Feedback — Quiz: Week Five

Help Center

You submitted this quiz on **Sat 13 Jun 2015 12:42 PM PDT**. You got a score of **6.50** out of **7.00**.

Question 1

Which of the following statements of confounding variables are true:

Select all that apply

Your Answer		Score	Explanation
☑ Confounders can be controlled for during study design and analysis	✔	0.33	This statement is true.
☑ Confounders can inflate the difference in means of an outcome among different groups	✔	0.33	This statement is true.
☑ Confounders are related to both the exposure and the response variable	✔	0.33	This statement is true.
Total		1.00 / 1.00	

Question 2

For this question, let R be a risk factor and C be a covariate.

Considering a model with significant interaction RC is the following statement is true or false:

An estimate of the odds ratio for three different levels of R (e.g. R_1, R_2 and R_3) should be made at different levels of C.

(please answer True or False below)

Your Answer	Score	Explanation

○ True			
◉ False	✔	1.00	Good job, you got it correct! When there is an interaction between a risk factor and a covariate, an estimate of the odds ratio for the risk factor should be made at a specific level of the covariate. We must take into account the correlation between the two interacting variables.
Total		1.00 / 1.00	

Question 3

Consider whether the following statement is true or false:

Adjusted odds ratios are obtained by comparing individuals who differ by only one characteristic of interest and have the values of all other variables held constant.

(please answer True or False below)

Your Answer		Score	Explanation
◉ True	✔	1.00	Great job!
○ False			
Total		1.00 / 1.00	

Question 4

Given a logistic model with a binary outcome, no interaction is present between a covariate and risk factor if which of the following statements are true:

Select all that apply

Your Answer		Score	Explanation
☑ The covariate does not modify the effect of the risk factor	✔	0.33	This statement

			is true.
☑ The association between the covariate and the risk factor is the same across the exposed groups	✔	0.33	This statement is true.
☑ The logit difference is constant over all values of the covariate	✔	0.33	This statement is true.
Total		1.00 / 1.00	

Question 5

Consider whether the following statement is true or false:

The identification of confounding relies on a statistical test.

(please answer True or False below)

Your Answer		Score	Explanation
○ True			
◉ False	✔	1.00	Great job! Confounding can be identified by comparing the difference in odds ratios with and without controlling for the potential confounder. However, a statistical test is necessary to identify **interaction** (i.e. to test the significance of the interaction term)
Total		1.00 / 1.00	

Question 6

Regarding covariates, which of the following statements are true:

Select all that apply

Your Answer	Score	Explanation

☑ A covariate should never be included in the model as an effect modifier if there is no biologically important change in the odds ratio with the inclusion of the interaction term in the model	✔	0.25	Determination of confounding relies on a biologically important change in the odds ratio, regardless of the statistical significance of the coefficient.
☐ A covariate should never be included in the model as an effect modifier if the interaction coefficient is not significant	✖	0.00	Determination of confounding relies on a biologically important change in the odds ratio, regardless of the statistical significance of the coefficient.
☑ A covariate should never be included in the model as a confounder if there is no biologically important change in the odds ratio with its inclusion in the model	✔	0.25	Determination of confounding relies on a biologically important change in the odds ratio, regardless of the statistical significance of the coefficient.
☑ A covariate should never be included in the model as a confounder if its estimated coefficient is not significant	✖	0.00	Determination of confounding relies on a biologically important change in the odds ratio, regardless of the statistical significance of the coefficient.
Total		0.50 / 1.00	

Question 7

Consider whether the following statement is true or false:

When a covariate is an effect modifier, it cannot be a confounder.

(please answer True or False below)

Your Answer		Score	Explanation
◉ True	✔	1.00	Great job! We know this is true because the estimate of the effect of the risk factor depends on the specific value of the covariate.
○			

False	
Total	1.00 / 1.00