

Between Groups Differences Results

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I have no known conflict of interest to disclose.

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Between Groups Differences Results

An independent-samples *t*-test was accomplished to test the null hypothesis of the following:

RQ: To what extent, if any, is there a difference of Neuroticism between gender groups?

H0: There is not a significant difference of Neuroticism between gender groups.

H1: There is a significant difference of Neuroticism between gender groups.

Data screening and tests of assumptions were accomplished for the variables gender, a dichotomous (categorical) variable with two groups of male and female, and IPIP-Neuroticism, an interval level of measurement variable, from the EDCO 745 course dataset in preparation to conduct an independent-samples *t*-test, the results of which can be seen in the Module 3 Data Screening Between Group Differences assignment¹. The descriptive statistics of Neuroticism for the two groups is shown in Table 1.

Table 1

Descriptive statistics for Neuroticism between gender groups

	Gender	<i>n</i>	Mean	Std Deviation	Std Error Mean
IPIP- Neuroticism	Male	704	10.8878	2.82796	.10658
	Female	596	11.2584	3.29915	.13514

N = 1,300

An independent-samples *t*-test (equal variances not assumed) demonstrated a statistically significant difference of Neuroticism between males ($M = 10.89$, $SD = 2.83$), and females ($M = 11.26$, $SD = 3.30$) with results of $t(1179.256) = -2.153$, $p = .031$ (see Table 2). The results reject the null hypothesis, which states there is not a significant difference of Neuroticism between genders.

¹ Only insert the last phrase if you completed a full writeup of the data screening and tests of assumptions in the assignment. Otherwise, the full writeup must be included here for all data screening and tests of assumptions.

Table 2*Differences of Neuroticism Between Genders*

	Levene's Test		<i>t</i> -test for Equality of Means						
	<i>F</i>	Sig.	<i>t</i>	df	Sig.	Mean difference	Std Error Difference	Lower	Upper
Equal variances assumed	11.315	.001	-2.181	1128	.029	-.37061	.16994	-.70399	-.03722
Equal variances not assumed			-2.153	1179.256	.031	-.37061	.17211	-.70828	-.03293

Note: Independent variable is gender, dependent variable is Neuroticism