Which variables are correlated with BMI?

Pearson Correlation

Correlation between uncontrolled eating and BMI

r (309) = -.02, *p* = .730 not significant

BMI vs. Uncontrolled eating score

Correlation between emotional eating and BMI

r (310) = .29, *p* <.001 significant

BMI vs. Emotional eating score

Correlation between cognitive restraint and BMI

r (308) = .20, *p* <.001 significant

BMI vs. Cognitive restraint score
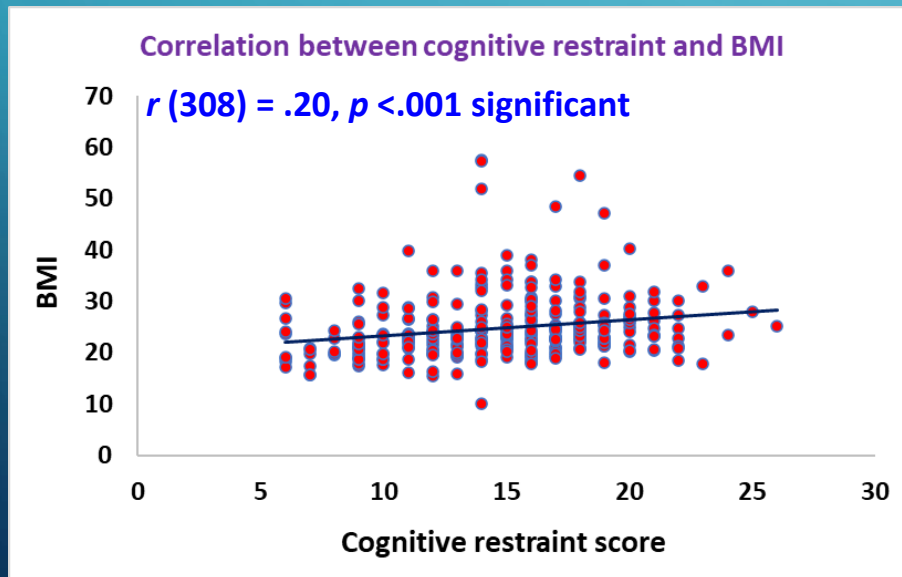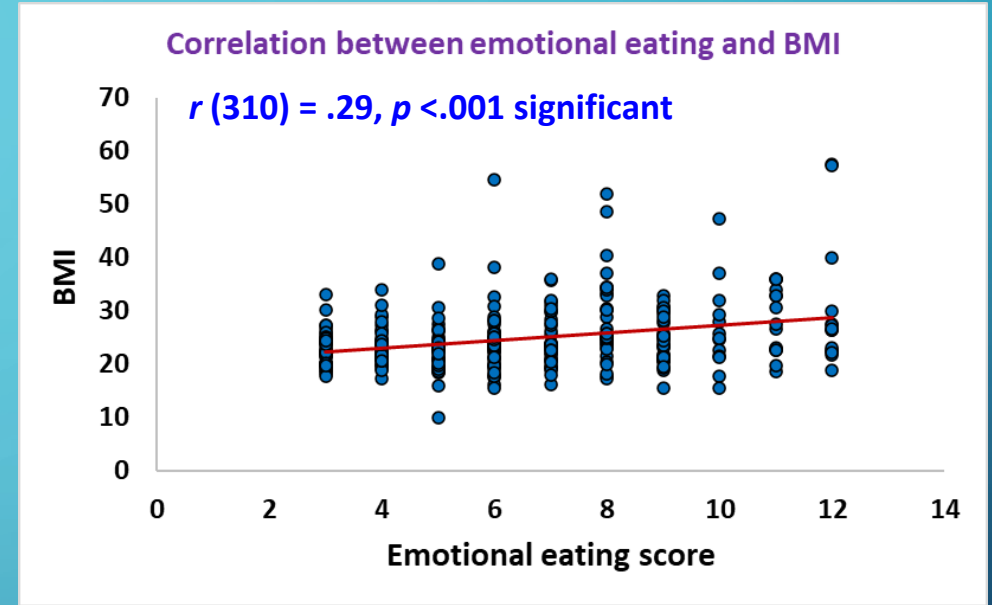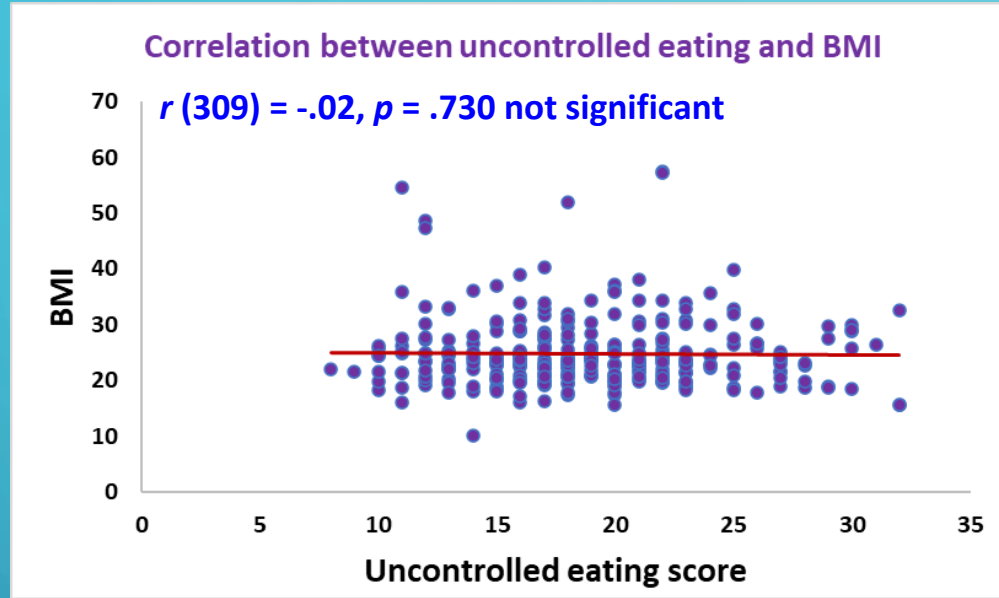
Cognitive restraint and emotional eating are probably related to BMI. The greater one's cognitive restraint, and the more they report emotional eating, the greater their BMI.

