0.055 | 0.059  |
| anppaaific  | 2  | 2 | 0.103 | 36.664 |
| anppaadmic  | 1  | 0 | 0.040 | 0.041  |
| ancpaaajfic | 1  | 0 | 0.294 | 0.417  |
| ancpaaific  | 5  | 1 | 1.395 | 0.155  |
| ancpaadmin  | 1  | 0 | 0.168 | 0.202  |
| aippuaific  | 1  | 1 | 0.292 | 2.420  |
| aecpaakmic  | 1  | 0 | 0.152 | 0.180  |
| adumutdmic  | 1  | 1 | 0.448 | 1.232  |
| adsmutdmic  | 2  | 1 | 0.759 | 0.123  |
| adsmutcfuc  | 1  | 0 | 0.138 | 0.160  |
| adcmutjfir  | 1  | 1 | 0.790 | 0.267  |
| adcmutjfic  | 1  | 1 | 0.796 | 0.256  |
| adcmutific  | 3  | 3 | 2.352 | 0.827  |
| adcmutdmin  | 2  | 2 | 1.310 | 1.054  |
| adcmutdmic  | 2  | 2 | 1.465 | 0.730  |
| adcmutcfuc  | 5  | 2 | 2.083 | 0.006  |
| adcmutbmuc  | 1  | 0 | 0.561 | 1.279  |
| aappaific   | 1  | 0 |       |        |

Total Chi-square = 660.6692  
 Chi-square/cell = 1.3347  
 Log likelihood = -528.624

Total chi-square: mide interacción entre los factores en los diferentes grupos factoriales. Indica si la interacción es significativa.  
 Chi-square per cell: más cerca de 0 ó 1 mejor, hay menos probabilidad de que haya interacción entre los grupos.  
 Log likelihood: es una medida de "goodness of fit". Debe estar cerca de 0.

Execution time: 0 min, 25.3 sec

• BINOMIAL VARBRUL • 9/21/2005•6:53 PM .....  
 Name of cell file: SDELPRESNO?.Cel

Using fast, less accurate method.  
 Averaging by weighting factors.

# SDELPRESNO?Honly.Res

Threshold, step-up/down: 0.050001

Binomial Up & Down produce una lista con el número de factores contextuales que contribuyen significativamente a la variación estudiada y elimina aquellos que no aportan a la variación. p=.05.

Stepping Up...

----- Level # 0 -----

Run # 1, 1 cells:  
Iterations: 1 2  
Convergence at Iteration 2  
Input 0.561  
Log likelihood = -807.697

----- Level # 1 -----

Run # 2, 3 cells:  
Iterations: 1 2 3 4 5  
Convergence at Iteration 5  
Input 0.566  
Group # 1 -- l: 0.658, i: 0.247, a: 0.237  
Log likelihood = -708.674 Significance = 0.000

Run # 3, 16 cells:  
Iterations: 1 2 3 4 5 6  
Convergence at Iteration 6  
Input 0.562  
Group # 2 -- n: 0.340, d: 0.673, a: 0.397, m: 0.593, v: 0.491, e: 0.774  
                  u: 0.489, o: 0.557, b: 0.519, h: 0.028, k: 0.046, i: 0.675  
                  p: 0.731, c: 0.609  
Log likelihood = -681.921 Significance = 0.000

Run # 4, 4 cells:  
Iterations: 1 2 3 4 5  
Convergence at Iteration 5  
Input 0.559  
Group # 3 -- u: 0.304, c: 0.625, s: 0.250, p: 0.144  
Log likelihood = -721.500 Significance = 0.000

Run # 5, 2 cells:  
Iterations: 1 2 3 4  
Convergence at Iteration 4  
Input 0.564  
Group # 4 -- p: 0.440, m: 0.647  
Log likelihood = -787.642 Significance = 0.000

Run # 6, 2 cells:  
Iterations: 1 2 3 4  
Convergence at Iteration 4  
Input 0.561  
Group # 5 -- a: 0.524, u: 0.450  
Log likelihood = -804.859 Significance = 0.018

Run # 7, 2 cells:  
Iterations: 1 2 3 4  
Convergence at Iteration 4  
Input 0.566

# SDELPRESNO?Honly.Res

---

Group # 6 -- a: 0.401, t: 0.643  
Log likelihood = -774.794 Significance = 0.000

Run # 8, 6 cells:  
Iterations: 1 2 3 4 5  
Convergence at Iteration 5  
Input 0.564  
Group # 7 -- k: 0.327, b: 0.511, j: 0.646, c: 0.344, d: 0.573, i: 0.604  
Log likelihood = -769.331 Significance = 0.000

Run # 9, 2 cells:  
Iterations: 1 2 3 4  
Convergence at Iteration 4  
Input 0.561  
Group # 8 -- m: 0.461, f: 0.540  
Log likelihood = -803.984 Significance = 0.008

Run # 10, 2 cells:  
Iterations: 1 2 3 4  
Convergence at Iteration 4  
Input 0.562  
Group # 9 -- i: 0.529, u: 0.424  
Log likelihood = -802.407 Significance = 0.002

Run # 11, 3 cells:  
Iterations: 1 2 3 4  
Convergence at Iteration 4  
Input 0.561  
Group #10 -- c: 0.501, r: 0.461, n: 0.539  
Log likelihood = -807.120 Significance = 0.569

Add Group # 3 with factors ucsp

----- Level # 2 -----

Run # 12, 12 cells:  
Iterations: 1 2 3 4 5  
Convergence at Iteration 5  
Input 0.561  
Group # 1 -- l: 0.640, i: 0.276, a: 0.252  
Group # 3 -- u: 0.349, c: 0.607, s: 0.274, p: 0.169  
Log likelihood = -655.154 Significance = 0.000

Run # 13, 56 cells:  
Iterations: 1 2 3 4 5 6 7  
Convergence at Iteration 7  
Input 0.558  
Group # 2 -- n: 0.354, d: 0.647, a: 0.419, m: 0.645, v: 0.490, e: 0.789  
          u: 0.524, o: 0.605, b: 0.492, h: 0.027, k: 0.052, i: 0.701  
          p: 0.634, c: 0.673  
Group # 3 -- u: 0.297, c: 0.616, s: 0.234, p: 0.195  
Log likelihood = -625.209 Significance = 0.000

Run # 14, 8 cells:  
Iterations: 1 2 3 4 5 6

# SDELPRESNO?Honly.Res

---

Convergence at Iteration 6

Input 0.563

Group # 3 -- u: 0.280, c: 0.636, s: 0.201, p: 0.144

Group # 4 -- p: 0.423, m: 0.686

Log likelihood = -694.571 Significance = 0.000

Run # 15, 8 cells:

Iterations: 1 2 3 4 5

Convergence at Iteration 5

Input 0.559

Group # 3 -- u: 0.301, c: 0.626, s: 0.252, p: 0.145

Group # 5 -- a: 0.524, u: 0.448

Log likelihood = -718.979 Significance = 0.027

Run # 16, 8 cells:

Iterations: 1 2 3 4 5 6

Convergence at Iteration 6

Input 0.564

Group # 3 -- u: 0.297, c: 0.631, s: 0.210, p: 0.143

Group # 6 -- a: 0.389, t: 0.659

Log likelihood = -686.874 Significance = 0.000

Run # 17, 24 cells:

Iterations: 1 2 3 4 5 6

Convergence at Iteration 6

Input 0.563

Group # 3 -- u: 0.288, c: 0.634, s: 0.257, p: 0.124

Group # 7 -- k: 0.301, b: 0.496, j: 0.686, c: 0.327, d: 0.579, i: 0.615

Log likelihood = -677.314 Significance = 0.000

Run # 18, 8 cells:

Iterations: 1 2 3 4 5

Convergence at Iteration 5

Input 0.560

Group # 3 -- u: 0.298, c: 0.627, s: 0.258, p: 0.140

Group # 8 -- m: 0.448, f: 0.553

Log likelihood = -715.996 Significance = 0.001

Run # 19, 8 cells:

Iterations: 1 2 3 4 5

Convergence at Iteration 5

Input 0.560

Group # 3 -- u: 0.295, c: 0.627, s: 0.252, p: 0.145

Group # 9 -- i: 0.534, u: 0.411

Log likelihood = -715.394 Significance = 0.000

Run # 20, 12 cells:

