

204B Assignment

Your Name _____

Using the path model depicted in Figure 4 (from an October 1992 issue of *American Psychologist*), determine the consequences of deleting one path, namely that from Job Knowledge to Performance Capability (i.e., make $p_{PK} = 0$). In particular, do the following:

- 1) Recompute all path coefficients that would be changed by this deletion. (3 points)
- 2) Reconstruct the new reproduced correlation matrix that would result. (3 points) How does this compare with the original correlation matrix? That is, how crucial was the deleted path to the causal model? (1 point).
- 3) Calculate the path coefficients for the residual effects in the new model. (2 points) How do these compare with the path coefficients for the observed variables? (1 point)