Answers to additional health exercises

Chapter 12 Partial Correlation

Q1.
Check the strength of the correlation between scores on the Sleepiness and Associated Sensations Scale (*totSAS*) and the impact of sleep problems on overall wellbeing (*impact6*) while controlling for *age*. Compare the zero order correlation (Pearson Correlation) and the partial correlation coefficient. Does controlling for *age* make a difference?

Descriptive Statistics

	Mean	Std. Deviation	N
sleepy & assoc sensations scale	26.04	10.520	251
oveall well-being	5.66	2.338	122
age	43.87	12.684	248

Correlations

Control Variables			sleepy & assoc sensations scale	oveall well-being	age
-none- [a]	sleepy & assoc sensations scale	Correlation	1.000	.466	-.141
		Significance (2-tailed)	.	.000	.033
		df	0	114	228
	oveall well-being	Correlation	.466	1.000	-.103
		Significance (2-tailed)	.000	.	.283
		df	114	0	109
	age	Correlation	-.141	-.103	1.000
		Significance (2-tailed)	.033	.283	.
		df	228	109	0
age	sleepy & assoc sensations scale	Correlation	1.000	.459	
		Significance (2-tailed)	.	.000	
		df	0	108	
	oveall well-being	Correlation	.459	1.000	
		Significance (2-tailed)	.000	.	
		df	108	0	
	age	Correlation			
		Significance (2-tailed)			
		df			

a. Cells contain zero-order (Pearson) correlations.

The partial correlation coefficient between total scores on the Sleepiness and Associated Sensations Scale and the overall impact on wellbeing, while controlling for age is .459. This is only slightly lower than the zero order correlation coefficient of r=.466, suggesting that age does not impact on this relationship.