

Data Screening of Categorical and Continuous Variables

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I have no known conflict of interest to disclose.

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Data screening was accomplished for the variables gender, race, DASS-Depression, and IPIP-Neuroticism from the EDCO 745 course dataset. Frequency tables were created for gender, race, DASS-Depression, and IPIP-Neuroticism (see Tables 1-4). Results of the frequency tables indicated slightly more male ($n = 704$) than female ($n = 596$) participants (Table 1). Visual inspection of histograms indicated a normal distribution for IPIP-Neuroticism (see Figure 1); however, DASS-Depression was not normally distributed, with a large number of participants having low scores, indicating few symptoms of depression (see Figure 2). Box plots were developed for the groups of gender and race to demonstrate the distribution of both DASS-Depression and IPIP-Neuroticism (See Figures 3-6). There were six outliers of IPIP-Neuroticism and no outliers of DASS-Depression between the gender groups. There were multiple outliers within several race groups, indicating the distribution of depression may not be normal within these groups. Additional screening included bar charts to allow for visual comparison of groups for gender (see Figure 7) and race (see Figure 8), and scatter plots to examine for a relationship between DASS-Depression and IPIP-Neuroticism, which visually indicated a positive correlation between the two (see Figure 9).

Table 1

Frequency for Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	704	53.9	54.0	54.0
	Female	596	45.6	45.7	99.7
	Other	4	.3	.3	100.0
	Total	1304	99.8	100.0	
Missing		2	.2		
Total		1306	100.0		

Table 2*Frequency for Race*

	Frequency	Percent	Valid Percent	Cumulative Percent
White	960	73.5	73.5	73.5
African American	213	16.3	16.3	89.8
American Indian or Alaska Native	14	1.1	1.1	90.9
Asian	65	5.0	5.0	95.9
Native Hawaiian or other Pacific Islander	1	.1	.1	95.9
Hispanic, Latino, or of Spanish Origin	39	3.0	3.0	98.9
Other	14	1.1	1.1	100.0
Total	1306	100.0	100.0	

Table 3*Frequency for DASS-Depression*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	202	15.5	15.9	15.9
	2.00	75	5.7	5.9	21.8
	4.00	55	4.2	4.3	26.1
	6.00	46	3.5	3.6	29.7
	8.00	46	3.5	3.6	33.3
	10.00	33	2.5	2.6	35.9
	12.00	33	2.5	2.6	38.5
	14.00	55	4.2	4.3	42.8
	16.00	39	3.0	3.1	45.9
	18.00	47	3.6	3.7	49.6
	20.00	63	4.8	5.0	54.6
	22.00	87	6.7	6.8	61.4
	24.00	87	6.7	6.8	68.2
	26.00	74	5.7	5.8	74.1
	28.00	92	7.0	7.2	81.3
	30.00	54	4.1	4.2	85.5

	32.00	66	5.1	5.2	90.7
	34.00	44	3.4	3.5	94.2
	36.00	29	2.2	2.3	96.5
	38.00	21	1.6	1.7	98.1
	40.00	10	.8	.8	98.9
	42.00	14	1.1	1.1	100.0
	Total	1272	97.4	100.0	
Missing	System	34	2.6		
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Total		1306	100.0		

Table 4*Frequency for IPIP-Neuroticism*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	.1	.1	.1
	4.00	46	3.5	3.5	3.6
	5.00	34	2.6	2.6	6.2
	6.00	25	1.9	1.9	8.1
	7.00	53	4.1	4.1	12.2
	8.00	75	5.7	5.7	17.9
	9.00	110	8.4	8.4	26.3
	10.00	156	11.9	11.9	38.3
	11.00	186	14.2	14.2	52.5
	12.00	232	17.8	17.8	70.3
	13.00	166	12.7	12.7	83.0
	14.00	92	7.0	7.0	90.0
	15.00	48	3.7	3.7	93.7
	16.00	29	2.2	2.2	95.9
	17.00	22	1.7	1.7	97.6
	18.00	14	1.1	1.1	98.7
	19.00	9	.7	.7	99.4
	20.00	8	.6	.6	100.0
<hr/>					
Total		1306	100.0	100.0	

