

Answers

Article: Effort and Reward in College

Topics: Practical Significance; Statistical Significance

Practice Items:

1. How many tests on correlations were conducted by the authors?

2. Why do you think the authors noted correlations as low as .29 were significant?

Tested at $\alpha = .05$, correlation was found statistically significant.

3. To keep the experimentwise alpha at .05, what alpha should each p value be compared to?

$.05/28 = .002$

4. Keeping the experimentwise alpha at .05, how many of the correlation coefficients are statistically significant?

12. Those where $p < .001$

5. For each test you deemed statistically significant, obtain a measure of practical significance and explain what that tells you.

Correlation	Coefficient of Determination
.51	.26
.50	.25
.83	.69
.81	.66
.37	.14
.70	.49
.86	.74
.32	.10
.72	.52
.52	.27
.65	.42
.45	.20

Measures of practical significance convey what percent of the variability in the DV can be attributed to the IV.