

Supplemental Material

CBE—Life Sciences Education

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Appendix

This is a sample CCTST item from the Insight Assessment website (Insight Assessment, 2016b).

“A scientific study compared two matched groups of college women. The women in both groups were presented with information about the benefits of a healthy diet and regular exercise. The women in one group were paired up with one another and encouraged to work as two-person teams to help each other stick with the recommended healthy regimen of smart eating and regular vigorous exercise. The women in the other group were encouraged to use the same recommended regimen, but they were also advised to work at it individually, rather than with a partner or teammate. After 50 days the physical health and the well-being of all the women in both groups were evaluated. On average the women in the first group (with teammates) showed a 26 point improvement in measures of cardiopulmonary capacity, body strength, body fat reduction, and sense of well-being. On average the women in the other group (encouraged to work as individuals) showed a 17 point improvement on those same measures. Using statistical analyses the researchers determined that the probability that a difference of this size had occurred by chance was less than one in 1000.

Consider the claim, "Working with a teammate or partners on a health regimen is better than working individually." Which of the following additional pieces of information would not weaken that claim?

- A) Most of the women in the group that was encouraged to work individually actually worked with friends and partners who were not part of the study.
- B) Most of the pairings and teams created in the first group (with teammates) fell apart after a few days and the women in that group actually worked individually.
- C) There was something about the women in the first group (with teammates) that the researchers overlooked, thus invalidating the intended matching of the two groups.
- D) Men are more likely to work alone, so any recommendation that men find a teammate or partner to support them in sticking with the regimen will be ignored.
- E) The study was undertaken when there were no exams or major projects due, thus the results about working with a teammate do not apply to more stressful times of the year.”