Figure 1

Histogram for IPIP-Neuroticism

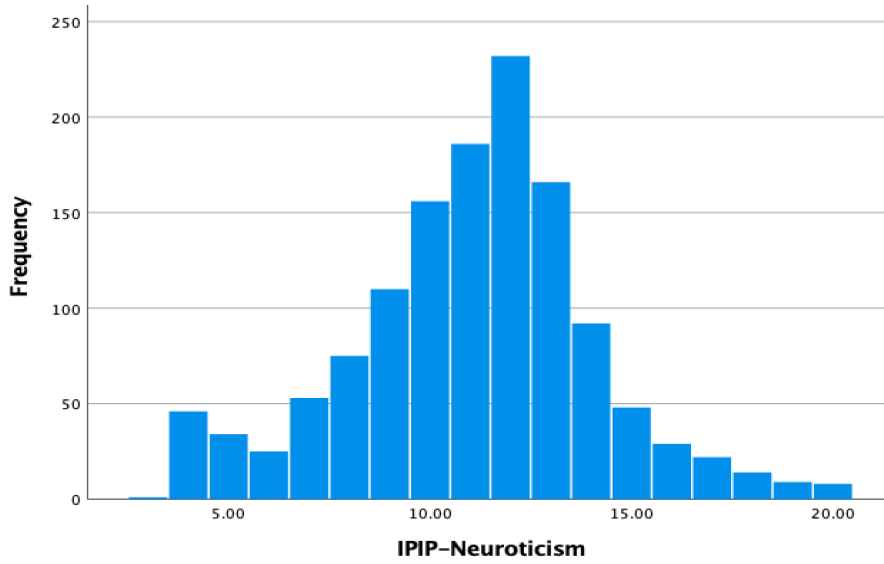


Figure 2

Histogram for DASS-Depression

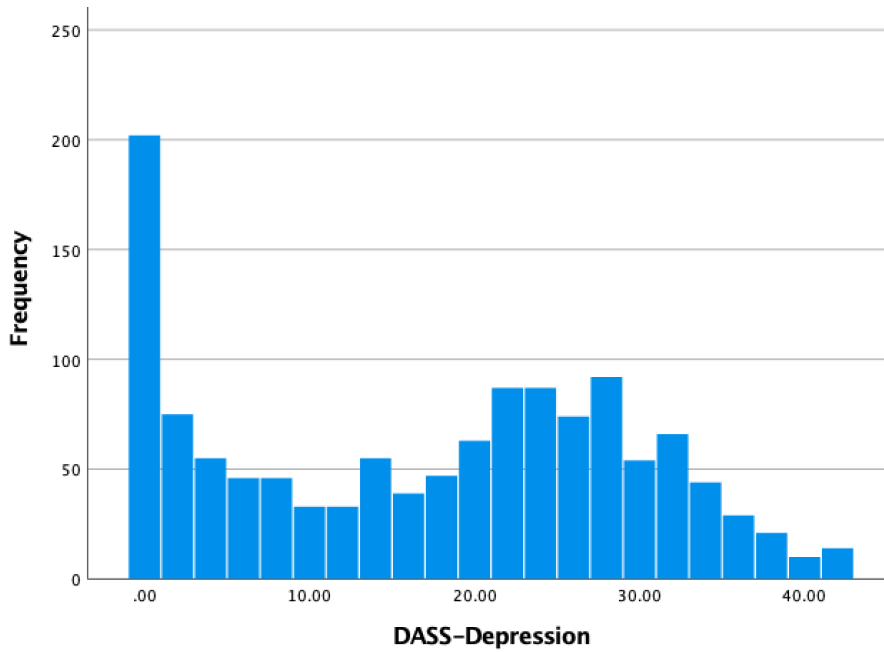


Figure 3

