

Figure 12.5

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Attitude Toward Math	20	3.7000	2.55672	.57170

One-Sample Test

Test Value = 4.0

	t	df	Significance		Mean Difference	95% Confidence Interval of the Difference	
			One-Sided p	Two-Sided p		Lower	Upper
Attitude Toward Math	-.525	19	.303	.606	-.30000	-1.4966	.8966

One-Sample Effect Sizes

	Standardizer ^a	Point Estimate	95% Confidence Interval	
			Lower	Upper
Attitude Toward Math	Cohen's d	2.55672	-.117	.324
	Hedges' correction	2.66350	-.113	.311

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation.

Hedges' correction uses the sample standard deviation, plus a correction factor.

Figure 12.6

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Attitude Toward Math	20	3.7000	2.55672	.57170

One-Sample Test

Test Value = 2.50

	t	df	Significance		Mean Difference	95% Confidence Interval of the Difference	
			One-Sided p	Two-Sided p		Lower	Upper
Attitude Toward Math							

Attitude Toward Math	2.099	19	.025	.049	1.20000	.0034	2.3966
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One-Sample Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Attitude Toward Math	Cohen's d	2.55672	.469	.001	.926
	Hedges' correction	2.66350	.451	.001	.889

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation.

Hedges' correction uses the sample standard deviation, plus a correction factor.

Exercise 12.1

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Washington Elementary	12	32.7500	4.02549	1.16206

One-Sample Test

Test Value = 32.00

	t	df	Significance		Mean Difference	95% Confidence Interval of the Difference	
			One-Sided p	Two-Sided p		Lower	Upper
Washington Elementary	.645	11	.266	.532	.75000	-1.8077	3.3077

One-Sample Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Washington Elementary	Cohen's d	4.02549	.186	-.389	.753
	Hedges' correction	4.32867	.173	-.362	.700

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation.

Hedges' correction uses the sample standard deviation, plus a correction factor.

a. The mean for the sample at Washington Elementary School is 32.75.

b. The value of t is 0.65.

c. The probability is 0.53.

d. The difference between the means is not statistically significant.

e. For the Washington Elementary School sample, the value of the mean is 32.75. The mean for the school district is 32.00. The difference between the school's mean and district's mean is not statistically significant at the 0.05 level ($t = 0.65$, $df = 11$).