

Survey Analysis in R

Method: Survey Analysis in R

Method type: software_workflow

Design: R-survey-style post-stratified estimate that gives equal target weight to the four school-by-sex cells.

Variables: school, sex, famrel, freetime, goout, Dalc, Walc, health

Inference scope: No group-difference test is imposed; the task estimates a post-stratified mean, linearized standard error, and effective sample size.

Formula: $w_h = N / (H * n_h)$; $mean_w = \sum(w_i * y_i) / \sum(w_i)$;

$SE = \sqrt{\sum(w_i^2 * (y_i - mean_w)^2) / (\sum(w_i))^2}$.

Source rows: 649

Calculated metrics:

weighted_scale_mean: 3.65826466752031

linearized_standard_error: 0.0219366553068587

ci_low: 3.61526882311886

ci_high: 3.70126051192175

effective_sample_size: 552.771192602488

poststrata: 4

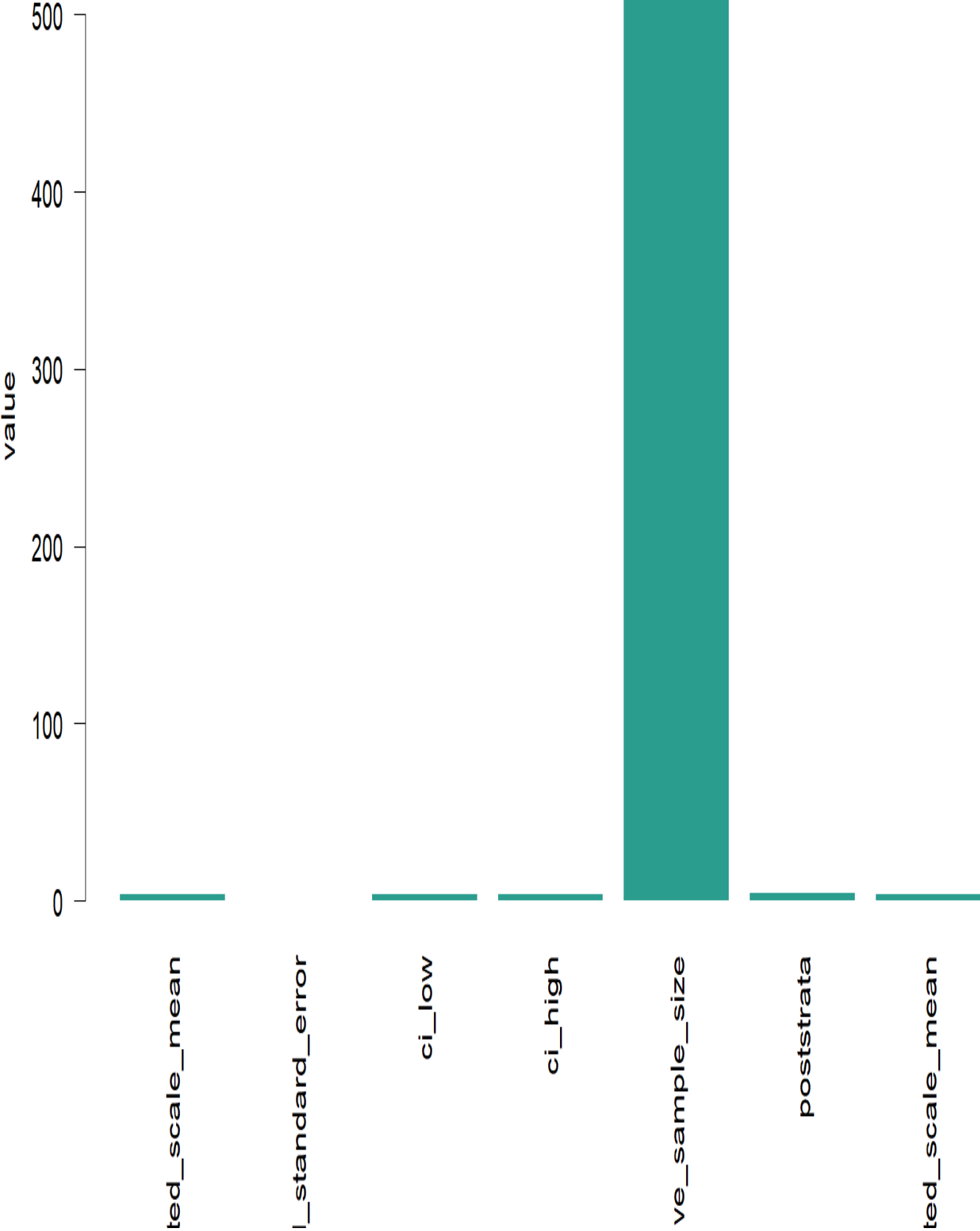
unweighted_scale_mean: 3.6748844375963

Interpretation:

