

## Answers to additional health exercises

### Chapter 9 Reliability

Check the reliability of the Sleepiness and Associated Sensations Scale which is made up of items *fatigue*, *lethargy*, *tired*, *sleepy*, *energy*. Please note: none of the items of this scale need to be reversed.

#### Warnings

The covariance matrix is calculated and used in the analysis.

#### Case Processing Summary

	N	%
Cases Valid	251	92.6
Excluded <sup>a</sup>	20	7.4
Total	271	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

	Cronbach's Alpha Based on Standardized Items	N of Items
Cronbach's Alpha	.941	5

#### Item Statistics

	Mean	Std. Deviation	N
fatigue fatigued	4.88	2.394	251
lethargy lethargic	4.74	2.365	251
tired tired	5.29	2.351	251
sleepy sleepy	5.60	2.225	251
energy lack energy	5.54	2.353	251

#### Inter-Item Correlation Matrix

	fatigue fatigued	lethargy lethargic	tired tired	sleepy sleepy	energy lack energy
fatigue fatigued	1.000	.798	.836	.770	.714
lethargy lethargic	.798	1.000	.766	.703	.736
tired tired	.836	.766	1.000	.828	.765
sleepy sleepy	.770	.703	.828	1.000	.707
energy lack energy	.714	.736	.765	.707	1.000

The covariance matrix is calculated and used in the analysis.

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
fatigue fatigued	21.16	70.241	.865	.769	.923
lethargy lethargic	21.31	71.926	.826	.701	.930
tired tired	20.76	70.089	.891	.807	.918
sleepy sleepy	20.44	74.048	.827	.713	.930
energy lack energy	20.51	73.035	.798	.647	.935

**Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
26.04	110.666	10.520	5

*The set of items shows good internal consistency with this sample recording a Cronbach alpha value of .94.*