Hazard Ratios and 95% CI

Date: 2017-06-28

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Transition | Predictor | Whitehall | OCTO-Twin | MAP | LASA | H70 |
| State 1 - State 2 | Cognitive Activity | 1.01 (0.93, 1.10) | 0.94 (0.90, 0.98)\* | 0.93 (0.89, 0.97)\* | 0.16 (0.04, 0.67)\* | 0.75 (0.67, 0.84)\* |
| State 1 - State 4 | Cognitive Activity | 0.96 (0.84, 1.09) | 1.05 (1.00, 1.10) | 0.96 (0.90, 1.02) | 1.21 (0.99, 1.48) | 0.64 (0.49, 0.82)\* |
| State 2 - State 1 | Cognitive Activity | 1.02 (0.86, 1.21) | 1.01 (0.96, 1.06) | --- | 0.16 (0.04, 0.64)\* | 1.11 (0.97, 1.27) |
| State 2 - State 3 | Cognitive Activity | 1.09 (0.98, 1.20) | 0.99 (0.91, 1.09) | 0.99 (0.87, 1.12) | 0.90 (0.74, 1.10) | 0.68 (0.58, 0.80)\* |
| State 2 - State 4 | Cognitive Activity | 1.26 (0.96, 1.64) | 0.93 (0.83, 1.05) | 1.07 (0.89, 1.27) | 0.51 (0.26, 0.99)\* | 1.12 (0.75, 1.66) |
| State 3 - State 4 | Cognitive Activity | 0.98 (0.91, 1.06) | 1.02 (0.96, 1.08) | --- | 0.92 (0.66, 1.28) | 0.80 (0.69, 0.93)\* |
| State 1 - State 2 | Social Network | 0.85 (0.73, 0.98)\* | 0.99 (0.98, 1.00)\* | 0.98 (0.93, 1.02) | 1.10 (0.98, 1.23) | 0.98 (0.97, 0.99)\* |
| State 1 - State 4 | Social Network | 1.13 (0.89, 1.44) | 0.99 (0.97, 1.00) | 0.98 (0.91, 1.05) | 1.00 (0.99, 1.01) | 0.96 (0.93, 1.00)\* |
| State 2 - State 1 | Social Network | 1.22 (0.90, 1.66) | 1.00 (0.98, 1.01) | --- | 1.13 (1.01, 1.27)\* | 1.01 (0.99, 1.02) |
| State 2 - State 3 | Social Network | 0.88 (0.75, 1.04) | 0.99 (0.97, 1.01) | 0.99 (0.85, 1.15) | 0.99 (0.95, 1.04) | 0.98 (0.96, 1.01) |
| State 2 - State 4 | Social Network | 1.66 (0.83, 3.33) | 1.00 (0.97, 1.02) | 0.77 (0.55, 1.10) | 0.92 (0.72, 1.17) | 0.98 (0.94, 1.03) |
| State 3 - State 4 | Social Network | 1.02 (0.91, 1.14) | 1.00 (0.99, 1.02) | --- | 1.00 (0.91, 1.09) | 0.99 (0.96, 1.01) |
| State 1 - State 2 | Education | 0.94 (0.86, 1.02) | 0.89 (0.87, 0.92)\* | 1.00 (0.96, 1.05) | 1.04 (0.89, 1.23) | 0.95 (0.92, 0.97)\* |
| State 1 - State 4 | Education | 1.07 (1.00, 1.15) | 0.99 (0.96, 1.02) | 1.00 (0.92, 1.08) | 0.97 (0.91, 1.04) | 0.98 (0.92, 1.04) |
| State 2 - State 1 | Education | 1.13 (0.95, 1.35) | 1.06 (1.03, 1.09)\* | --- | 1.10 (0.93, 1.30) | 1.02 (0.99, 1.05) |
| State 2 - State 3 | Education | 1.04 (0.94, 1.14) | 1.00 (0.96, 1.05) | 0.95 (0.84, 1.07) | 1.02 (0.93, 1.11) | 1.01 (0.97, 1.06) |
| State 2 - State 4 | Education | 0.89 (0.58, 1.38) | 0.98 (0.92, 1.04) | 1.10 (0.91, 1.32) | 0.97 (0.72, 1.31) | 1.04 (0.96, 1.12) |
| State 3 - State 4 | Education | 1.07 (1.00, 1.14) | 1.03 (0.99, 1.06) | --- | 0.99 (0.77, 1.27) | 0.99 (0.95, 1.02) |
| State 1 - State 2 | Sex(M) | 1.49 (1.07, 2.06)\* | 1.35 (1.15, 1.60)\* | 0.90 (0.61, 1.33) | 0.03 (0.00, 0.56)\* | 1.56 (1.30, 1.87)\* |
| State 1 - State 4 | Sex(M) | 1.32 (0.82, 2.15) | 1.69 (1.35, 2.12)\* | 1.05 (0.59, 1.86) | 3.00 (1.59, 5.67)\* | 1.53 (1.00, 2.34) |
| State 2 - State 1 | Sex(M) | 1.14 (0.64, 2.02) | 0.91 (0.74, 1.11) | --- | 0.03 (0.00, 0.60)\* | 1.15 (0.93, 1.43) |
| State 2 - State 3 | Sex(M) | 1.49 (1.06, 2.11)\* | 0.87 (0.65, 1.17) | 1.83 (0.51, 6.54) | 1.94 (0.86, 4.36) | 0.89 (0.66, 1.21) |
| State 2 - State 4 | Sex(M) | 0.61 (0.06, 6.10) | 2.37 (1.57, 3.58)\* | --- | 0.28 (0.00,93.13) | 1.61 (0.93, 2.76) |
| State 3 - State 4 | Sex(M) | 1.52 (1.17, 1.97)\* | 1.17 (0.93, 1.47) | --- | 2.25 (0.46,10.89) | 1.41 (1.08, 1.84)\* |
| State 1 - State 2 | Age | 1.11 (1.06, 1.17)\* | 1.05 (1.04, 1.06)\* | 1.02 (0.95, 1.10) | 1.30 (0.93, 1.81) | 1.08 (1.06, 1.09)\* |
| State 1 - State 4 | Age | 1.17 (1.09, 1.25)\* | 1.09 (1.07, 1.10)\* | 1.12 (1.04, 1.20)\* | 1.26 (1.08, 1.48)\* | 1.10 (1.07, 1.13)\* |
| State 2 - State 1 | Age | 0.96 (0.88, 1.05) | 0.96 (0.95, 0.97)\* | 0.91 (0.86, 0.97)\* | 1.09 (0.77, 1.53) | 0.98 (0.96, 0.99)\* |
| State 2 - State 3 | Age | 1.06 (1.02, 1.12)\* | 1.11 (1.09, 1.13)\* | 1.15 (0.98, 1.35) | 0.97 (0.83, 1.12) | 1.04 (1.02, 1.06)\* |
| State 2 - State 4 | Age | 1.21 (1.06, 1.38)\* | 1.05 (1.03, 1.08)\* | 1.26 (0.96, 1.66) | 0.83 (0.57, 1.19) | 1.07 (1.02, 1.12)\* |
| State 3 - State 4 | Age | 1.04 (1.01, 1.08)\* | 1.05 (1.04, 1.07)\* | --- | 0.77 (0.61, 0.97)\* | 1.05 (1.03, 1.07)\* |

