# First Writing Assignment

Write a short paper (1-2 pages, double-spaced, typed) on the question assigned for your section. These are to be turned in at the beginning of class on Thursday, February 22. Present your answers totally in your own words—do not quote material either from the website or the lecture powerpoints. There is no need to quote anyone else—explain everything in your own words. Clarity, precision, and accuracy are all essential for a good paper.

#### Section A01

Whether you know it or not, you would like to discover whether athletic ability is a predictor of moral rectitude (how morally upstanding someone is); that is to say that you want to know whether athletic ability and moral rectitude are correlated. In order to begin your research, as you should know by now, you will have to come up with operational definitions of athletic ability and rectitude. Explain why that is necessary. Then give two operational definitions of each one, stating a strength and weakness of each operational definition. Make sure to discuss the strength and weakness in terms of construct validity (writing the words "construct validity" repeatedly is neither necessary nor sufficient for meeting this requirement. Make me understand that you understand that the operational definition is good insofar as it has good construct validity, and what that means). Keep in mind that both rectitude and athletic ability are going to have to be score variables; you will need operational definitions that allow you to render them numerically.

#### Section A02

Your colleagues have done a study in which they found that athletic ability is a predictor of moral rectitude (how morally upstanding someone is). The Pearson coefficient is -.99. They have achieved statistical significance of p<.001. Twenty-five years from now, your daughter (make appropriate changes if you prefer to write about your son) brings home the star college basketball player, saying she is in love with him and they are going to marry. A man having good moral rectitude is a necessary and sufficient condition for you to want your daughter to marry that man. She has never heard of a Pearson coefficient or a p-value. Explain very carefully to her why you do or do not want her to marry this man, making her understand clearly what the Pearson coefficient is and what the p-value means (you do not need to say anything to her about necessary and sufficient conditions, and you may assume that the operational definitions your colleagues used for athletic ability and moral rectitude have excellent construct validity and that the fact that 25 years has passed is irrelevant). Please do not recapitulate the scenario in your paper; just start explaining things to her based on the scenario.

## Section A03

Let's pretend there is tremendous incentive—over and above your intrinsic natural curiosity—for you to discover the relationship between writing acumen in college and professional success in

later life: how well are these two things correlated? In order to begin your research, you will need operational definitions for these two concepts. First, explain why that is necessary. Then give two operational definitions for each concept, noting a strength and weakness of each one. These should be discussed in terms of construct validity. Keep in mind that both writing acumen and professional success will need to be score variables, so you need operational definitions that allows you to render them numerically.

### Section A04

You are a middle-aged professional, and you've just come up for a promotion at your place of employment. You now have the chance to get a job that pays significantly more, involves fewer hours of work, provides five months of vacation time per year, and permits travel to exotic locales. But it will be a competitive process, since you're contending with several other candidates for this dream job. The only problem is this: the boss is referencing a paper published by your colleagues which shows a correlation between collegiate writing acumen and future success. [They found a Pearson correlation coefficient of 0.71 and a statistical significance of p < 0.3.] Furthermore, your collegiate writing abilities were demonstrably poor: you were a terrible writer who never progressed much beyond a mediocre high school level of writing. So now you're (rightly) concerned that your boss' use of this paper as a way to predict future success may weigh against your ability to secure the job. Make a case for why your boss shouldn't use this scientific paper as a way to rule out job candidates. Make sure to convey your understanding of correlation and significance. You don't need to repeat this scenario; just get straight to the point about why you ought not to be immediately ruled out as a candidate based on this paper.