Uncontrolled eating is probably not related to BMI

Correlations

		BMI	cog_res	uncon_eat	emot_eat
BMI	Pearson Correlation	1	.201**	-.020	.292**
	Sig. (2-tailed)		<.001	.730	<.001
	N	313	310	311	312
cog_res	Pearson Correlation	.201**	1	-.204**	.054
	Sig. (2-tailed)	<.001		<.001	.346
	N	310	313	311	312
uncon_eat	Pearson Correlation	-.020	-.204**	1	.460**
	Sig. (2-tailed)	.730	<.001		<.001
	N	311	311	314	313
emot_eat	Pearson Correlation	.292**	.054	.460**	1
	Sig. (2-tailed)	<.001	.346	<.001	
	N	312	312	313	315

**. Correlation is significant at the 0.01 level (2-tailed).

Which variables predict BMI?

Multiple Linear Regression

Predicted variable: BMI (ratio)
Predictors: cognitive restraint (ratio), uncontrolled eating (ratio), emotional eating (ratio)

$F(3, 303) = 16.63$, $p < .001$ The linear combination of variables significantly predicted BMI with an adjusted $r^2 = .13$

Predictor	Standardized β coefficient	t	p
Cognitive restraint	.16	2.84	.005
Uncontrolled eating	-.16	-2.49	.013
Emotional eating	.36	5.90	<.001

Showing more cognitive restraint, more emotional eating, and less uncontrolled eating predicted higher BMIs. Emotional eating was the strongest predictor of BMI.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.376[a]	.141	.133	5.79807

a. Predictors: (Constant), emot_eat, cog_res, uncon_eat

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1676.841	3	558.947	16.627	<.001[b]
	Residual	10186.145	303	33.618		
	Total	11862.986	306			

a. Dependent Variable: BMI

b. Predictors: (Constant), emot_eat, cog_res, uncon_eat

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	19.225	1.983		9.693	<.001
	cog_res	.240	.085	.156	2.837	.005
	uncon_eat	-.194	.078	-.155	-2.491	.013
	emot_eat	.864	.146	.359	5.901	<.001

a. Dependent Variable: BMI