Practice with Univariate Statistics -- Answers

We collected three variables from each participant: 1) their score on a psychological wellness questionnaire, 2) whether they had daily or weekly therapy, and 3) and whether they received treatment at the Heath Center, the Psychology Department Clinic or from a private therapist.

Here are the frequency outputs and the univariate statistics …

WELLNESS

		Frequency	Percent	Cumulative Percent
Valid	23.00	1	3.1	3.3
	24.00	2	6.3	10.0
	26.00	1	3.1	13.3
	30.00	1	3.1	16.7
	32.00	1	3.1	20.0
	33.00	2	6.3	26.7
	34.00	1	3.1	30.0
	37.00	1	3.1	33.3
	38.00	4	12.5	46.7
	39.00	2	6.3	53.3
	40.00	2	6.3	60.0
	41.00	3	9.4	70.0
	42.00	1	3.1	73.3
	47.00	1	3.1	76.7
	49.00	1	3.1	80.0
	50.00	1	3.1	83.3
	52.00	1	3.1	86.7
	56.00	1	3.1	90.0
	57.00	2	6.3	96.7
	58.00	1	3.1	100.0
	Total	30	93.8	
Missing	System	2	6.3	
Total		32	100	

What kind of variable is this? **Quantitative (continuous)**

Will the mean be interpretable? Why? **Yes -- quant variable**

What does the mean tell you? **Average wellness score is 39.90**

What does the standard deviation tell you?

    about 68% of scores are between   29.97 and 48.83

    about 96% of scores are between   20.04 and 59.76

THERAPY

		Frequency	Percent	Cumulative Percent
Valid	weekly	25	83.3	83.3
	daily	5	16.7	100.0
	Total	30	100.0	

What kind of variable is this? **Binary**

Will the mean be interpretable? **Yes -- the decimal part of the mean will tell the proportion of cases in the higher coded group**

What does the mean tell you? **16.67% receive daily therapy**

TREAT

		Frequency	Percent	Cumulative Percent
Valid	health center	13	40.6	43.3
	Psychology Department Clinic	9	28.1	73.3
	private therapist	8	25.0	100.0
	Total	30	93.8	
Missing	System	2	6.3	
Total		32	100.0	

What kind of variable is this? **Multiple category qualitative variable**

Will the mean be interpretable? **No**

What does the mean tell you? **Nada!**

Statistics

		WELLNESS	THERAPY	TREAT
N	Valid	30	30	30
Mean		39.9000	1.1667	1.8333
Std. Deviation		9.93201	.37905	.83391