The original proposed experiment.

A company with work sites in five different countries has sent you data on employee satisfaction rates for workers in Human Resources and workers in Information Technology. Most HR workers are concentrated in three of the countries, while IT workers are equally distributed across worksites. The company requests a report on satisfaction for each job type. You calculate average job satisfaction for HR and for IT and present the report.

Research proposal.

Define the problem:

A company wants to elucidate employee satisfaction rates for their HR and IT employees, who are in five different countries. The company requests a report on satisfaction for each job type; however, ‘satisfaction’ has not been defined in detail.

Hypothesis:

There is no difference in employee satisfaction between IT and HR employees.

Method of testing hypothesis:

This hypothesis can be measured by testing whether there is a difference in reported satisfaction between these two groups of employees. To execute this correctly, a random sample of employees needs to be selected, such that the numbers of IT and HR employees are represented equally from each country. There is an issue with the fact that the HR workers are concentrated in three countries, while IT employees are spread out across all five countries. Therefore, the sample may need to have the weights adjusted to account for the likelihood that HR workers may not be as represented in two out of the five countries.

Furthermore, satisfaction may be impacted by several different factors – like someone’s boss or the duration of time they may have been employed. Therefore, after ensuring that the sample is truly representative, it may be worthwhile to split the employees into two groups. Group A would be comprised of employees with under one year of employment and group B of employees with over one year of employment and levels of satisfaction between two groups can be measured and compared.

Measures of satisfaction need to be clearly defined. Specifically, a questionnaire, consisting of the same questions, may be administered to all the participants. Questions about general satisfaction, satisfaction with their manager, satisfaction with their department, and satisfaction with the company can be measured with specific questions that would leverage a scale of 1 to 10, with 1 equaling dissatisfaction and 10 equaling total satisfaction.