Feedback — Quiz: Week Three

Help Center

You submitted this quiz on **Wed 27 May 2015 11:09 PM PDT**. You got a score of **6.00** out of **6.00**.

Question 1

Which of the following values can be used to compute the confidence interval (CI) for the probability:

Select all that apply

Your Answer		Score	Explanation
☑ Standard Error of Logit	✔	0.20	To directly calculate the CI of the logit, you need the **standard error** and estimation of the logit, as well as the significance level (otherwise known as alpha) to calculate the standard (Z) score.
☑ Variance of Logit	✔	0.20	**Variance** can also be used in calculations of the CI of the logit as the square root of the variance is the standard error.
☑ The Information Matrix	✔	0.20	The inverse of **the information matrix** is also the variance of the logit, and thus can be used to calculate the standard error as well.
☑ Significance Level	✔	0.20	To directly calculate the CI of the logit, you need the standard error and estimation of the logit, as well as the **significance level** (otherwise known as alpha) to calculate the standard (Z) score.
☑ Estimation of Log Odds	✔	0.20	To directly calculate the CI of the logit, you need the standard error and **estimation of the logit**, as well as the significance level (otherwise known as alpha) to calculate the standard (Z) score.
Total		1.00 / 1.00	

Question 2

Consider whether the following statement is true or false:

Interpretation of the coefficient is concerned with the definition of the unit change for the dependent variables.

(please answer True or False below)

Your Answer		Score	Explanation
○ True			
◉ False	✔	1.00	Nice work! You got it correct! The interpretation of the coefficient would be concerned with the definition of the unit change for the ***independent*** variables.
Total		1.00 / 1.00	

Question 3

Consider whether the following statement is true or false:

The link function of linear regression is the identity function (i.e. $y = y$), whereas the logit is the link function for logistic regression.

(please answer True or False below)

Your Answer		Score	Explanation
◉ True	✔	1.00	Good job! This is correct. We know from the definition of linear regression that y is already linear in its parameters.
○ False			
Total		1.00 / 1.00	

Question 4

Given a binary independent variable and dependent variable within a logistic regression model, which of the following are true :

Your Answer		Score	Explanation
◉ The log of the odds ratio is the difference in the logit between exposed and non-exposed groups.	✔	1.00	Great job! This is correct.
○ The exponent of the coefficient is the log odds ratio			
○ All of the above			
○ None of the above			
Total		1.00 / 1.00	

Question 5

Consider the following scenario:

You perform a logistic regression with lymphoma/no lymphoma as the dichotomous outcome, and find that the Odds Ratio = 5, comparing males to females.

Given that there is a **low** prevalence of lymphoma in this population, which of the following is the correct interpretation:

Select the statement below that is most correct.

Your Answer		Score	Explanation
○ Males have 5 times higher risk of lymphoma than females			
○ The odds of lymphoma among males is 5 times that of females			
◉ Both are correct	✔	1.00	Nice work! Both are correct. If the disease is rare, the odds ratio is a good proxy of relative risk.

Total	1.00 / 1.00

Question 6

Consider whether the following statement is true or false:

When deviation from means coding (-1,1) is used for a dichotomous outcome variable, the coefficient and standard error reported is twice as large as it should be under reference cell coding (0,1).

(please answer True or False below)

Your Answer		Score	Explanation
○ True			
◉ False	✔	1.00	Good job, you got it right! Based on the example we would discover that the coefficient and standard error reported would be **half as large**.
Total		1.00 / 1.00	