

## ologit problems on hypothesis testing and interpretation of results

We will discuss these and/or similar questions in class, so prepare for these beforehand. Hypothesis testing and interpretation of results is very similar in `ologit` and `logit`. If in doubt, see Long and Freese and/or the help for `ologit`.

Begin with the following. Then give whatever other commands you need to answer the rest of the questions. (If you estimate other models though, remember to go back to the full model when answering subsequent questions.)

```
use http://www.nd.edu/~rwilliam/xsoc73994/long2006/ordwarm2.dta, clear
ologit warm yr89 male white age ed prst
```

Now do the following:

- Briefly discuss what the results tell you about the effects of each independent variable on attitudes toward working mothers.
- Test the hypothesis that all coefficients equal zero.
- Do multiple tests of the hypothesis that the effect of `prst` is zero. Your tests should include a Wald test, a likelihood ratio test, and BIC test.
- Test the hypothesis that the effects of `age` and `ed` both equal zero. Do both a Wald test and a likelihood ratio test.
- Test the hypothesis that the effect of `male` equals the effect of `white`.
- Compute the predicted probabilities. Then use the `extremes` command (you will need to install it if you haven't already) to determine the characteristics of those who are most likely and least likely to be predicted to strongly disagree.
- Using commands like `adjust`, `prvalue`, and/or `prrtab`, determine:
  - The predicted probabilities for “average” individuals in 1977 and 1989
  - The predicted probabilities for “average” men and women in 1977 and 1989
  - Briefly interpret the results
- Compute the standardized coefficients. Interpret the x-standardized coefficient for `yr89`, the y-standardized coefficient for `male`, and the fully standardized coefficient for education.
- Run the `mfx2` command (you'll need to install it if you haven't already). What do the results tell you about the effect of `white`?
- Finally, feel free to suggest any other analyses you think would help with the interpretation of the results.