1.3.5: Statistical Tests and Models
(Asynchronous-Online)

Session Objectives

1. Develop linear and logistic regression models.
2. (Use a survey sampling weight to generate more representative descriptive and inferential statistical values.) - Currently, this objective is under the Module 1.3.4: Missing data and sampling weight.
3. Interpret a model output.

key points Key points to cover: 1. Run multivariate linear regression models with R. 2. Run multivariate logistic regression models with R. 3. Include interaction terms in regression models. 4. (R packages for complex survey data (e.g., survey package) a. R codes to generate weighted descriptive statistics and contingency tables, as well as to develop weighted linear models) 5. Interpret a model output. 6. (Compare the outputs of unweighted and weighted models.)

---

0. Prework - Before You Begin

---

1. Develop linear and logistic regression models.

2. (Use a survey sampling weight to generate more representative descriptive and inferential statistical values.)

Currently, this objective is under the Module 1.3.4: Missing data and sampling weight.

---

3. Interpret a model output.

References

R Core Team. 2024. *R: A Language and Environment for Statistical Computing.* Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Other Helpful Resources

Other Helpful Resources