

Table 10.1Symbolic and Verbal Representations of Two-Tailed Research and Null Hypotheses for an Independent t Test

	<i>Symbolic</i>	<i>Verbal</i>	<i>Mean Difference Created by</i>
Research hypothesis (H_1)	$H_1: \mu_1 \neq \mu_2$ OR $H_1: \mu_1 - \mu_2 \neq 0$	If a population were given the verbal descriptions, their mean memory score <i>would be significantly different</i> from a population not given the verbal descriptions.	The verbal label affecting memory scores
Null hypothesis (H_0)	$H_0: \mu_1 = \mu_2$ OR $H_0: \mu_1 - \mu_2 = 0$	If a population were given the verbal descriptions, their mean memory score <i>would not be significantly different</i> from a population not given the verbal descriptions.	Sampling error