Box plots of IPIP-Neuroticism for Gender Groups

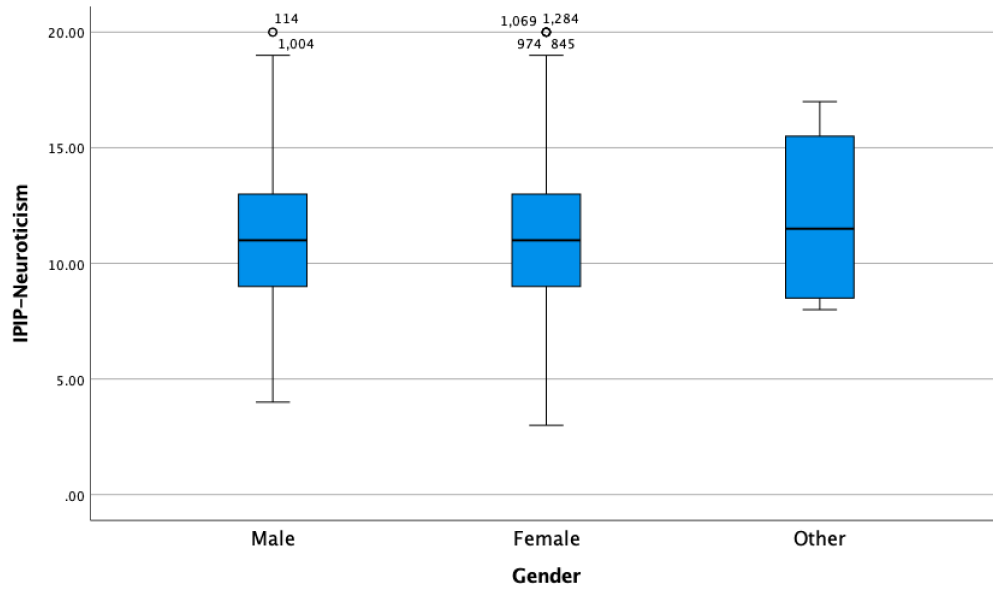


Figure 4

Box plots of DASS-Depression for Gender Groups

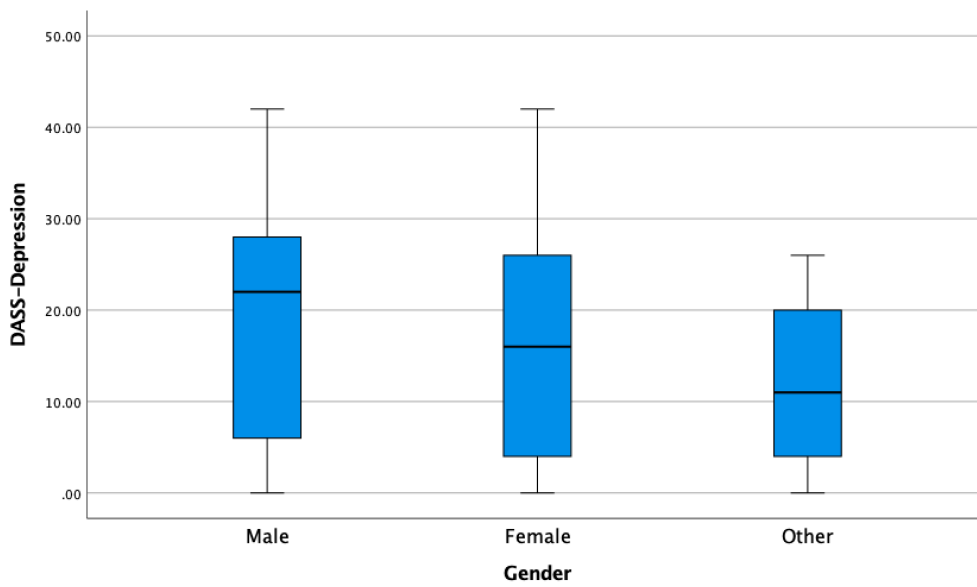


Figure 5