Iterations: 1 2 3 4 5

Convergence at Iteration 5

Input 0.559

Group # 3 -- u: 0.304, c: 0.625, s: 0.249, p: 0.145

Group #10 -- c: 0.503, r: 0.460, n: 0.519

Log likelihood = -721.117 Significance = 0.684

Add Group # 7 with factors kbjcdi

# SDELPRESNO?Honly.Res

---

----- Level # 3 -----

Run # 21, 69 cells:

Iterations: 1 2 3 4 5 6

Convergence at Iteration 6

Input 0.565

Group # 1 -- l: 0.638, i: 0.282, a: 0.248

Group # 3 -- u: 0.330, c: 0.617, s: 0.283, p: 0.144

Group # 7 -- k: 0.320, b: 0.471, j: 0.700, c: 0.327, d: 0.583, i: 0.591

Log likelihood = -618.484 Significance = 0.000

Run # 22, 222 cells:

Iterations: 1 2 3 4 5 6 7 8

Convergence at Iteration 8

Input 0.562

Group # 2 -- n: 0.346, d: 0.627, a: 0.435, m: 0.657, v: 0.500, e: 0.795

u: 0.520, o: 0.668, b: 0.456, h: 0.016, k: 0.071, i: 0.741

p: 0.658, c: 0.581

Group # 3 -- u: 0.273, c: 0.627, s: 0.240, p: 0.167

Group # 7 -- k: 0.315, b: 0.451, j: 0.675, c: 0.298, d: 0.590, i: 0.652

Log likelihood = -585.248 Significance = 0.000

Run # 23, 48 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.567

Group # 3 -- u: 0.262, c: 0.646, s: 0.204, p: 0.123

Group # 4 -- p: 0.417, m: 0.698

Group # 7 -- k: 0.309, b: 0.485, j: 0.681, c: 0.298, d: 0.588, i: 0.633

Log likelihood = -648.819 Significance = 0.000

Run # 24, 48 cells:

Iterations: 1 2 3 4 5 6

Convergence at Iteration 6

Input 0.564

Group # 3 -- u: 0.284, c: 0.635, s: 0.259, p: 0.125

Group # 5 -- a: 0.526, u: 0.444

Group # 7 -- k: 0.299, b: 0.492, j: 0.688, c: 0.328, d: 0.585, i: 0.611

Log likelihood = -674.570 Significance = 0.019

Run # 25, 48 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.568

Group # 3 -- u: 0.279, c: 0.642, s: 0.217, p: 0.119

Group # 6 -- a: 0.381, t: 0.669

Group # 7 -- k: 0.318, b: 0.468, j: 0.680, c: 0.292, d: 0.588, i: 0.641

Log likelihood = -641.804 Significance = 0.000

Run # 26, 24 cells:

Iterations: 1 2 3 4 5 6

Convergence at Iteration 6

Input 0.563

Group # 3 -- u: 0.288, c: 0.634, s: 0.257, p: 0.124

# SDELPRESNO?Honly.Res

---

Group # 7 -- k: 0.308, b: 0.503, j: 0.679, c: 0.320, d: 0.587, i: 0.607  
Group # 8 -- m: 0.492, f: 0.508  
Log likelihood = -677.314 Significance = 0.976

Run # 27, 24 cells:

Iterations: 1 2 3 4 5 6

Convergence at Iteration 6

Input 0.563

Group # 3 -- u: 0.288, c: 0.634, s: 0.257, p: 0.124

Group # 7 -- k: 0.297, b: 0.509, j: 0.682, c: 0.339, d: 0.574, i: 0.610

Group # 9 -- i: 0.505, u: 0.487

\*\*\* Warning, negative change in likelihood (-0.01153564) replaced by 0.

Log likelihood = -677.320 Significance = 1.000

Run # 28, 53 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.564

Group # 3 -- u: 0.290, c: 0.635, s: 0.256, p: 0.122

Group # 7 -- k: 0.298, b: 0.491, j: 0.691, c: 0.325, d: 0.589, i: 0.609

Group #10 -- c: 0.507, r: 0.490, n: 0.427

Log likelihood = -676.650 Significance = 0.517

Add Group # 6 with factors at

----- Level # 4 -----

Run # 29, 115 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.563

Group # 1 -- l: 0.617, i: 0.316, a: 0.273

Group # 3 -- u: 0.318, c: 0.626, s: 0.252, p: 0.132

Group # 6 -- a: 0.421, t: 0.614

Group # 7 -- k: 0.330, b: 0.455, j: 0.695, c: 0.304, d: 0.584, i: 0.614

Log likelihood = -605.373 Significance = 0.000

Run # 30, 281 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11

Convergence at Iteration 11

Input 0.564

Group # 2 -- n: 0.385, d: 0.513, a: 0.423, m: 0.507, v: 0.559, e: 0.699

u: 0.363, o: 0.559, b: 0.462, h: 0.023, k: 0.105, i: 0.733

p: 0.510, c: 0.567

Group # 3 -- u: 0.275, c: 0.630, s: 0.223, p: 0.160

Group # 6 -- a: 0.391, t: 0.656

Group # 7 -- k: 0.319, b: 0.433, j: 0.676, c: 0.284, d: 0.600, i: 0.662

Log likelihood = -569.470 Significance = 0.000

Run # 31, 69 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12

Convergence at Iteration 12

Input 0.568

Group # 3 -- u: 0.270, c: 0.645, s: 0.206, p: 0.120

Group # 4 -- p: 0.466, m: 0.585

# SDELPRESNO?Honly.Res

---

Group # 6 -- a: 0.413, t: 0.626  
Group # 7 -- k: 0.317, b: 0.470, j: 0.679, c: 0.289, d: 0.589, i: 0.643  
Log likelihood = -639.949 Significance = 0.056

Run # 32, 92 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.567

Group # 3 -- u: 0.274, c: 0.643, s: 0.218, p: 0.118

Group # 5 -- a: 0.542, u: 0.411

Group # 6 -- a: 0.374, t: 0.679

Group # 7 -- k: 0.316, b: 0.461, j: 0.680, c: 0.291, d: 0.598, i: 0.639

Log likelihood = -635.564 Significance = 0.000

Run # 33, 48 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.568

Group # 3 -- u: 0.279, c: 0.642, s: 0.217, p: 0.119

Group # 6 -- a: 0.381, t: 0.669

Group # 7 -- k: 0.324, b: 0.475, j: 0.673, c: 0.286, d: 0.595, i: 0.635

Group # 8 -- m: 0.493, f: 0.507

Log likelihood = -641.801 Significance = 0.943

Run # 34, 48 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.568

Group # 3 -- u: 0.279, c: 0.642, s: 0.217, p: 0.119

Group # 6 -- a: 0.381, t: 0.669

Group # 7 -- k: 0.312, b: 0.486, j: 0.674, c: 0.307, d: 0.581, i: 0.635

Group # 9 -- i: 0.507, u: 0.482

Log likelihood = -641.802 Significance = 0.953

Run # 35, 93 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.568

Group # 3 -- u: 0.281, c: 0.642, s: 0.217, p: 0.117

Group # 6 -- a: 0.382, t: 0.669

Group # 7 -- k: 0.315, b: 0.464, j: 0.684, c: 0.291, d: 0.596, i: 0.637

Group #10 -- c: 0.505, r: 0.496, n: 0.437

Log likelihood = -641.356 Significance = 0.646

Add Group # 2 with factors ndamvetuobhkispc

----- Level # 5 -----

Run # 36, 357 cells:

Iterations: 1 2 3 4 5 6 7 8 9

Convergence at Iteration 9

Input 0.568

Group # 1 -- l: 0.646, i: 0.305, a: 0.156

Group # 2 -- n: 0.375, d: 0.750, a: 0.420, m: 0.439, v: 0.676, e: 0.634

u: 0.302, o: 0.593, b: 0.319, h: 0.010, k: 0.172, i: 0.805

# SDELPRESNO?Honly.Res

---

p: 0.476, c: 0.415  
Group # 3 -- u: 0.323, c: 0.609, s: 0.275, p: 0.182  
Group # 6 -- a: 0.454, t: 0.566  
Group # 7 -- k: 0.320, b: 0.422, j: 0.679, c: 0.287, d: 0.595, i: 0.667  
Log likelihood = -533.310 Significance = 0.000

Run # 37, 310 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
Convergence at Iteration 16