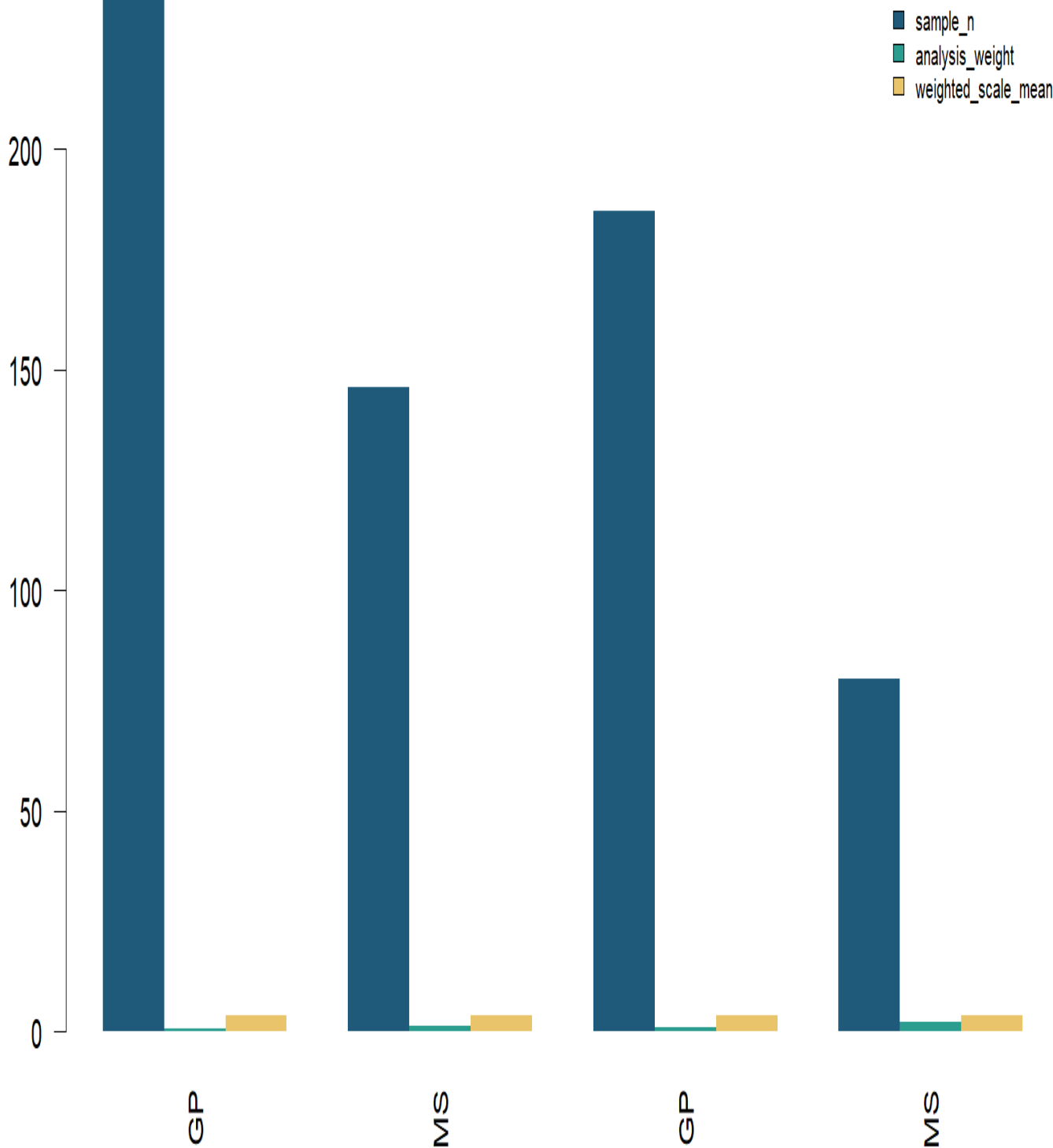
Four school-by-sex poststrata receive equal target weight.