Box Plot of IPIP-Neuroticism for Race Groups

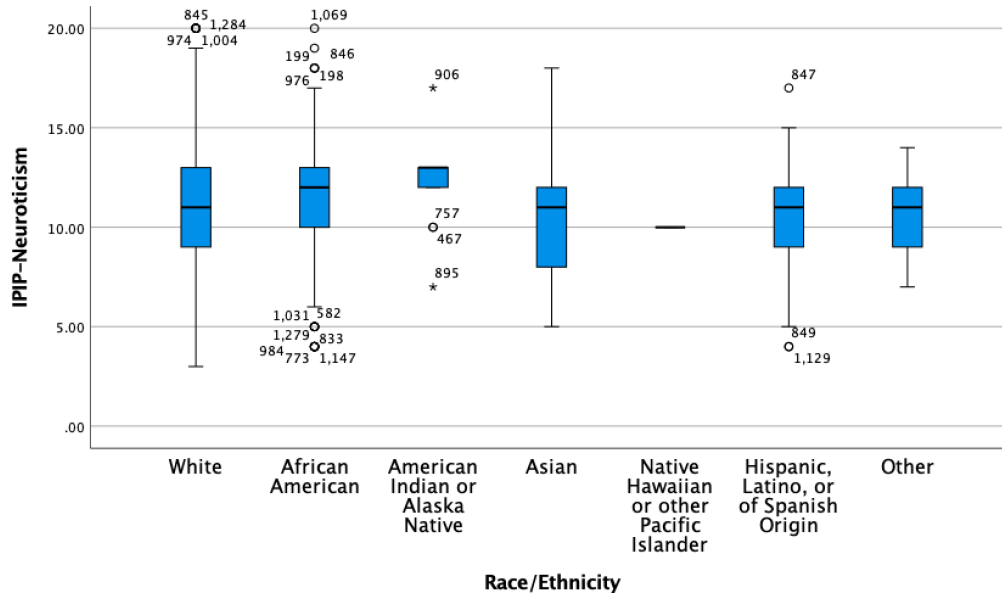


Figure 6

Box Plot of DASS-Depression for Race Groups

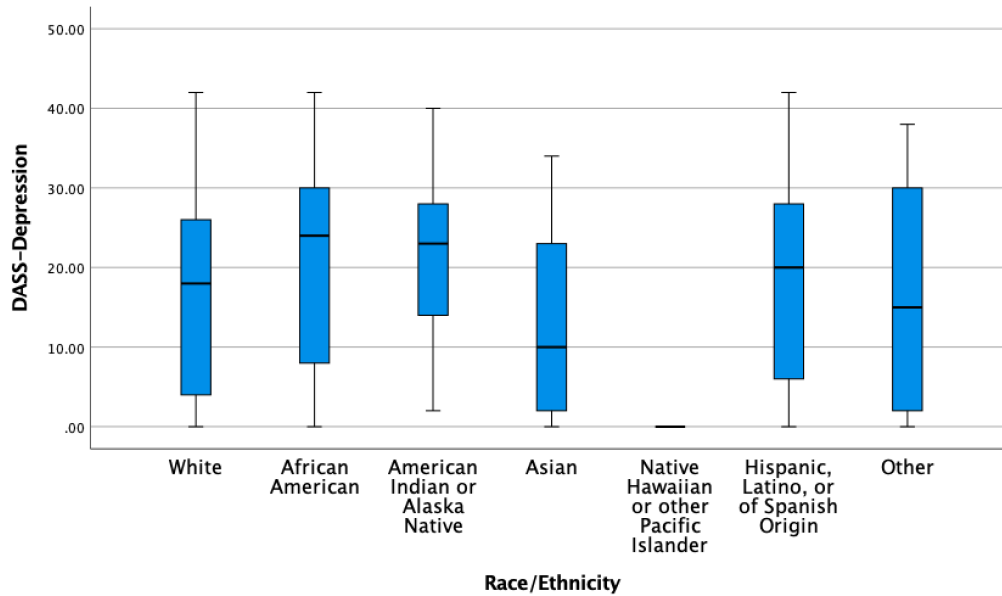


Figure 7

Bar Chart of Gender Frequency