Input 0.564

Group # 2 -- n: 0.397, d: 0.501, a: 0.424, m: 0.468, v: 0.569, e: 0.670  
u: 0.327, o: 0.529, b: 0.482, h: 0.024, k: 0.109, i: 0.752  
p: 0.552, c: 0.590

Group # 3 -- u: 0.271, c: 0.632, s: 0.214, p: 0.161

Group # 4 -- p: 0.476, m: 0.560

Group # 6 -- a: 0.405, t: 0.637

Group # 7 -- k: 0.317, b: 0.434, j: 0.676, c: 0.284, d: 0.599, i: 0.663

Log likelihood = -568.903 Significance = 0.289

Run # 38, 311 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.564

Group # 2 -- n: 0.440, d: 0.388, a: 0.445, m: 0.555, v: 0.601, e: 0.745  
u: 0.254, o: 0.432, b: 0.366, h: 0.014, k: 0.067, i: 0.623  
p: 0.386, c: 0.443

Group # 3 -- u: 0.276, c: 0.630, s: 0.221, p: 0.160

Group # 5 -- a: 0.441, u: 0.624

Group # 6 -- a: 0.389, t: 0.659

Group # 7 -- k: 0.321, b: 0.428, j: 0.676, c: 0.282, d: 0.597, i: 0.667

Log likelihood = -566.831 Significance = 0.023

Run # 39, 281 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11

Convergence at Iteration 11

Input 0.564

Group # 2 -- n: 0.385, d: 0.513, a: 0.423, m: 0.507, v: 0.559, e: 0.699  
u: 0.363, o: 0.560, b: 0.462, h: 0.024, k: 0.105, i: 0.733  
p: 0.510, c: 0.567

Group # 3 -- u: 0.275, c: 0.630, s: 0.223, p: 0.160

Group # 6 -- a: 0.391, t: 0.656

Group # 7 -- k: 0.326, b: 0.441, j: 0.668, c: 0.277, d: 0.608, i: 0.654

Group # 8 -- m: 0.492, f: 0.508

Log likelihood = -569.468 Significance = 0.952

Run # 40, 281 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11

Convergence at Iteration 11

Input 0.564

Group # 2 -- n: 0.385, d: 0.513, a: 0.423, m: 0.507, v: 0.559, e: 0.699  
u: 0.363, o: 0.559, b: 0.462, h: 0.024, k: 0.105, i: 0.733  
p: 0.510, c: 0.567

Group # 3 -- u: 0.275, c: 0.630, s: 0.223, p: 0.160

Group # 6 -- a: 0.391, t: 0.656

Group # 7 -- k: 0.312, b: 0.454, j: 0.669, c: 0.301, d: 0.592, i: 0.655

# SDELPRESNO?Honly.Res

---

Group # 9 -- i: 0.508, u: 0.479  
Log likelihood = -569.468 Significance = 0.950

Run # 41, 379 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11

Convergence at Iteration 11

Input 0.564

Group # 2 -- n: 0.382, d: 0.512, a: 0.421, m: 0.507, v: 0.558, e: 0.705  
u: 0.367, o: 0.558, b: 0.459, h: 0.023, k: 0.105, i: 0.729  
p: 0.505, c: 0.550

Group # 3 -- u: 0.277, c: 0.631, s: 0.222, p: 0.155

Group # 6 -- a: 0.392, t: 0.655

Group # 7 -- k: 0.314, b: 0.424, j: 0.684, c: 0.280, d: 0.617, i: 0.654

Group #10 -- c: 0.510, r: 0.499, n: 0.372

Log likelihood = -567.908 Significance = 0.212

Add Group # 1 with factors lia

----- Level # 6 -----

Run # 42, 376 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Convergence at Iteration 14

Input 0.566

Group # 1 -- l: 0.651, i: 0.298, a: 0.149

Group # 2 -- n: 0.399, d: 0.727, a: 0.423, m: 0.366, v: 0.696, e: 0.568  
u: 0.240, o: 0.535, b: 0.353, h: 0.011, k: 0.187, i: 0.834  
p: 0.567, c: 0.458

Group # 3 -- u: 0.317, c: 0.611, s: 0.262, p: 0.184

Group # 4 -- p: 0.450, m: 0.623

Group # 6 -- a: 0.488, t: 0.518

Group # 7 -- k: 0.317, b: 0.423, j: 0.678, c: 0.287, d: 0.594, i: 0.670

Log likelihood = -530.688 Significance = 0.023

Run # 43, 383 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.568

Group # 1 -- l: 0.646, i: 0.304, a: 0.158

Group # 2 -- n: 0.418, d: 0.665, a: 0.439, m: 0.477, v: 0.707, e: 0.675  
u: 0.222, o: 0.492, b: 0.252, h: 0.007, k: 0.123, i: 0.734  
p: 0.377, c: 0.321

Group # 3 -- u: 0.324, c: 0.609, s: 0.276, p: 0.183

Group # 5 -- a: 0.453, u: 0.601

Group # 6 -- a: 0.452, t: 0.569

Group # 7 -- k: 0.321, b: 0.418, j: 0.680, c: 0.285, d: 0.593, i: 0.670

Log likelihood = -531.821 Significance = 0.088

Run # 44, 357 cells:

Iterations: 1 2 3 4 5 6 7 8 9

Convergence at Iteration 9

Input 0.568

Group # 1 -- l: 0.646, i: 0.305, a: 0.156

Group # 2 -- n: 0.375, d: 0.750, a: 0.420, m: 0.439, v: 0.676, e: 0.634  
u: 0.302, o: 0.593, b: 0.319, h: 0.010, k: 0.172, i: 0.805

# SDELPRESNO?Honly.Res

---

p: 0.476, c: 0.415  
Group # 3 -- u: 0.323, c: 0.609, s: 0.276, p: 0.182  
Group # 6 -- a: 0.455, t: 0.566  
Group # 7 -- k: 0.327, b: 0.430, j: 0.672, c: 0.280, d: 0.603, i: 0.659  
Group # 8 -- m: 0.491, f: 0.509  
\*\*\* Warning, negative change in likelihood (-0.00598145) replaced by 0.  
Log likelihood = -533.313 Significance = 1.000

Run # 45, 357 cells:  
Iterations: 1 2 3 4 5 6 7 8 9  
Convergence at Iteration 9  
Input 0.568  
Group # 1 -- l: 0.646, i: 0.305, a: 0.156  
Group # 2 -- n: 0.375, d: 0.750, a: 0.420, m: 0.439, v: 0.676, e: 0.634  
u: 0.302, o: 0.593, b: 0.319, h: 0.010, k: 0.172, i: 0.805  
p: 0.476, c: 0.415  
Group # 3 -- u: 0.323, c: 0.609, s: 0.275, p: 0.182  
Group # 6 -- a: 0.454, t: 0.566  
Group # 7 -- k: 0.313, b: 0.443, j: 0.672, c: 0.305, d: 0.587, i: 0.660  
Group # 9 -- i: 0.508, u: 0.478  
Log likelihood = -533.310 Significance = 0.976

Run # 46, 459 cells:  
Iterations: 1 2 3 4 5 6 7 8 9  
Convergence at Iteration 9  
Input 0.568  
Group # 1 -- l: 0.645, i: 0.306, a: 0.157  
Group # 2 -- n: 0.373, d: 0.749, a: 0.419, m: 0.438, v: 0.675, e: 0.637  
u: 0.304, o: 0.592, b: 0.318, h: 0.010, k: 0.171, i: 0.802  
p: 0.469, c: 0.403  
Group # 3 -- u: 0.325, c: 0.610, s: 0.274, p: 0.179  
Group # 6 -- a: 0.454, t: 0.567  
Group # 7 -- k: 0.315, b: 0.418, j: 0.685, c: 0.286, d: 0.605, i: 0.661  
Group #10 -- c: 0.509, r: 0.481, n: 0.414  
Log likelihood = -532.578 Significance = 0.485

Add Group # 4 with factors pm

----- Level # 7 -----

Run # 47, 398 cells:  
Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
No Convergence at Iteration 20  
Input 0.566  
Group # 1 -- l: 0.651, i: 0.297, a: 0.151  
Group # 2 -- n: 0.443, d: 0.640, a: 0.440, m: 0.400, v: 0.726, e: 0.610  
u: 0.173, o: 0.434, b: 0.284, h: 0.007, k: 0.135, i: 0.772  
p: 0.472, c: 0.364  
Group # 3 -- u: 0.317, c: 0.611, s: 0.261, p: 0.185  
Group # 4 -- p: 0.449, m: 0.627  
Group # 5 -- a: 0.453, u: 0.599  
Group # 6 -- a: 0.488, t: 0.518  
Group # 7 -- k: 0.318, b: 0.420, j: 0.678, c: 0.286, d: 0.593, i: 0.673  
Log likelihood = -529.237 Significance = 0.091

