**Psyc492 Exam 1a Prep**

**The Story**

You've been hired as the data analyst for a series of studies exploring the effectiveness of "Presentation X" (PX) which is designed to improve motivation. For all studies the outcome variable (DV) is the Motivational Index (MI -- higher scores are "better"). Analyze the data from each study and tell the results of the RH: tests and/or the answers to questions that are asked.

**Things to consider:**

* Design and ongoing equivalence 🡪 what (if any) effects are causally interpretable
* Set up “boxes & pointees” for RH:
* Questions of replication require you to
  + Does the DV in the current study match the DV in Study #1?
  + Are there IV conditions in the current study that match IV conditions from Study #1?
  + Do the other external validity elements from the current study match those from Study #1?
  + If all those are a “Yes” the ask do the results of current study replicate results from Study #1?

**Example Study #1**

Office managers (N=200) in the initial study were randomly assigned to receive either PX or a Dale Carnegie Speech (DC) delivered in person by a trained research assistant to groups of 5-10 participants, immediately followed by a motivational assessment using the Optiscan version of the MI .

Tell if the results support the RH: that PX approach would produce better motivation scores than would DC.

**Example Study #2**

Regional managers (n=200) were randomly assigned to receive either an online video version of PX (VPX), an online audio version of PX (APX), or an online video version of a Dale Carnegie Speech (VDC) delivered by a trained research assistant. Each participant was given a 3-day window during which to complete the session. Immediately after completing the video/audio session each participant completed an online motivational assessment using the MI.

Tell if the results support the RH: that VPX would produce better motivation scores than would either the APX or the VDC.

Do these results replicate the results from Study #1?

**Example Study #3**

This study was designed to compare the time-course of PX for different managerial levels. Two hundred Office managers received PX or CD, followed immediately by the MI, which was given again 3, 6, & 12 months later.

The research hypothesis was PX would produce higher initial MI than would DC, but that the effect would decrease over time.

Do the results of this study replicate the original study?

Do the results of this study replicate study #2?