

The multinomial regression output gives the regression coefficients in a logOR metric (see the handout and video for Topic 2 and Topic 5). A 95% CI for the corresponding OR, where $OR = \exp(\log OR)$ is obtained as follows. Compute the 95% CI limits for the logOR estimate as $\log OR \pm 1.96 * SE(\log OR)$. Then exponentiate those two limits to get the OR limits. While the logOR CI is symmetric around the estimate, the OR limits are not which is what is desired given that the OR distribution is not necessarily normal.