# SDELPRESNO?Honly.Res

---

Run # 48, 376 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Convergence at Iteration 14

Input 0.566

Group # 1 -- l: 0.651, i: 0.298, a: 0.149

Group # 2 -- n: 0.399, d: 0.727, a: 0.423, m: 0.366, v: 0.696, e: 0.568

u: 0.240, o: 0.535, b: 0.353, h: 0.011, k: 0.187, i: 0.834

p: 0.567, c: 0.459

Group # 3 -- u: 0.317, c: 0.611, s: 0.262, p: 0.184

Group # 4 -- p: 0.450, m: 0.623

Group # 6 -- a: 0.488, t: 0.518

Group # 7 -- k: 0.325, b: 0.431, j: 0.670, c: 0.279, d: 0.603, i: 0.663

Group # 8 -- m: 0.491, f: 0.509

Log likelihood = -530.687 Significance = 0.972

Run # 49, 376 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Convergence at Iteration 14

Input 0.566

Group # 1 -- l: 0.651, i: 0.298, a: 0.149

Group # 2 -- n: 0.399, d: 0.726, a: 0.423, m: 0.366, v: 0.696, e: 0.568

u: 0.240, o: 0.535, b: 0.353, h: 0.011, k: 0.187, i: 0.834

p: 0.567, c: 0.458

Group # 3 -- u: 0.317, c: 0.611, s: 0.262, p: 0.184

Group # 4 -- p: 0.450, m: 0.623

Group # 6 -- a: 0.488, t: 0.518

Group # 7 -- k: 0.310, b: 0.444, j: 0.671, c: 0.304, d: 0.587, i: 0.663

Group # 9 -- i: 0.508, u: 0.478

\*\*\* Warning, negative change in likelihood (-0.00207520) replaced by 0.

Log likelihood = -530.689 Significance = 1.000

Run # 50, 476 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Convergence at Iteration 14

Input 0.566

Group # 1 -- l: 0.650, i: 0.299, a: 0.150

Group # 2 -- n: 0.396, d: 0.726, a: 0.421, m: 0.367, v: 0.695, e: 0.573

u: 0.243, o: 0.535, b: 0.352, h: 0.011, k: 0.186, i: 0.831

p: 0.560, c: 0.447

Group # 3 -- u: 0.318, c: 0.612, s: 0.261, p: 0.181

Group # 4 -- p: 0.451, m: 0.621

Group # 6 -- a: 0.487, t: 0.519

Group # 7 -- k: 0.314, b: 0.418, j: 0.683, c: 0.285, d: 0.604, i: 0.665

Group #10 -- c: 0.507, r: 0.491, n: 0.419

Log likelihood = -530.100 Significance = 0.563

No remaining groups significant

Groups selected while stepping up: 3 7 6 2 1 4

Best stepping up run: #42

-----

Stepping Down...

----- Level # 10 -----

# SDELPRESNO?Honly.Res

---

Run # 51, 495 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.567

Group # 1 -- l: 0.650, i: 0.298, a: 0.153

Group # 2 -- n: 0.440, d: 0.637, a: 0.438, m: 0.402, v: 0.725, e: 0.616  
u: 0.174, o: 0.432, b: 0.283, h: 0.007, k: 0.133, i: 0.767  
p: 0.465, c: 0.353

Group # 3 -- u: 0.318, c: 0.612, s: 0.260, p: 0.182

Group # 4 -- p: 0.450, m: 0.624

Group # 5 -- a: 0.453, u: 0.600

Group # 6 -- a: 0.487, t: 0.519

Group # 7 -- k: 0.315, b: 0.446, j: 0.668, c: 0.295, d: 0.603, i: 0.652

Group # 8 -- m: 0.491, f: 0.509

Group # 9 -- i: 0.509, u: 0.477

Group #10 -- c: 0.507, r: 0.497, n: 0.416

Log likelihood = -528.624

----- Level # 9 -----

Run # 52, 433 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.564

Group # 2 -- n: 0.449, d: 0.375, a: 0.442, m: 0.522, v: 0.609, e: 0.728  
u: 0.228, o: 0.400, b: 0.379, h: 0.014, k: 0.068, i: 0.638  
p: 0.420, c: 0.445

Group # 3 -- u: 0.274, c: 0.633, s: 0.213, p: 0.156

Group # 4 -- p: 0.477, m: 0.558

Group # 5 -- a: 0.440, u: 0.627

Group # 6 -- a: 0.404, t: 0.639

Group # 7 -- k: 0.314, b: 0.451, j: 0.670, c: 0.289, d: 0.613, i: 0.645

Group # 8 -- m: 0.492, f: 0.509

Group # 9 -- i: 0.509, u: 0.477

Group #10 -- c: 0.509, r: 0.514, n: 0.368

Log likelihood = -564.654 Significance = 0.000

Run # 53, 289 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10

Convergence at Iteration 10

Input 0.563

Group # 1 -- l: 0.618, i: 0.316, a: 0.266

Group # 3 -- u: 0.302, c: 0.631, s: 0.238, p: 0.130

Group # 4 -- p: 0.451, m: 0.621

Group # 5 -- a: 0.532, u: 0.431

Group # 6 -- a: 0.462, t: 0.555

Group # 7 -- k: 0.325, b: 0.477, j: 0.685, c: 0.308, d: 0.601, i: 0.597

Group # 8 -- m: 0.493, f: 0.507

Group # 9 -- i: 0.507, u: 0.480

Group #10 -- c: 0.505, r: 0.493, n: 0.448

Log likelihood = -597.642 Significance = 0.000

Run # 54, 329 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

---

# SDELPRESNO?Honly.Res

---

No Convergence at Iteration 20

Input 0.571

Group # 1 -- l: 0.682, i: 0.252, a: 0.119  
Group # 2 -- n: 0.428, d: 0.729, a: 0.410, m: 0.375, v: 0.739, e: 0.622  
          u: 0.165, o: 0.445, b: 0.268, h: 0.006, k: 0.108, i: 0.695  
          p: 0.536, c: 0.252

Group # 4 -- p: 0.462, m: 0.595

Group # 5 -- a: 0.451, u: 0.603

Group # 6 -- a: 0.504, t: 0.495

Group # 7 -- k: 0.337, b: 0.462, j: 0.638, c: 0.313, d: 0.586, i: 0.645

Group # 8 -- m: 0.493, f: 0.507

Group # 9 -- i: 0.508, u: 0.480

Group #10 -- c: 0.505, r: 0.488, n: 0.455

Log likelihood = -567.923    Significance = 0.000

Run # 55, 483 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.569

Group # 1 -- l: 0.645, i: 0.306, a: 0.160

Group # 2 -- n: 0.416, d: 0.663, a: 0.437, m: 0.477, v: 0.706, e: 0.678  
          u: 0.223, o: 0.489, b: 0.252, h: 0.007, k: 0.122, i: 0.729  
          p: 0.371, c: 0.310

Group # 3 -- u: 0.325, c: 0.610, s: 0.274, p: 0.179

Group # 5 -- a: 0.452, u: 0.601

Group # 6 -- a: 0.452, t: 0.570

Group # 7 -- k: 0.316, b: 0.445, j: 0.670, c: 0.296, d: 0.604, i: 0.648

Group # 8 -- m: 0.491, f: 0.509

Group # 9 -- i: 0.509, u: 0.476

Group #10 -- c: 0.508, r: 0.486, n: 0.411

Log likelihood = -531.075    Significance = 0.030

Run # 56, 476 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Convergence at Iteration 14

Input 0.566

Group # 1 -- l: 0.650, i: 0.299, a: 0.150

Group # 2 -- n: 0.396, d: 0.726, a: 0.421, m: 0.367, v: 0.695, e: 0.573  
          u: 0.243, o: 0.535, b: 0.352, h: 0.011, k: 0.185, i: 0.831  
          p: 0.560, c: 0.447