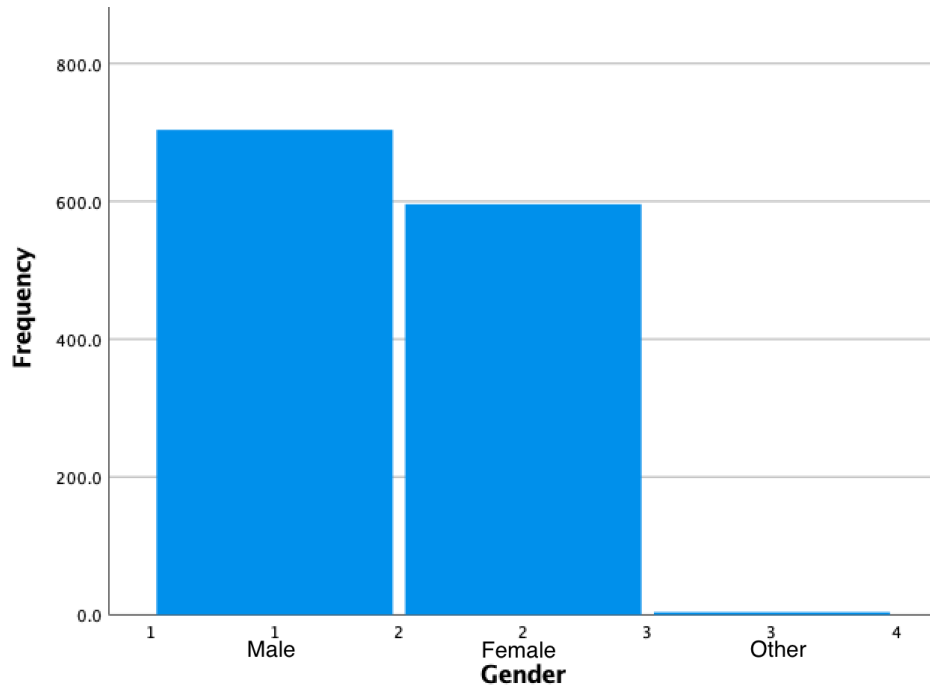


Figure 8

Bar Chart of Race Frequency

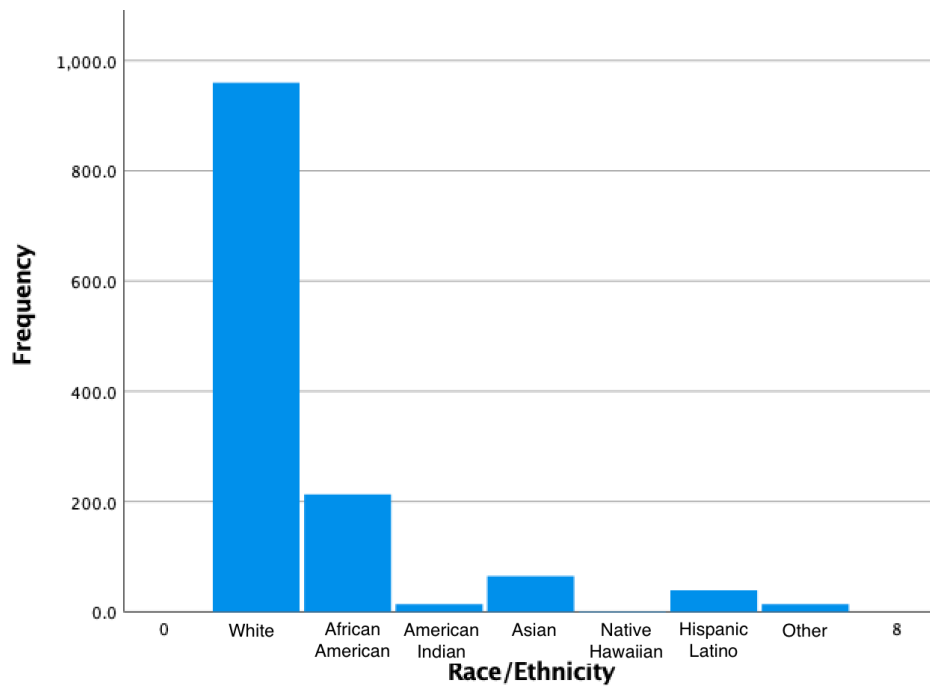


Figure 9

Scatter Plot of IPIP-Neuroticism and DASS-Depression

