

ONE SAMPLE T-TEST

All that you need to do to carry out a one sample t-test is specify the population mean against which you want to run your test (here, 0) and the variable that you want to test:

```
t-test
  /testval = 0
  /vars = ach100 .
```

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Achievement, 100 cases	106	.37929	8.7445E-02	8.493E-03

The first part of the output gives you basic descriptive information, including the sample mean that will be compared to the population that you specified.

This population value (test value) appears at the top of the second part of the output as a reminder of your specification. This table includes the t value, degrees of freedom, and p value (labeled "Sig. (2-tailed)"). The example shown below is an incredibly large t value, because the average accuracy score was compared to an unrealistic population parameter (0).

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Achievement, 100 cases	44.657	105	.000	.37929	.36245	.39613

Because, as noted above, the population parameter was unrealistic, a second one sample t-test was conducted, this time using .4 as a population value for comparison.

```
t-test
  /testval = .4
  /vars = ach100 .
```

As you can see below, the results of this test turned out differently. The average accuracy of participants in the sample was reliably less than the population value of .4.

T-Test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Achievement, 100 cases	106	.37929	8.7445E-02	8.493E-03

One-Sample Test

	Test Value = .4					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Achievement, 100 cases	-2.439	105	.016	-2.071E-02	-3.76E-02	-3.87E-03