Group # 3 -- u: 0.318, c: 0.612, s: 0.261, p: 0.181

Group # 4 -- p: 0.451, m: 0.621

Group # 6 -- a: 0.487, t: 0.519

Group # 7 -- k: 0.314, b: 0.449, j: 0.668, c: 0.296, d: 0.605, i: 0.649

Group # 8 -- m: 0.491, f: 0.509

Group # 9 -- i: 0.509, u: 0.478

Group #10 -- c: 0.507, r: 0.491, n: 0.419

Log likelihood = -530.104    Significance = 0.089

Run # 57, 462 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.567

Group # 1 -- l: 0.653, i: 0.293, a: 0.149

Group # 2 -- n: 0.440, d: 0.648, a: 0.440, m: 0.402, v: 0.724, e: 0.614

# SDELPRESNO?Honly.Res

---

u: 0.176, o: 0.437, b: 0.285, h: 0.007, k: 0.134, i: 0.772  
p: 0.488, c: 0.357  
Group # 3 -- u: 0.318, c: 0.611, s: 0.261, p: 0.183  
Group # 4 -- p: 0.444, m: 0.638  
Group # 5 -- a: 0.454, u: 0.599  
Group # 7 -- k: 0.314, b: 0.448, j: 0.669, c: 0.296, d: 0.602, i: 0.651  
Group # 8 -- m: 0.491, f: 0.509  
Group # 9 -- i: 0.509, u: 0.477  
Group #10 -- c: 0.507, r: 0.498, n: 0.417  
Log likelihood = -528.772 Significance = 0.604

Run # 58, 414 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.563

Group # 1 -- l: 0.653, i: 0.294, a: 0.150  
Group # 2 -- n: 0.447, d: 0.650, a: 0.427, m: 0.412, v: 0.719, e: 0.626  
u: 0.167, o: 0.409, b: 0.309, h: 0.009, k: 0.103, i: 0.684  
p: 0.514, c: 0.423  
Group # 3 -- u: 0.319, c: 0.605, s: 0.263, p: 0.208  
Group # 4 -- p: 0.452, m: 0.618  
Group # 5 -- a: 0.449, u: 0.608  
Group # 6 -- a: 0.487, t: 0.519  
Group # 8 -- m: 0.437, f: 0.564  
Group # 9 -- i: 0.559, u: 0.349  
Group #10 -- c: 0.502, r: 0.500, n: 0.469  
Log likelihood = -550.300 Significance = 0.000

Run # 59, 495 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.567

Group # 1 -- l: 0.650, i: 0.298, a: 0.153  
Group # 2 -- n: 0.440, d: 0.637, a: 0.438, m: 0.402, v: 0.724, e: 0.615  
u: 0.175, o: 0.432, b: 0.283, h: 0.007, k: 0.133, i: 0.767  
p: 0.465, c: 0.353  
Group # 3 -- u: 0.318, c: 0.612, s: 0.260, p: 0.182  
Group # 4 -- p: 0.450, m: 0.624  
Group # 5 -- a: 0.453, u: 0.600  
Group # 6 -- a: 0.487, t: 0.519  
Group # 7 -- k: 0.307, b: 0.437, j: 0.677, c: 0.302, d: 0.595, i: 0.660  
Group # 9 -- i: 0.509, u: 0.477  
Group #10 -- c: 0.507, r: 0.497, n: 0.416  
\*\*\* Warning, negative change in likelihood (-0.00244141) replaced by 0.  
Log likelihood = -528.623 Significance = 1.000

Run # 60, 495 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.567

Group # 1 -- l: 0.650, i: 0.298, a: 0.153  
Group # 2 -- n: 0.440, d: 0.637, a: 0.438, m: 0.402, v: 0.725, e: 0.615  
u: 0.174, o: 0.432, b: 0.283, h: 0.007, k: 0.133, i: 0.767  
p: 0.465, c: 0.353  
Group # 3 -- u: 0.318, c: 0.612, s: 0.260, p: 0.182

# SDELPRESNO?Honly.Res

---

Group # 4 -- p: 0.450, m: 0.624  
Group # 5 -- a: 0.453, u: 0.600  
Group # 6 -- a: 0.487, t: 0.519  
Group # 7 -- k: 0.322, b: 0.423, j: 0.676, c: 0.277, d: 0.611, i: 0.660  
Group # 8 -- m: 0.491, f: 0.509  
Group #10 -- c: 0.507, r: 0.497, n: 0.416  
\*\*\* Warning, negative change in likelihood (-0.00537109) replaced by 0.  
Log likelihood = -528.622 Significance = 1.000

Run # 61, 398 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.566

Group # 1 -- l: 0.651, i: 0.297, a: 0.151  
Group # 2 -- n: 0.443, d: 0.639, a: 0.440, m: 0.400, v: 0.726, e: 0.610  
          u: 0.172, o: 0.434, b: 0.284, h: 0.007, k: 0.135, i: 0.771  
          p: 0.471, c: 0.364  
Group # 3 -- u: 0.317, c: 0.611, s: 0.261, p: 0.185  
Group # 4 -- p: 0.449, m: 0.627  
Group # 5 -- a: 0.453, u: 0.599  
Group # 6 -- a: 0.488, t: 0.518  
Group # 7 -- k: 0.319, b: 0.451, j: 0.662, c: 0.297, d: 0.593, i: 0.657  
Group # 8 -- m: 0.491, f: 0.509  
Group # 9 -- i: 0.509, u: 0.477  
Log likelihood = -529.234 Significance = 0.549

Cut Group # 9 with factors iu

----- Level # 8 -----

Run # 62, 433 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.564

Group # 2 -- n: 0.449, d: 0.376, a: 0.442, m: 0.522, v: 0.609, e: 0.728  
          u: 0.228, o: 0.400, b: 0.379, h: 0.015, k: 0.068, i: 0.638  
          p: 0.420, c: 0.446  
Group # 3 -- u: 0.274, c: 0.633, s: 0.213, p: 0.156  
Group # 4 -- p: 0.477, m: 0.558  
Group # 5 -- a: 0.440, u: 0.627  
Group # 6 -- a: 0.404, t: 0.639  
Group # 7 -- k: 0.322, b: 0.428, j: 0.677, c: 0.271, d: 0.621, i: 0.653  
Group # 8 -- m: 0.492, f: 0.508  
Group #10 -- c: 0.509, r: 0.513, n: 0.368  
Log likelihood = -564.655 Significance = 0.000

Run # 63, 289 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11

Convergence at Iteration 11

Input 0.563

Group # 1 -- l: 0.618, i: 0.316, a: 0.266  
Group # 3 -- u: 0.302, c: 0.631, s: 0.238, p: 0.130  
Group # 4 -- p: 0.451, m: 0.621  
Group # 5 -- a: 0.532, u: 0.431  
Group # 6 -- a: 0.462, t: 0.556

# SDELPRESNO?Honly.Res

---

Group # 7 -- k: 0.331, b: 0.457, j: 0.691, c: 0.291, d: 0.608, i: 0.605  
Group # 8 -- m: 0.493, f: 0.507  
Group #10 -- c: 0.505, r: 0.493, n: 0.448  
Log likelihood = -597.639 Significance = 0.000

Run # 64, 329 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.571

Group # 1 -- l: 0.682, i: 0.252, a: 0.119

Group # 2 -- n: 0.428, d: 0.729, a: 0.410, m: 0.375, v: 0.739, e: 0.622  
u: 0.165, o: 0.445, b: 0.268, h: 0.006, k: 0.108, i: 0.695  
p: 0.536, c: 0.253

Group # 4 -- p: 0.462, m: 0.595

Group # 5 -- a: 0.451, u: 0.603

Group # 6 -- a: 0.504, t: 0.494

Group # 7 -- k: 0.344, b: 0.442, j: 0.645, c: 0.296, d: 0.594, i: 0.652

Group # 8 -- m: 0.493, f: 0.507

Group #10 -- c: 0.505, r: 0.488, n: 0.455

Log likelihood = -567.926 Significance = 0.000

Run # 65, 483 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.569

Group # 1 -- l: 0.645, i: 0.306, a: 0.160

Group # 2 -- n: 0.416, d: 0.663, a: 0.437, m: 0.477, v: 0.706, e: 0.678  
u: 0.224, o: 0.489, b: 0.252, h: 0.007, k: 0.122, i: 0.729  
p: 0.371, c: 0.310

