semmcci: Internal Tests

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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
\textit{\#> test-semmcci-mc-simple-med-std-defined-none-random-x}
#> Test passed
\textit{\#> test-semmcci-mc-simple-med-std-defined-none}
#> Test passed
\#> test-semmcci-mc-simple-med-std-defined
```

```
#> Test passed
#> test-semmcci-mun
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> test-semmcci-mun
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> test-semmcci-mun
#> Test passed
#> Test passed
#> Test passed
#> Test passed
#> test-semmcci-mc-print
#> Monte Carlo Confidence Intervals
                    est se R 0.05%
                                              0.5% 2.5% 97.5% 99.5%
#> visual=~x2
                  0.5535 0.10379 100 0.25685 0.27180 0.31151 0.7273 0.7682
#> visual=~x3
                 0.7294 0.10254 100 0.45120 0.46728 0.52101 0.9148 0.9359
#> textual=~x5
                 1.1131 0.06653 100 0.93835 0.95545 0.98682 1.2475 1.2660
#> textual=~x6
                  0.9261 0.04952 100 0.82884 0.83039 0.83911 1.0327 1.0555
                   1.1800 0.16828 100 0.77609 0.79612 0.83240 1.4817 1.5984
#> speed=~x8
#> speed=~x9
                   1.0815 0.16935 100 0.62978 0.65466 0.75856 1.3783 1.5034
#> x1~~x1
                   0.5491 0.11254 100 0.22562 0.23811 0.31783 0.7079 0.7624
#> x2~~x2
                   1.1338 0.08869 100 0.90371 0.92071 0.95269 1.3015 1.3129
#> x3~~x3
                  0.8443 0.08565 100 0.61537 0.65206 0.71426 1.0313 1.0914
#> x4~~x4
                  0.3712 0.05583 100 0.22310 0.23856 0.26429 0.4616 0.4961
#> x5~~x5
                  0.4463 0.06091 100 0.27190 0.28812 0.32424 0.5560 0.6163
                  0.3562 0.04342 100 0.24364 0.24815 0.27468 0.4401 0.4621
#> x6~~x6
#> x7~~x7
                  0.7994 0.08003 100 0.60473 0.60763 0.63754 0.9513 0.9740
#> x8~~x8
                  0.4877 0.06886 100 0.34436 0.34493 0.36318 0.6204 0.6399
#> x9~~x9
                  0.5661 0.06799 100 0.35846 0.38048 0.43200 0.6575 0.7357
#> visual~~visual     0.8093 0.13876 100 0.53874 0.55059 0.56616 1.1172 1.2236
#> textual~~textual 0.9795 0.11010 100 0.77381 0.77435 0.80297 1.2205 1.3133
#> speed~~speed 0.3837 0.09845 100 0.19752 0.20201 0.20982 0.6088 0.6392
#> visual~~textual 0.4082 0.07110 100 0.23580 0.23753 0.28995 0.5572 0.5965
#> visual~~speed 0.2622 0.06150 100 0.11483 0.12179 0.13950 0.3891 0.4218
#> textual~~speed
                   0.1735 0.05302 100 0.02585 0.04126 0.07912 0.2618 0.2921
                   99.95%
```

```
#> visual=~x2
                  0.7801
#> visual=~x3
                  0.9411
#> textual=~x5
                  1.2732
#> textual=~x6
                  1.0645
#> speed=~x8
                  1.6622
#> speed=~x9
                  1.5576
#> x1~~x1
                  0.7706
#> x2~~x2
                  1.3154
#> x3~~x3
                  1.1016
#> x4~~x4
                  0.5149
#> x5~~x5
                  0.6292
#> x6~~x6
                  0.4686
#> x7~~x7
                  0.9777
#> x8~~x8
                  0.6507
#> x9~~x9
                  0.7707
#> visual~~visual 1.2619
#> textual~~textual 1.3830
#> speed~~speed 0.6446
#> visual~~textual 0.6084
#> visual~~speed
                  0.4294
#> textual~~speed 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
                  0.5811 0.0536 100 0.4535 0.4578 0.4646 0.6765 0.6924 0.6985
#> visual=~x3
#> 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
                 0.6650 0.0546 100 0.5226 0.5330 0.5534 0.7513 0.7680 0.7681
#> speed=~x9
#> 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
                 0.2748 0.0423 100 0.1537 0.1583 0.1802 0.3432 0.3490 0.3504
#> x4~~x4
#> 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
#> textual~~textual 1.0000 0.0000 100 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
#> [[1]]
#> [[1]][[1]]
```

```
#> [[1]][[1]]$value
#> [[1]][[1]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[1]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[2]]
#> [[1]][[2]]$value
#> [[1]][[2]]$value[[1]]
#> [1] TRUE
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#>
#> [[1]][[2]]$visible
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#> [[1]][[3]]$value
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#> [[1]][[3]]$visible
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#> [[1]][[4]]
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#> [[1]][[4]]$visible
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#> [[1]][[5]]$value
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#>
```

```
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#> [[1]][[6]]
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#>
#> [[1]][[6]]$visible
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#> [[1]][[7]]
#> [[1]][[7]]$value
#> [[1]][[7]]$value[[1]]
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#>
#>
#> [[1]][[7]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[8]]
#> [[1]][[8]]$value
#> [[1]][[8]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[8]]$visible
#> [1] TRUE
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#>
#> [[1]][[9]]
#> [[1]][[9]]$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]]
#> [1] TRUE
#> [[1]][[12]]$value[[2]]
#> [1] TRUE
#> [[1]][[12]]$value[[3]]
#> [1] TRUE
#>
#> [[1]][[12]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[13]]
#> [[1]][[13]]$value
#> [[1]] [[13]] $value [[1]]
                             se R 0.05% 0.5% 2.5% 97.5% 99.5% 99.95%
                      est
#> 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
                  0.8380 0.0221 100 0.7917 0.7931 0.7954 0.8788 0.8922 0.8924
#> textual=~x6
#> 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
                 0.8206 0.0497 100 0.6932 0.7049 0.7292 0.9159 0.9537 0.9559
#> x2~~x2
#> 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
#> 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
#> 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
#>
#> [[1]][[13]]$visible
#> [1] TRUE
```

Environment

```
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/