Figure 10.7 Annotated SPSS Output for an Independent *t* Test

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
MemoryScore	verbal descriptions	6	20.1667	1.32916	.54263
	no verbal descriptions	6	18.6667	1.50555	.61464

N: Sample sizes

Mean: Sample means (*M*)

Std. Deviation: Standard deviations (*SD*)

Std. Error Mean: Standard errors of the means; computed as $\frac{SD}{\sqrt{n}}$

Sig. (2-tailed): Two-tailed *p* value; for a one-tailed test, divide the *p* value by 2; reject H_0 if $p < \alpha$.

95% Confidence Interval: We are 95% confident that the actual difference between the sample means is between the lower and upper values.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MemoryScore	Equal variances assumed	.185	.676	1.830	10	.097	1.50000	.81989	-.32683	3.32683
	Equal variances not assumed			1.830	9.849	.098	1.50000	.81989	-.33064	3.33064

F: Used to determine if the homogeneity of variance assumption is met

Sig. Use the "Equal variances assumed line" if Sig. > .05

Use the "Equal variances not assumed" line if Sig. ≤ .05

t: Obtained *t* value

$$t = \frac{M_1 - M_2}{SEM_i}$$

df: Degrees of freedom for equal variances $(n_1 - 1) + (n_2 - 1)$

Mean Difference: The difference between the means $(M_1 - M_2)$; the numerator of the *t*

Std. Error Difference: Standard error of the mean difference (SEM_i); the denominator of the *t*