

manMCMedMiss: Staging

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Staging...

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/>

1 MI

```
library(mice)

#>
#> Attaching package: 'mice'
#> The following object is masked from 'package:stats':
#>
#>     filter
#> The following objects are masked from 'package:base':
#>
#>     cbind, rbind

mi <- complete(
  mice(
    elliot2007,
    method = "norm",
    m = 100,
    print = FALSE,
    seed = 42
  ),
  action = "all"
)
library(lavaan)

#> This is lavaan 0.6-12
#> lavaan is FREE software! Please report any bugs.
```

```

model <- "
  y ~ x + b * m
  m ~ a * x
"
fit <- lapply(
  X = mi,
  FUN = function(data,
                  model) {
    sem(
      model = model,
      data = data
    )
  },
  model = model
)
param_vec <- lapply(
  X = fit,
  FUN = function(fit) {
    coef(fit)
  }
)
var_mat <- lapply(
  X = fit,
  FUN = function(fit) {
    vcov(fit)
  }
)
mi <- MICombine(
  param_vec = param_vec,
  var_mat = var_mat
)
set.seed(42)
R = 20000
mc <- MASS::mvrnorm(
  n = R,
  mu = mi$estimates,
  Sigma = mi$total
)
stats::quantile(
  mc[, "a"] * mc[, "b"],
  probs = c(0.025, 0.975)
)

#>          2.5%          97.5%
#> 0.01236716 0.11813687

```

2 FIML