Cognitive Activity

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| State 1 - State 2 | 1.01 (0.93, 1.10) | 0.94 (0.90, 0.98)\* | 0.93 (0.89, 0.97)\* | 0.16 (0.04, 0.67)\* | 0.75 (0.67, 0.84)\* |
| State 1 - State 4 | 0.96 (0.84, 1.09) | 1.05 (1.00, 1.10) | 0.96 (0.90, 1.02) | 1.21 (0.99, 1.48) | 0.64 (0.49, 0.82)\* |
| State 2 - State 1 | 1.02 (0.86, 1.21) | 1.01 (0.96, 1.06) | --- | 0.16 (0.04, 0.64)\* | 1.11 (0.97, 1.27) |
| State 2 - State 3 | 1.09 (0.98, 1.20) | 0.99 (0.91, 1.09) | 0.99 (0.87, 1.12) | 0.90 (0.74, 1.10) | 0.68 (0.58, 0.80)\* |
| State 2 - State 4 | 1.26 (0.96, 1.64) | 0.93 (0.83, 1.05) | 1.07 (0.89, 1.27) | 0.51 (0.26, 0.99)\* | 1.12 (0.75, 1.66) |
| State 3 - State 4 | 0.98 (0.91, 1.06) | 1.02 (0.96, 1.08) | --- | 0.92 (0.66, 1.28) | 0.80 (0.69, 0.93)\* |

