

Weekly assignment

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Week 6 assignment

For this assignment you will use a modified version of the alexithymia-dataset from the PCovR-package. The data contains the scores of 122 psychology students on the 20-item Toronto Alexithymia Scale (TAS-20; Bagby, Parker, & Taylor, 1994), which measures the inability to recognize and verbalize emotions and the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). These data can be used to examine the extent to which the degree of depressive symptomology (measured with the total CES-D score) can be predicted by the separate items of the TAS-20. The dataset also contains basic demographic information (age and sex) and an ID variable.

- a) Run a principal component analysis on the TAS-20 items: decide how many components to extract, note how much variance the components explain and rotate the components if needed.

What you should hand in:

A maximum 350 word summary structured as introduction, method, result and conclusion, where you summarise and interpret your findings. You may use figures, if you wish, but your entire solution should fit on 1 A4 page!

References

- Bagby, R. M., Parker, J. D., & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale: Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research* , 38 (1), 23-32.
- Radloff, R. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied psychological measurement* , 1 (3), 385-401.

Explanation of the variables in the dataset

ID	Identification number of participant
Sex	0 = male, 1 = female
Age	Age in years
confused	I am often confused about what emotion I am feeling
right words	It is difficult for me to find the right words for my feelings
sensations	I have physical sensations that even doctors don't understand
describe	I am able to describe my feelings easily
analyze problems	I prefer to analyze problems rather than just describe them
upset	When I am upset, I don't know if I am sad, frightened, or angry
puzzled	I am often puzzled by sensations in my body
let happen	I prefer to just let things happen rather than to understand why they turned out that way
identify	I have feelings that I can't quite identify
essential	Being in touch with emotions is essential
feel about people	I find it hard to describe how I feel about people
describe more	People tell me to describe my feelings more
going on	I don't know what's going on inside me
why angry	I often don't know why I am angry
daily activities	I prefer talking to people about their daily activities rather than their feelings
entertainment	I prefer to watch "light" entertainment shows rather than psychological dramas
reveal feelings	It is difficult for me to reveal my innermost feelings, even to close friends
close	I can feel close to someone, even in moments of silence
useful	I find examination of my feelings useful in solving personal problems
hidden meanings	Looking for hidden meanings in movies or plays distracts from their enjoyment
CESD	Depression score measured with CESD