

LEARNING CHECK

Now that we've seen the independent samples t test in action, let's review our conceptual understanding of this tool. In addition to the dependent variable of pleasure spending that we just discussed in great detail, Kasser and Sheldon (2000) also had a dependent variable called "financial worth." That is, participants provided a dollar estimate of how much they would be worth financially 15 years into the future. Here are the statistical results for this dependent variable:

An independent samples t test suggested that participants primed to think about their deaths estimated they would be worth more money ($M = 0.16$, $SD = 0.94$) than participants primed to think about music ($M = -0.23$, $SD = 0.38$), $t(44.5) = 1.99$, $p = .05$, $d = 0.54$, 95% CI [0.00, 0.77].

Now, answer the following questions. Then check your answers.

1. What is the mean difference between the two groups being examined?
2. What is the t test statistic?
3. What is the standard error of the difference between the means? (*HINT: It is not reported above.*)
4. How many degrees of freedom do the researchers have for this analysis?
5. Was the assumption of homogeneity of variance violated or not violated? How do you know?
6. By using Appendix B, approximate the critical value that was used to see whether we reject or do not reject the null hypothesis.
7. What is the probability that the difference between the two groups' means was due to random variation?
8. Did the researchers reject or not reject the null hypothesis?