Homework 3-Outputs to Include

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Question-1

Q1a:

1. Direct effect regression coefficients
   - `(fit1)`: $Y\ X : \beta = 0.05, p = 0.001$
   - $c'(Y\ X) : \beta_c = 0.045(SE = 0.015), p = 0.002$
   - $b(Y\ M) : \beta_b = 0.071(SE = 0.023), p = 0.002$
   - $a(M\ X) : \beta_a = 0.082(SE = 0.037), p = 0.027$
2. Indirect effect coefficient
   - $ab(M * X) : \beta_{ab} = 0.006(SE = 0.003), p = 0.072$
   - $Total : \beta_T = 0.051(SE = 0.015), p = 0.001$
3. Bootstrap confidence limits

Q1a:

Include:

- Residual plot with standardized residuals on the y-axis and predicted probabilities on the x-axis
- Residual plot of casewise values for $\Delta\chi^2$
- Residual plot of Casewise values for ΔD
- Residual plot ofCasewise values for $\Delta\beta$
- 4-Column table of plotted residual residuals:
  - $\Delta\chi^2$
  - $\Delta Deviance$
  - $\Delta\beta$

Report:

1. What each diagnostic test tells you
2. The diagnostic values for any cases that you judge to be possible outliers or influential data points

Question-2

Q2a:

1. Regression coefficients
2. Odds ratios
3. Confidence limits
4. Model fit information
5. A pseudo-R2 measure.

Q2b:

1. Regression coefficients
2. Odds ratios
3. Confidence limits
4. Model fit information
5. A pseudo-R2 measure.

Q2c:

1. Regression coefficients
2. Confidence limits
3. Model fit information
4. A pseudo-R2 measure.
5. One or two sentences about how your and conclusions compare to the logistic model above.

Question-3

Q3a:

Include:

- Residual plot with standardized residuals on the y-axis and predicted probabilities on the x-axis
- Residual plot of casewise values for $\Delta\chi^2$
- Residual plot of Casewise values for ΔD
- Residual plot ofCasewise values for $\Delta\beta$
- 4-Column table of plotted residual residuals:
  - $\Delta\chi^2$
  - $\Delta Deviance$
  - $\Delta\beta$

Report:

1. What each diagnostic test tells you
2. The diagnostic values for any cases that you judge to be possible outliers or influential data points

Q3b:

1. Regression coefficients
2. Confidence limits
3. Model fit information
4. A pseudo-R2 measure.
5. One or two sentences about how your results and conclusions compare to the logistic model above.