semmcci: Internal Tests

Ivan Jacob Agaloos Pesigan

Tests

```
#> test-semmcci-mc-latent-med-defined-none
#> Test passed

#> test-semmcci-mc-latent-med-defined

#> Test passed

#> test-semmcci-mc-latent-med-std-defined-none

#> Test passed

#> test-semmcci-mc-latent-med-std-defined

#> Test passed

#> test-semmcci-mc-simple-med-defined-equality

#> Test passed

#> test-semmcci-mc-simple-med-defined-inequality

#> Test passed

#> test-semmcci-mc-simple-med-defined-none

#> Test passed

#> test-semmcci-mc-simple-med-defined

#> Test passed

#> test-semmcci-mc-simple-med-std-defined-none-random-x

#> Test passed

#> test-semmcci-mc-simple-med-std-defined-none

#> Test passed

#> test-semmcci-mc-simple-med-std-defined
```

```
#> Test passed
#> test-semmcci-mc-methods
#> Monte Carlo Confidence Intervals
#>                    est     se   R  0.05%   0.5%   2.5%  97.5%  99.5% 99.95%
#> visual=~x2      0.5535 0.1038 100 0.2569 0.2718 0.3115 0.7273 0.7682 0.7801
#> visual=~x3      0.7294 0.1025 100 0.4512 0.4673 0.5210 0.9148 0.9359 0.9411
#> textual=~x5     1.1131 0.0665 100 0.9383 0.9554 0.9868 1.2475 1.2660 1.2732
#> textual=~x6     0.9261 0.0495 100 0.8288 0.8304 0.8391 1.0327 1.0555 1.0645
#> speed=~x8       1.1800 0.1683 100 0.7761 0.7961 0.8324 1.4817 1.5984 1.6622
#> speed=~x9       1.0815 0.1693 100 0.6298 0.6547 0.7586 1.3783 1.5034 1.5576
#> x1~~x1          0.5491 0.1125 100 0.2256 0.2381 0.3178 0.7079 0.7624 0.7706
#> x2~~x2          1.1338 0.0887 100 0.9037 0.9207 0.9527 1.3015 1.3129 1.3154
#> x3~~x3          0.8443 0.0856 100 0.6154 0.6521 0.7143 1.0313 1.0914 1.1016
#> x4~~x4          0.3712 0.0558 100 0.2231 0.2386 0.2643 0.4616 0.4961 0.5149
#> x5~~x5          0.4463 0.0609 100 0.2719 0.2881 0.3242 0.5560 0.6163 0.6292
#> x6~~x6          0.3562 0.0434 100 0.2436 0.2481 0.2747 0.4401 0.4621 0.4686
#> x7~~x7          0.7994 0.0800 100 0.6047 0.6076 0.6375 0.9513 0.9740 0.9777
#> x8~~x8          0.4877 0.0689 100 0.3444 0.3449 0.3632 0.6204 0.6399 0.6507
#> x9~~x9          0.5661 0.0680 100 0.3585 0.3805 0.4320 0.6575 0.7357 0.7707
#> visual~~visual  0.8093 0.1388 100 0.5387 0.5506 0.5662 1.1172 1.2236 1.2619
#> textual~~textual 0.9795 0.1101 100 0.7738 0.7744 0.8030 1.2205 1.3133 1.3830
#> speed~~speed    0.3837 0.0984 100 0.1975 0.2020 0.2098 0.6088 0.6392 0.6446
#> visual~~textual 0.4082 0.0711 100 0.2358 0.2375 0.2899 0.5572 0.5965 0.6084
#> visual~~speed   0.2622 0.0615 100 0.1148 0.1218 0.1395 0.3891 0.4218 0.4294
#> textual~~speed  0.1735 0.0530 100 0.0258 0.0413 0.0791 0.2618 0.2921 0.2937
#> Standardized Monte Carlo Confidence Intervals
#>                    est     se   R  0.05%   0.5%   2.5%  97.5%  99.5% 99.95%
#> visual=~x2      0.4236 0.0613 100 0.2099 0.2152 0.2898 0.5204 0.5431 0.5538
#> visual=~x3      0.5811 0.0536 100 0.4535 0.4578 0.4646 0.6765 0.6924 0.6985
#> textual=~x5     0.8551 0.0246 100 0.7739 0.7794 0.8003 0.9019 0.9155 0.9223
#> textual=~x6     0.8380 0.0221 100 0.7917 0.7931 0.7954 0.8788 0.8922 0.8924
#> speed=~x8       0.7230 0.0489 100 0.5749 0.5855 0.6144 0.7929 0.8028 0.8051
#> speed=~x9       0.6650 0.0546 100 0.5226 0.5330 0.5534 0.7513 0.7680 0.7681
#> x1~~x1          0.4042 0.0817 100 0.1868 0.1961 0.2259 0.5316 0.5423 0.5448
#> x2~~x2          0.8206 0.0497 100 0.6932 0.7049 0.7292 0.9159 0.9537 0.9559
#> x3~~x3          0.6623 0.0613 100 0.5121 0.5205 0.5423 0.7841 0.7904 0.7943
#> x4~~x4          0.2748 0.0423 100 0.1537 0.1583 0.1802 0.3432 0.3490 0.3504
#> x5~~x5          0.2689 0.0419 100 0.1493 0.1619 0.1865 0.3595 0.3926 0.4011
#> x6~~x6          0.2977 0.0371 100 0.2037 0.2040 0.2277 0.3673 0.3710 0.3731
#> x7~~x7          0.6757 0.0669 100 0.4884 0.5067 0.5381 0.7974 0.8103 0.8151
#> x8~~x8          0.4772 0.0688 100 0.3519 0.3555 0.3714 0.6226 0.6571 0.6694
#> x9~~x9          0.5578 0.0713 100 0.4100 0.4102 0.4355 0.6938 0.7157 0.7269