Social Network

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| State 1 - State 2 | 0.85 (0.73, 0.98)\* | 0.99 (0.98, 1.00)\* | 0.98 (0.93, 1.02) | 1.10 (0.98, 1.23) | 0.98 (0.97, 0.99)\* |
| State 1 - State 4 | 1.13 (0.89, 1.44) | 0.99 (0.97, 1.00) | 0.98 (0.91, 1.05) | 1.00 (0.99, 1.01) | 0.96 (0.93, 1.00)\* |
| State 2 - State 1 | 1.22 (0.90, 1.66) | 1.00 (0.98, 1.01) | --- | 1.13 (1.01, 1.27)\* | 1.01 (0.99, 1.02) |
| State 2 - State 3 | 0.88 (0.75, 1.04) | 0.99 (0.97, 1.01) | 0.99 (0.85, 1.15) | 0.99 (0.95, 1.04) | 0.98 (0.96, 1.01) |
| State 2 - State 4 | 1.66 (0.83, 3.33) | 1.00 (0.97, 1.02) | 0.77 (0.55, 1.10) | 0.92 (0.72, 1.17) | 0.98 (0.94, 1.03) |
| State 3 - State 4 | 1.02 (0.91, 1.14) | 1.00 (0.99, 1.02) | --- | 1.00 (0.91, 1.09) | 0.99 (0.96, 1.01) |

Education

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| State 1 - State 2 | 0.94 (0.86, 1.02) | 0.89 (0.87, 0.92)\* | 1.00 (0.96, 1.05) | 1.04 (0.89, 1.23) | 0.95 (0.92, 0.97)\* |
| State 1 - State 4 | 1.07 (1.00, 1.15) | 0.99 (0.96, 1.02) | 1.00 (0.92, 1.08) | 0.97 (0.91, 1.04) | 0.98 (0.92, 1.04) |
| State 2 - State 1 | 1.13 (0.95, 1.35) | 1.06 (1.03, 1.09)\* | --- | 1.10 (0.93, 1.30) | 1.02 (0.99, 1.05) |
| State 2 - State 3 | 1.04 (0.94, 1.14) | 1.00 (0.96, 1.05) | 0.95 (0.84, 1.07) | 1.02 (0.93, 1.11) | 1.01 (0.97, 1.06) |
| State 2 - State 4 | 0.89 (0.58, 1.38) | 0.98 (0.92, 1.04) | 1.10 (0.91, 1.32) | 0.97 (0.72, 1.31) | 1.04 (0.96, 1.12) |
| State 3 - State 4 | 1.07 (1.00, 1.14) | 1.03 (0.99, 1.06) | --- | 0.99 (0.77, 1.27) | 0.99 (0.95, 1.02) |

Sex(M)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| State 1 - State 2 | 1.49 (1.07, 2.06)\* | 1.35 (1.15, 1.60)\* | 0.90 (0.61, 1.33) | 0.03 (0.00, 0.56)\* | 1.56 (1.30, 1.87)\* |
| State 1 - State 4 | 1.32 (0.82, 2.15) | 1.69 (1.35, 2.12)\* | 1.05 (0.59, 1.86) | 3.00 (1.59, 5.67)\* | 1.53 (1.00, 2.34) |
| State 2 - State 1 | 1.14 (0.64, 2.02) | 0.91 (0.74, 1.11) | --- | 0.03 (0.00, 0.60)\* | 1.15 (0.93, 1.43) |
| State 2 - State 3 | 1.49 (1.06, 2.11)\* | 0.87 (0.65, 1.17) | 1.83 (0.51, 6.54) | 1.94 (0.86, 4.36) | 0.89 (0.66, 1.21) |
| State 2 - State 4 | 0.61 (0.06, 6.10) | 2.37 (1.57, 3.58)\* | --- | 0.28 (0.00,93.13) | 1.61 (0.93, 2.76) |
| State 3 - State 4 | 1.52 (1.17, 1.97)\* | 1.17 (0.93, 1.47) | --- | 2.25 (0.46,10.89) | 1.41 (1.08, 1.84)\* |