Group # 3 -- u: 0.325, c: 0.610, s: 0.274, p: 0.179

Group # 5 -- a: 0.452, u: 0.601

Group # 6 -- a: 0.452, t: 0.570

Group # 7 -- k: 0.324, b: 0.422, j: 0.678, c: 0.276, d: 0.612, i: 0.656

Group # 8 -- m: 0.491, f: 0.509

Group #10 -- c: 0.508, r: 0.486, n: 0.411

Log likelihood = -531.073 Significance = 0.030

Run # 66, 476 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13

Convergence at Iteration 13

Input 0.566

Group # 1 -- l: 0.650, i: 0.299, a: 0.150

Group # 2 -- n: 0.396, d: 0.726, a: 0.421, m: 0.368, v: 0.694, e: 0.573  
u: 0.243, o: 0.535, b: 0.352, h: 0.011, k: 0.185, i: 0.830  
p: 0.560, c: 0.447

Group # 3 -- u: 0.318, c: 0.612, s: 0.261, p: 0.181

Group # 4 -- p: 0.451, m: 0.621

Group # 6 -- a: 0.487, t: 0.519

Group # 7 -- k: 0.321, b: 0.427, j: 0.676, c: 0.278, d: 0.613, i: 0.657

Group # 8 -- m: 0.491, f: 0.509

Group #10 -- c: 0.507, r: 0.491, n: 0.419

Log likelihood = -530.101 Significance = 0.089

Run # 67, 462 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

# SDELPRESNO?Honly.Res

---

No Convergence at Iteration 20

Input 0.567

Group # 1 -- l: 0.653, i: 0.293, a: 0.149

Group # 2 -- n: 0.440, d: 0.648, a: 0.440, m: 0.402, v: 0.724, e: 0.614  
u: 0.176, o: 0.437, b: 0.285, h: 0.007, k: 0.134, i: 0.772  
p: 0.487, c: 0.357

Group # 3 -- u: 0.318, c: 0.611, s: 0.261, p: 0.183

Group # 4 -- p: 0.444, m: 0.638

Group # 5 -- a: 0.454, u: 0.599

Group # 7 -- k: 0.322, b: 0.425, j: 0.676, c: 0.278, d: 0.610, i: 0.659

Group # 8 -- m: 0.491, f: 0.509

Group #10 -- c: 0.507, r: 0.498, n: 0.417

Log likelihood = -528.772 Significance = 0.601

Run # 68, 324 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.562

Group # 1 -- l: 0.653, i: 0.291, a: 0.155

Group # 2 -- n: 0.454, d: 0.675, a: 0.427, m: 0.389, v: 0.712, e: 0.593  
u: 0.181, o: 0.427, b: 0.326, h: 0.011, k: 0.097, i: 0.715  
p: 0.445, c: 0.494

Group # 3 -- u: 0.338, c: 0.600, s: 0.265, p: 0.212

Group # 4 -- p: 0.453, m: 0.616

Group # 5 -- a: 0.456, u: 0.594

Group # 6 -- a: 0.496, t: 0.506

Group # 8 -- m: 0.441, f: 0.560

Group #10 -- c: 0.504, r: 0.451, n: 0.516

Log likelihood = -562.539 Significance = 0.000

Run # 69, 495 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.567

Group # 1 -- l: 0.650, i: 0.298, a: 0.153

Group # 2 -- n: 0.440, d: 0.637, a: 0.438, m: 0.402, v: 0.725, e: 0.615  
u: 0.174, o: 0.432, b: 0.283, h: 0.007, k: 0.133, i: 0.767  
p: 0.465, c: 0.353

Group # 3 -- u: 0.318, c: 0.612, s: 0.260, p: 0.182

Group # 4 -- p: 0.450, m: 0.624

Group # 5 -- a: 0.453, u: 0.600

Group # 6 -- a: 0.487, t: 0.519

Group # 7 -- k: 0.315, b: 0.415, j: 0.684, c: 0.284, d: 0.603, i: 0.668

Group #10 -- c: 0.507, r: 0.497, n: 0.416

Log likelihood = -528.622 Significance = 0.972

Run # 70, 398 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.566

Group # 1 -- l: 0.651, i: 0.297, a: 0.151

Group # 2 -- n: 0.443, d: 0.640, a: 0.440, m: 0.400, v: 0.726, e: 0.610  
u: 0.173, o: 0.434, b: 0.284, h: 0.007, k: 0.135, i: 0.772  
p: 0.472, c: 0.364

Group # 3 -- u: 0.317, c: 0.611, s: 0.261, p: 0.185

# SDELPRESNO?Honly.Res

---

Group # 4 -- p: 0.449, m: 0.627  
Group # 5 -- a: 0.453, u: 0.599  
Group # 6 -- a: 0.488, t: 0.518  
Group # 7 -- k: 0.326, b: 0.429, j: 0.670, c: 0.278, d: 0.601, i: 0.665  
Group # 8 -- m: 0.491, f: 0.509  
Log likelihood = -529.237 Significance = 0.546

Cut Group # 8 with factors mf

----- Level # 7 -----

Run # 71, 433 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.564

Group # 2 -- n: 0.449, d: 0.376, a: 0.442, m: 0.522, v: 0.609, e: 0.728  
u: 0.228, o: 0.400, b: 0.379, h: 0.015, k: 0.068, i: 0.638  
p: 0.420, c: 0.446

Group # 3 -- u: 0.274, c: 0.633, s: 0.213, p: 0.156

Group # 4 -- p: 0.477, m: 0.558

Group # 5 -- a: 0.440, u: 0.627

Group # 6 -- a: 0.404, t: 0.639

Group # 7 -- k: 0.314, b: 0.420, j: 0.685, c: 0.277, d: 0.613, i: 0.660

Group #10 -- c: 0.509, r: 0.513, n: 0.368

Log likelihood = -564.656 Significance = 0.000

Run # 72, 289 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11

Convergence at Iteration 11

Input 0.563

Group # 1 -- l: 0.618, i: 0.316, a: 0.266

Group # 3 -- u: 0.302, c: 0.631, s: 0.238, p: 0.130

Group # 4 -- p: 0.451, m: 0.621

Group # 5 -- a: 0.532, u: 0.431

Group # 6 -- a: 0.462, t: 0.556

Group # 7 -- k: 0.325, b: 0.450, j: 0.697, c: 0.297, d: 0.601, i: 0.611

Group #10 -- c: 0.505, r: 0.493, n: 0.448

Log likelihood = -597.640 Significance = 0.000

Run # 73, 329 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.571

Group # 1 -- l: 0.682, i: 0.252, a: 0.119

Group # 2 -- n: 0.428, d: 0.729, a: 0.410, m: 0.375, v: 0.739, e: 0.622

u: 0.165, o: 0.445, b: 0.268, h: 0.006, k: 0.108, i: 0.695

p: 0.536, c: 0.253

Group # 4 -- p: 0.462, m: 0.595

Group # 5 -- a: 0.451, u: 0.603

Group # 6 -- a: 0.504, t: 0.494

Group # 7 -- k: 0.338, b: 0.435, j: 0.651, c: 0.302, d: 0.587, i: 0.658

Group #10 -- c: 0.505, r: 0.488, n: 0.455

Log likelihood = -567.926 Significance = 0.000

Run # 74, 483 cells:

# SDELPRESNO?Honly.Res

---

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.569

Group # 1 -- l: 0.645, i: 0.306, a: 0.160

Group # 2 -- n: 0.416, d: 0.663, a: 0.437, m: 0.477, v: 0.706, e: 0.678  
u: 0.224, o: 0.489, b: 0.252, h: 0.007, k: 0.122, i: 0.729  
p: 0.371, c: 0.310

Group # 3 -- u: 0.325, c: 0.610, s: 0.274, p: 0.179

Group # 5 -- a: 0.452, u: 0.601

Group # 6 -- a: 0.452, t: 0.570

Group # 7 -- k: 0.317, b: 0.414, j: 0.686, c: 0.283, d: 0.604, i: 0.664

Group #10 -- c: 0.508, r: 0.486, n: 0.411

Log likelihood = -531.073 Significance = 0.030

Run # 75, 476 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Convergence at Iteration 14

Input 0.566

Group # 1 -- l: 0.650, i: 0.299, a: 0.150

Group # 2 -- n: 0.396, d: 0.726, a: 0.421, m: 0.367, v: 0.695, e: 0.573  
u: 0.243, o: 0.535, b: 0.352, h: 0.011, k: 0.186, i: 0.831  
p: 0.560, c: 0.447