Weighted mean 3.65826466752031 effective n 552.771192602488

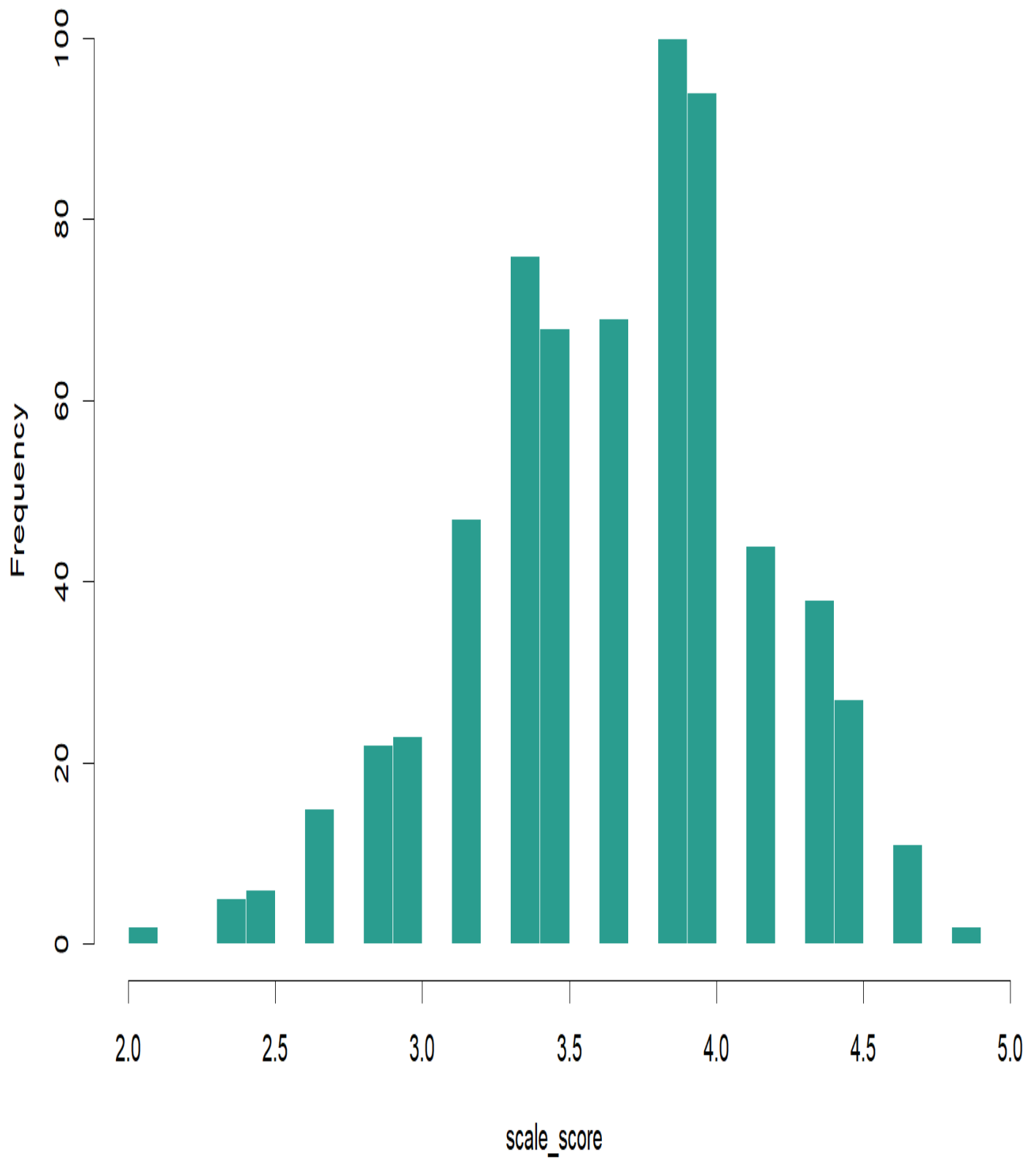
Survey Analysis in R - primary metrics



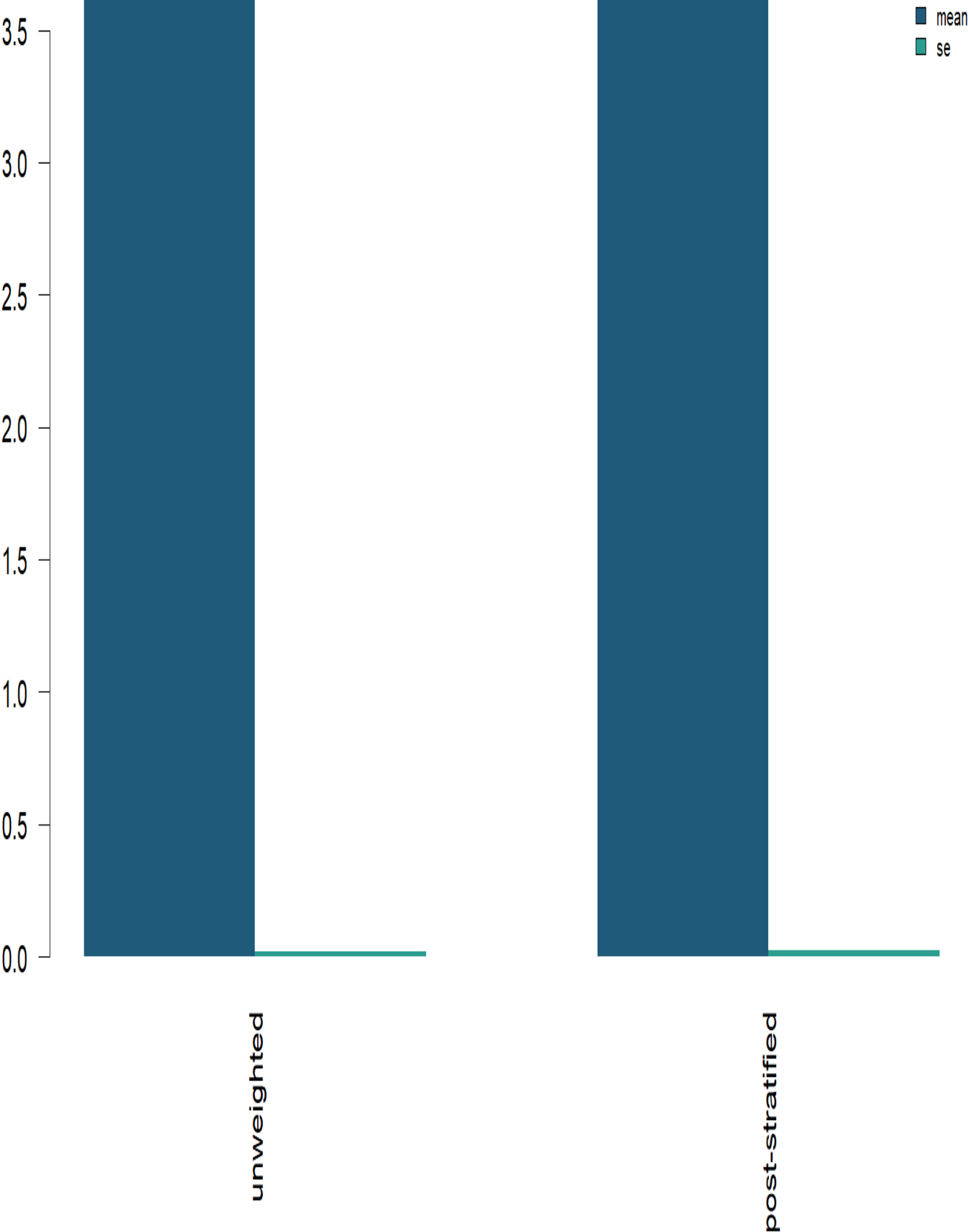
Survey Analysis in R - poststratum weights



Survey Analysis in R - weighted score preview



Survey Analysis in R - weighted unweighted comparison



Survey Analysis in R verified results

unweighted_scale_mean

poststrata

effective_sample_size

ci_high

ci_low

linearized_standard_error

weighted_scale_mean