#> visual~~visual  1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> textual~~textual 1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
#> speed~~speed    1.0000 0.0000 100 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000
```

```
#> visual~~textual  0.4585 0.0645 100 0.3101 0.3130 0.3524 0.5909 0.6207 0.6261
#> visual~~speed    0.4705 0.0728 100 0.3025 0.3134 0.3322 0.5929 0.6311 0.6469
#> textual~~speed   0.2830 0.0743 100 0.0505 0.0791 0.1338 0.4106 0.4621 0.4880
#> Monte Carlo Confidence Intervals
#> Standardized Monte Carlo Confidence Intervals

#> test-semmcci-mvn

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mvn

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-semmcci-mvn

#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> [[1]]
#> [[1]][[1]]
#> [[1]][[1]]$value
#> [[1]][[1]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[1]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[2]]
#> [[1]][[2]]$value
#> [[1]][[2]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[2]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[3]]
```

```
#> [[1]][[3]]$value
#> [[1]][[3]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[3]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[4]]
#> [[1]][[4]]$value
#> [[1]][[4]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[4]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[5]]
#> [[1]][[5]]$value
#> [[1]][[5]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[5]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[6]]
#> [[1]][[6]]$value
#> [[1]][[6]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[6]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[7]]
#> [[1]][[7]]$value
#> [[1]][[7]]$value[[1]]
#> [1] TRUE
#>
#>
```

```
#> [[1]][[7]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[8]]
#> [[1]][[8]]$value
#> [[1]][[8]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[8]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[9]]
#> [[1]][[9]]$value
#> [[1]][[9]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[9]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[10]]
#> [[1]][[10]]$value
#> [[1]][[10]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[10]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[11]]
#> [[1]][[11]]$value
#> [[1]][[11]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[11]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[12]]
```

```
#> [[1]][[12]]$value
#> [[1]][[12]]$value[[1]]
#>                             2.5%      97.5%
#> visual=~x2        0.2897874 0.5203873
#> visual=~x3        0.4646159 0.6765250
#> textual=~x5       0.8002979 0.9019032
#> textual=~x6       0.7954116 0.8787872
#> speed=~x8         0.6143520 0.7928503
#> speed=~x9         0.5533531 0.7513261
#> x1~~x1            0.2258972 0.5315962
#> x2~~x2            0.7291958 0.9158788
#> x3~~x3            0.5422806 0.7841317
#> x4~~x4            0.1801977 0.3432245
#> x5~~x5            0.1865401 0.3595047
#> x6~~x6            0.2277287 0.3673203
#> x7~~x7            0.5381230 0.7974247
#> x8~~x8            0.3713578 0.6225555
#> x9~~x9            0.4355037 0.6937509
#> visual~~visual    1.0000000 1.0000000
#> textual~~textual  1.0000000 1.0000000
#> speed~~speed      1.0000000 1.0000000
#> visual~~textual   0.3524238 0.5908821
#> visual~~speed     0.3321714 0.5928531
#> textual~~speed    0.1338109 0.4106239
#>
#>
#> [[1]][[12]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[13]]
#> [[1]][[13]]$value
#> [[1]][[13]]$value[[1]]
#> [1] TRUE
#>
#> [[1]][[13]]$value[[2]]
#> [1] TRUE
#>
#> [[1]][[13]]$value[[3]]
#> [1] TRUE
#>
#>
#> [[1]][[13]]$visible
#> [1] TRUE
```

Environment

```r
ls()

#> [1] "i"         "root"      "tex_file"
```

Class

```
#> [[1]]
#> [1] "character"
#>
#> [[2]]
#> [1] "root_criterion"
#>
#> [[3]]
#> [1] "character"
```

References

R Core Team. (2022). *R: A language and environment for statistical computing.* R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/