Group # 3 -- u: 0.318, c: 0.612, s: 0.261, p: 0.181

Group # 4 -- p: 0.451, m: 0.621

Group # 6 -- a: 0.487, t: 0.519

Group # 7 -- k: 0.314, b: 0.418, j: 0.683, c: 0.285, d: 0.604, i: 0.665

Group #10 -- c: 0.507, r: 0.491, n: 0.419

Log likelihood = -530.100 Significance = 0.089

Run # 76, 462 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.567

Group # 1 -- l: 0.653, i: 0.293, a: 0.149

Group # 2 -- n: 0.440, d: 0.648, a: 0.440, m: 0.402, v: 0.724, e: 0.614  
u: 0.176, o: 0.437, b: 0.285, h: 0.007, k: 0.134, i: 0.772  
p: 0.487, c: 0.357

Group # 3 -- u: 0.318, c: 0.611, s: 0.261, p: 0.183

Group # 4 -- p: 0.444, m: 0.638

Group # 5 -- a: 0.454, u: 0.599

Group # 7 -- k: 0.314, b: 0.416, j: 0.684, c: 0.285, d: 0.602, i: 0.667

Group #10 -- c: 0.507, r: 0.498, n: 0.417

Log likelihood = -528.771 Significance = 0.603

Run # 77, 233 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.562

Group # 1 -- l: 0.653, i: 0.290, a: 0.158

Group # 2 -- n: 0.444, d: 0.681, a: 0.422, m: 0.396, v: 0.709, e: 0.600  
u: 0.193, o: 0.417, b: 0.315, h: 0.013, k: 0.104, i: 0.707  
p: 0.440, c: 0.465

Group # 3 -- u: 0.346, c: 0.597, s: 0.256, p: 0.222

Group # 4 -- p: 0.454, m: 0.614

Group # 5 -- a: 0.458, u: 0.589

# SDELPRESNO?Honly.Res

---

Group # 6 -- a: 0.495, t: 0.507  
Group #10 -- c: 0.505, r: 0.451, n: 0.510  
Log likelihood = -567.608 Significance = 0.000

Run # 78, 398 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
No Convergence at Iteration 20

Input 0.566

Group # 1 -- l: 0.651, i: 0.297, a: 0.151

Group # 2 -- n: 0.443, d: 0.640, a: 0.440, m: 0.400, v: 0.726, e: 0.610  
u: 0.173, o: 0.434, b: 0.284, h: 0.007, k: 0.135, i: 0.772  
p: 0.472, c: 0.364

Group # 3 -- u: 0.317, c: 0.611, s: 0.261, p: 0.185

Group # 4 -- p: 0.449, m: 0.627

Group # 5 -- a: 0.453, u: 0.599

Group # 6 -- a: 0.488, t: 0.518

Group # 7 -- k: 0.318, b: 0.420, j: 0.678, c: 0.286, d: 0.593, i: 0.673

Log likelihood = -529.237 Significance = 0.546

Cut Group # 6 with factors at

----- Level # 6 -----

Run # 79, 383 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
No Convergence at Iteration 20

Input 0.564

Group # 2 -- n: 0.438, d: 0.441, a: 0.447, m: 0.546, v: 0.588, e: 0.738  
u: 0.257, o: 0.429, b: 0.419, h: 0.013, k: 0.058, i: 0.696  
p: 0.609, c: 0.511

Group # 3 -- u: 0.266, c: 0.633, s: 0.210, p: 0.163

Group # 4 -- p: 0.432, m: 0.667

Group # 5 -- a: 0.445, u: 0.617

Group # 7 -- k: 0.309, b: 0.435, j: 0.686, c: 0.285, d: 0.607, i: 0.654

Group #10 -- c: 0.507, r: 0.530, n: 0.365

Log likelihood = -573.545 Significance = 0.000

Run # 80, 252 cells:

Iterations: 1 2 3 4 5 6 7  
Convergence at Iteration 7

Input 0.564

Group # 1 -- l: 0.625, i: 0.304, a: 0.257

Group # 3 -- u: 0.301, c: 0.630, s: 0.240, p: 0.133

Group # 4 -- p: 0.432, m: 0.666

Group # 5 -- a: 0.529, u: 0.438

Group # 7 -- k: 0.323, b: 0.456, j: 0.698, c: 0.302, d: 0.601, i: 0.606

Group #10 -- c: 0.504, r: 0.498, n: 0.447

Log likelihood = -599.114 Significance = 0.000

Run # 81, 290 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
No Convergence at Iteration 20

Input 0.571

Group # 1 -- l: 0.681, i: 0.254, a: 0.120

Group # 2 -- n: 0.428, d: 0.727, a: 0.409, m: 0.375, v: 0.739, e: 0.622

# SDELPRESNO?Honly.Res

---

u: 0.165, o: 0.444, b: 0.267, h: 0.007, k: 0.108, i: 0.692  
p: 0.529, c: 0.252  
Group # 4 -- p: 0.464, m: 0.590  
Group # 5 -- a: 0.451, u: 0.604  
Group # 7 -- k: 0.338, b: 0.434, j: 0.651, c: 0.301, d: 0.587, i: 0.658  
Group #10 -- c: 0.505, r: 0.487, n: 0.455  
Log likelihood = -567.935 Significance = 0.000

Run # 82, 431 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
No Convergence at Iteration 20

Input 0.570

Group # 1 -- l: 0.659, i: 0.282, a: 0.147  
Group # 2 -- n: 0.397, d: 0.730, a: 0.444, m: 0.522, v: 0.693, e: 0.707  
u: 0.267, o: 0.549, b: 0.243, h: 0.006, k: 0.117, i: 0.735  
p: 0.429, c: 0.307  
Group # 3 -- u: 0.329, c: 0.606, s: 0.288, p: 0.186  
Group # 5 -- a: 0.457, u: 0.593  
Group # 7 -- k: 0.315, b: 0.419, j: 0.687, c: 0.290, d: 0.601, i: 0.658  
Group #10 -- c: 0.508, r: 0.485, n: 0.414  
Log likelihood = -533.526 Significance = 0.004

Run # 83, 441 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14  
Convergence at Iteration 14

Input 0.566

Group # 1 -- l: 0.654, i: 0.294, a: 0.147  
Group # 2 -- n: 0.397, d: 0.733, a: 0.423, m: 0.367, v: 0.695, e: 0.571  
u: 0.243, o: 0.537, b: 0.354, h: 0.010, k: 0.185, i: 0.834  
p: 0.581, c: 0.451  
Group # 3 -- u: 0.319, c: 0.611, s: 0.262, p: 0.182  
Group # 4 -- p: 0.445, m: 0.635  
Group # 7 -- k: 0.313, b: 0.420, j: 0.683, c: 0.286, d: 0.603, i: 0.664  
Group #10 -- c: 0.507, r: 0.492, n: 0.420  
Log likelihood = -530.206 Significance = 0.093

Run # 84, 209 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
No Convergence at Iteration 20

Input 0.562

Group # 1 -- l: 0.654, i: 0.288, a: 0.156  
Group # 2 -- n: 0.444, d: 0.684, a: 0.422, m: 0.396, v: 0.709, e: 0.599  
u: 0.194, o: 0.419, b: 0.316, h: 0.013, k: 0.104, i: 0.710  
p: 0.449, c: 0.466  
Group # 3 -- u: 0.346, c: 0.597, s: 0.256, p: 0.223  
Group # 4 -- p: 0.452, m: 0.619  
Group # 5 -- a: 0.459, u: 0.588  
Group #10 -- c: 0.505, r: 0.452, n: 0.510  
Log likelihood = -567.634 Significance = 0.000

Run # 85, 369 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
No Convergence at Iteration 20

Input 0.566

Group # 1 -- l: 0.655, i: 0.292, a: 0.148

# SDELPRESNO?Honly.Res

---

Group # 2 -- n: 0.442, d: 0.649, a: 0.442, m: 0.400, v: 0.726, e: 0.608  
u: 0.174, o: 0.439, b: 0.286, h: 0.007, k: 0.135, i: 0.776  
p: 0.492, c: 0.368  
Group # 3 -- u: 0.317, c: 0.611, s: 0.262, p: 0.187  
Group # 4 -- p: 0.443, m: 0.639  
Group # 5 -- a: 0.454, u: 0.598  
Group # 7 -- k: 0.318, b: 0.421, j: 0.678, c: 0.287, d: 0.592, i: 0.673  
Log likelihood = -529.366 Significance = 0.558

