

Week Four

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Polychotomous Variables

Last week, we learned about the coding of independent dichotomous variables and the interpretation of their coefficients in logistic regression. This week we continue our discussion of the interpretation of coefficients, only now we will be moving on to polychotomous independent variables (i.e. variables having 3 or more levels).

We will also discuss various types of cell coding and the implications of these methods of coding the interpretation of model coefficients.

Furthermore, we will introduce several real-life examples of polychotomous variable coding from Dr. Lemeshow's past research.

Lectures

Please click on the links below to access the video lectures for this fourth week

- [Polychotomous Independent Variable](#)
- [Reference Groups and Cell Coding](#)
- [Deviation from Means Coding](#)
- [Applications of Polychotomous Variable Coding](#)
- [Adjusted Odds Ratios](#)
- [Continuous Independent Variable and Week Four Homework](#)

Lecture Material

Please click on the link below to download the slides of the fourth week

[Week Four: "Polychotomous Variables"](#)

Conversations

Please join in the conversations around regression analysis in our [community forums](#) area. You can ask and answer questions and discover insights and help for yourself and others as we come together to encourage each other in our exploration.

Key Terms

Below are definitions of some important terms covered this week:

- **Polychotomous Variable:** a variable that has 3 or more levels with a fixed number of outcomes
- **Referent Group:** Primary comparison group when generating odds ratios in logistic regression. It is often the group with the lowest risk/odds of outcome
- **Referent Cell Coding:** All design variables are coded as 0 for the referent group

Homework

Please watch the following video, [Homework Highlights from Week Three](#), to review the homework from last week.

Navigate to the [Week Four Homework](#) page to view and download the homework for this week.

Quiz

After you've gone through the materials for this week please be sure to visit the [quizzes area](#) to complete this week's quiz.



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