

PAD/PPOL 202(81): Research Methods and Applied Statistics
Data Analysis Assignment IV
Due: April 27th, 2004

[General Instructions: Each question is worth 25% of the total grade for the assignment. For each of the questions, paste your tables, figures, or graphs into a word processing document. All questions use the data analysis IV data set from the web page.]

1. Regress the average public affairs score (**PAav**) on the rescaled public policy ranking (**pubpolR**). Do you reject the null hypothesis of a flat regression line? Why? What is the marginal impact of the rescaled public policy ranking? Again using **PAav** as your dependent variable, regress **PAav** on the rescaled public administration ranking, **PAR**. What is the marginal impact of **PAR**? Judging on the basis of these two bivariate regressions, which ranking appears to have a larger effect? How confident are you in making that conclusion? Why?
2. Now regress the average public affairs score (**PAav**) on the rescaled public policy ranking (**pubpolR**) and on the rescaled public administration ranking (**PAR**). Are the slope coefficients statistically significant at the .01 level? What has happened to the substantive impact of the two variables? How do you interpret the change in impact? What has happened to the fit of the model?
3. Now regress the average public affairs score (**PAav**) on the public policy ranking dummy (**Dpubpol**) and on the public administration ranking dummy (**DPA**). Are the two dummy variables statistically significant at the .01 level? Interpret the substantive meaning of each of the dummy variables—i.e., clearly state what the estimated coefficients mean.
4. Now regress the average public affairs score (**PAav**) on all six subfield dummies (**DPA**, **Dhealth**, **DUrban**, **Dpubpol**, **DBudget**, **Dsocial**). Based on the estimated equation, what would the predicted average public affairs score be for a school that was ranked in health policy, urban policy, and social policy only? Based on the estimated equation, what would the predicted average public affairs score be for a school that was ranked in health policy, urban policy, public administration, and public policy?