Cut Group # 10 with factors crn

----- Level # 5 -----

Run # 86, 295 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.563

Group # 2 -- n: 0.440, d: 0.449, a: 0.450, m: 0.544, v: 0.588, e: 0.729  
u: 0.258, o: 0.437, b: 0.425, h: 0.013, k: 0.059, i: 0.704  
p: 0.615, c: 0.531  
Group # 3 -- u: 0.264, c: 0.632, s: 0.210, p: 0.168  
Group # 4 -- p: 0.431, m: 0.667  
Group # 5 -- a: 0.447, u: 0.611  
Group # 7 -- k: 0.314, b: 0.446, j: 0.675, c: 0.292, d: 0.590, i: 0.662  
Log likelihood = -575.381 Significance = 0.000

Run # 87, 174 cells:

Iterations: 1 2 3 4 5 6 7

Convergence at Iteration 7

Input 0.564

Group # 1 -- l: 0.626, i: 0.304, a: 0.256  
Group # 3 -- u: 0.300, c: 0.630, s: 0.241, p: 0.135  
Group # 4 -- p: 0.432, m: 0.666  
Group # 5 -- a: 0.529, u: 0.438  
Group # 7 -- k: 0.325, b: 0.459, j: 0.695, c: 0.303, d: 0.593, i: 0.610  
Log likelihood = -599.417 Significance = 0.000

Run # 88, 197 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.570

Group # 1 -- l: 0.681, i: 0.253, a: 0.120  
Group # 2 -- n: 0.430, d: 0.726, a: 0.410, m: 0.374, v: 0.739, e: 0.620  
u: 0.163, o: 0.443, b: 0.268, h: 0.007, k: 0.109, i: 0.696  
p: 0.533, c: 0.258  
Group # 4 -- p: 0.463, m: 0.592  
Group # 5 -- a: 0.451, u: 0.604  
Group # 7 -- k: 0.340, b: 0.436, j: 0.648, c: 0.301, d: 0.582, i: 0.662  
Log likelihood = -568.161 Significance = 0.000

Run # 89, 338 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

No Convergence at Iteration 20

Input 0.570

Group # 1 -- l: 0.660, i: 0.281, a: 0.145

# SDELPRESNO?Honly.Res

```
Group # 2 -- n: 0.400, d: 0.731, a: 0.446, m: 0.522, v: 0.694, e: 0.705
              u: 0.265, o: 0.551, b: 0.243, h: 0.006, k: 0.118, i: 0.740
              p: 0.435, c: 0.317
Group # 3 -- u: 0.328, c: 0.605, s: 0.290, p: 0.190
Group # 5 -- a: 0.457, u: 0.592
Group # 7 -- k: 0.319, b: 0.424, j: 0.681, c: 0.291, d: 0.590, i: 0.664
Log likelihood = -534.225  Significance = 0.003
```

```
Run # 90, 346 cells:
Iterations:  1 2 3 4 5 6 7 8 9 10 11 12 13 14
Convergence at Iteration 14
Input 0.566
Group # 1 -- l: 0.655, i: 0.293, a: 0.146
Group # 2 -- n: 0.399, d: 0.734, a: 0.425, m: 0.366, v: 0.696, e: 0.567
              u: 0.240, o: 0.538, b: 0.354, h: 0.010, k: 0.187, i: 0.837
              p: 0.586, c: 0.461
Group # 3 -- u: 0.317, c: 0.611, s: 0.263, p: 0.185
Group # 4 -- p: 0.444, m: 0.637
Group # 7 -- k: 0.317, b: 0.424, j: 0.678, c: 0.288, d: 0.594, i: 0.670
Log likelihood = -530.771  Significance = 0.095
```

```
Run # 91, 132 cells:
Iterations:  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
```

Factores que favorecen la aspiración de la /s/ en esta comunidad puertorriqueña:

1. estatus gramatical del morfema: léxico
2. categoría de la palabra: ser, estar, pronombres indefinidos, artículos, preposiciones
3. segmento fonológico siguiente: consonantes
4. estructura silábica: monosílabos : 0.602
7. hablantes: varios hablantes favorecen la aspiración (aquí miraremos al nivel educacional, contexto, estilo, edad etc..) : 0.713

```
Group # 3 -- u: 0.317, c: 0.597, s: 0.257, p: 0.221
Group # 4 -- p: 0.451, m: 0.621
Group # 5 -- a: 0.458, u: 0.590
Log likelihood = -568.008  Significance = 0.000
```

Cut Group # 5 with factors au

----- Level # 4 -----

```
Run # 92, 268 cells:
Iterations:  1 2 3 4 5 6 7 8 9 10 11 12 13 14
Convergence at Iteration 14
Input 0.563
Group # 2 -- n: 0.391, d: 0.560, a: 0.431, m: 0.501, v: 0.550, e: 0.687
              u: 0.355, o: 0.551, b: 0.514, h: 0.020, k: 0.089, i: 0.789
              p: 0.712, c: 0.639
Group # 3 -- u: 0.263, c: 0.633, s: 0.212, p: 0.167
Group # 4 -- p: 0.432, m: 0.665
Group # 7 -- k: 0.312, b: 0.450, j: 0.676, c: 0.293, d: 0.592, i: 0.657
Log likelihood = -577.510  Significance = 0.000
```

```
Run # 93, 114 cells:
Iterations:  1 2 3 4 5 6 7
Convergence at Iteration 7
Input 0.562
Group # 1 -- l: 0.628, i: 0.299, a: 0.258
```

# SDELPRESNO?Honly.Res

Group # 3 -- u: 0.304, c: 0.629, s: 0.239, p: 0.137  
Group # 4 -- p: 0.435, m: 0.659  
Group # 7 -- k: 0.328, b: 0.462, j: 0.695, c: 0.304, d: 0.585, i: 0.612  
Log likelihood = -602.296 Significance = 0.000

Run # 94, 172 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13

Convergence at Iteration 13

Input 0.570

Group # 1 -- l: 0.681, i: 0.254, a: 0.118

Group # 2 -- n: 0.385, d: 0.802, a: 0.390, m: 0.339, v: 0.709, e: 0.576

u: 0.231, o: 0.549, b: 0.338, h: 0.010, k: 0.155, i: 0.777

p: 0.632, c: 0.344

Group # 4 -- p: 0.464, m: 0.589

Group # 7 -- k: 0.339, b: 0.440, j: 0.649, c: 0.303, d: 0.584, i: 0.658

Log likelihood = -569.905 Significance = 0.000

Run # 95, 310 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10

Convergence at Iteration 10

Input 0.569

Group # 1 -- l: 0.660, i: 0.282, a: 0.144

Group # 2 -- n: 0.362, d: 0.797, a: 0.428, m: 0.485, v: 0.664, e: 0.668

u: 0.344, o: 0.639, b: 0.304, h: 0.008, k: 0.162, i: 0.805

p: 0.525, c: 0.403

Group # 3 -- u: 0.328, c: 0.605, s: 0.288, p: 0.189

Group # 7 -- k: 0.318, b: 0.427, j: 0.681, c: 0.293, d: 0.591, i: 0.662

Log likelihood = -535.450 Significance = 0.004

Run # 96, 116 cells:

Iterations: 1 2 3 4 5 6 7 8 9 10 11 12 13

Convergence at Iteration 13

Input 0.561

Group # 1 -- l: 0.653, i: 0.290, a: 0.155

Group # 2 -- n: 0.405, d: 0.755, a: 0.404, m: 0.365, v: 0.681, e: 0.565

u: 0.258, o: 0.502, b: 0.382, h: 0.018, k: 0.142, i: 0.780

p: 0.542, c: 0.562

Group # 3 -- u: 0.346, c: 0.598, s: 0.258, p: 0.220

Group # 4 -- p: 0.452, m: 0.619

Log likelihood = -569.292 Significance = 0.000

All remaining groups significant

Groups eliminated while stepping down: 9 8 6 10 5

Best stepping up run: #42

Best stepping down run: #90

Execution time: 12 min, 3.1 sec

Los factores incluidos en los best stepping up and best stepping down deben ser los mismos. Si no, hay que revisar los factores.

Las probabilidades que aparecen en esta parte son las que normalmente se usan para la publicación de artículos.