1. Flaws: There is very little discussion on randomization, except to say that there were two experimental groups of 50 each (potential assignment bias). Also, the different slogans were presented by different people and there was no detail on whether there were differences between the presentations (contextual bias).

Corrections: I would propose a more robust randomization scheme for the group of 100, to make sure that group assignment was as random as possible to reduce any inherent group differences. I would also pick one person, not associated with the slogans, to present to both groups – this would likely eliminate the potential contextual bias.

1. Flaws: Clear bias in assignment – each representative was sent to 4 planets each that had identical sentiment toward the Jedi; however, the sentiment of one group of four planets was the exact opposite from the other groups.

Corrections: It would be better to assign the planets to each representative randomly and also ensure that each representative gets two planets of folks with positive sentiment and two planets of folks with negative sentiment. This would eliminate the bias from assignment and result in more valid results about which representative had a better success rate.

1. Flaws: Here there is a lot of potential for selection bias, since the HR workers are concentrated in three out of the five countries, while the IT workers are equally distributed between all five countries. So, comparing satisfaction between IT and HR employees, without any adjustment for country effect, would be incorrect.

Corrections: It may make sense to resample the IT workers, such that they are limited to the countries that the HR employees are concentrated in. This would eliminate any potential country-specific effects.

1. Flaws: Potential for selection bias – people who choose to opt in to the data tracking may already be more interested in increasing their fitness, so the positive results would be misleading.

Corrections: I would suggest tracking the fitness levels of everyone who installs the app – not just the people who chose to opt in. This would make for a more representative sample.

1. Flaws: There is likely bias from assignment of students to different tests. Since the tests were stacked on top of each other it’s possible that they were not randomly distributed. For example, if a group of friends who wanted to sit together came at the same time and all got test B, they may still end up cheating and scoring better.

Correction: Tests should be handed out in a mixed order to students to ensure that they do not cluster in any specific location.