Age

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| State 1 - State 2 | 1.11 (1.06, 1.17)\* | 1.05 (1.04, 1.06)\* | 1.02 (0.95, 1.10) | 1.30 (0.93, 1.81) | 1.08 (1.06, 1.09)\* |
| State 1 - State 4 | 1.17 (1.09, 1.25)\* | 1.09 (1.07, 1.10)\* | 1.12 (1.04, 1.20)\* | 1.26 (1.08, 1.48)\* | 1.10 (1.07, 1.13)\* |
| State 2 - State 1 | 0.96 (0.88, 1.05) | 0.96 (0.95, 0.97)\* | 0.91 (0.86, 0.97)\* | 1.09 (0.77, 1.53) | 0.98 (0.96, 0.99)\* |
| State 2 - State 3 | 1.06 (1.02, 1.12)\* | 1.11 (1.09, 1.13)\* | 1.15 (0.98, 1.35) | 0.97 (0.83, 1.12) | 1.04 (1.02, 1.06)\* |
| State 2 - State 4 | 1.21 (1.06, 1.38)\* | 1.05 (1.03, 1.08)\* | 1.26 (0.96, 1.66) | 0.83 (0.57, 1.19) | 1.07 (1.02, 1.12)\* |
| State 3 - State 4 | 1.04 (1.01, 1.08)\* | 1.05 (1.04, 1.07)\* | --- | 0.77 (0.61, 0.97)\* | 1.05 (1.03, 1.07)\* |

# Session Information

For the sake of documentation and reproducibility, the current report was rendered on a system using the following software.

Report rendered by koval\_000 at 2017-06-28, 11:37 -0400

R version 3.3.2 (2016-10-31)  
Platform: x86\_64-w64-mingw32/x64 (64-bit)  
Running under: Windows >= 8 x64 (build 9200)  
  
locale:  
[1] LC\_COLLATE=English\_United States.1252 LC\_CTYPE=English\_United States.1252 LC\_MONETARY=English\_United States.1252  
[4] LC\_NUMERIC=C LC\_TIME=English\_United States.1252   
  
attached base packages:  
[1] stats graphics grDevices utils datasets methods base   
  
other attached packages:  
[1] msm\_1.6.4 knitr\_1.15.1 magrittr\_1.5 ggplot2\_2.2.1  
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.9 highr\_0.6 RColorBrewer\_1.1-2 plyr\_1.8.4 tools\_3.3.2 extrafont\_0.17   
 [7] digest\_0.6.12 jsonlite\_1.2 evaluate\_0.10 tibble\_1.2 gtable\_0.2.0 lattice\_0.20-34   
[13] Matrix\_1.2-8 DBI\_0.5-1 GGally\_1.3.0 yaml\_2.1.14 mvtnorm\_1.0-5 expm\_0.999-1   
[19] kableExtra\_0.1.0 Rttf2pt1\_1.3.4 xml2\_1.1.1 httr\_1.2.1 dplyr\_0.5.0 stringr\_1.1.0   
[25] htmlwidgets\_0.8 rprojroot\_1.2 grid\_3.3.2 DT\_0.2 reshape\_0.8.6 R6\_2.2.0   
[31] XML\_3.98-1.5 readxl\_0.1.1 survival\_2.40-1 rmarkdown\_1.3 selectr\_0.3-1 tidyr\_0.6.1   
[37] reshape2\_1.4.2 extrafontdb\_1.0 scales\_0.4.1 backports\_1.0.5 htmltools\_0.3.5 splines\_3.3.2   
[43] rvest\_0.3.2 rsconnect\_0.7 testit\_0.6 assertthat\_0.1 dichromat\_2.0-0 colorspace\_1.3-2   
[49] labeling\_0.3 stringi\_1.1.2 lazyeval\_0.2.0 munsell\_0.4.3