

drink it through grimacing faces. The straw was a blessing because it filtered out the lumps formed in the gently curdling milk. Politicians take note: if you want children to enjoy school, don't force-feed them warm, lumpy milk.

But despite gagging on warm milk every morning, primary school was a very happy time for me. With the help of Jonathan Land, my confidence grew. With this new confidence I began to feel comfortable not just at school but in the world more generally. It was time to explore.

4.16 Key terms that I've discovered

Currency variable

Data editor

Data view

Date variable

Long format data

Numeric variable

Smartreader

String variable

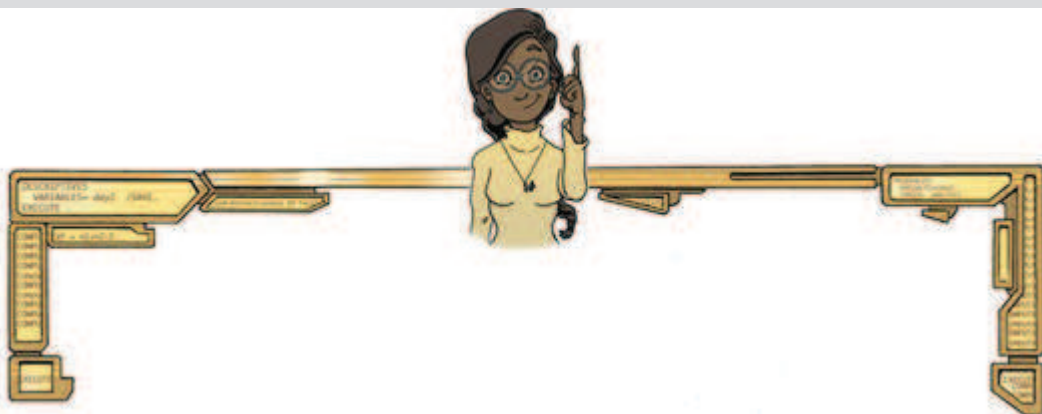
Syntax editor

Variable view

Viewer

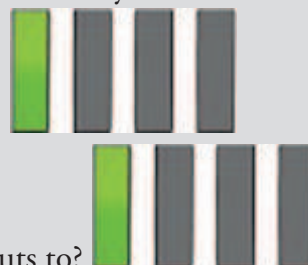
Wide format data

Smart Alex's tasks



- Task 1: Smart Alex's first task for this chapter is to save the data that you've entered in this chapter. Save it somewhere on the hard drive of your computer (or a USB stick if you're not working on your own computer). Give it a sensible title and save it somewhere easy to find (perhaps create a folder called 'My Data Files' where you can save all of

your files when working through this book).



- Task 2: What are the following icons shortcuts to?

- Task 3: The data below show the score (out of 20) for 20 different students, some of whom are male and some female, and some of whom were taught using positive reinforcement (being nice) and others who were taught using punishment (electric shock). Enter these data into SPSS and save the file as Method Of Teaching.sav. (Hint: the data should not be entered in the same way that they are laid out below.)



Male		Female	
Electric Shock	Being Nice	Electric Shock	Being Nice
15	10	6	12
14	9	7	10
20	8	5	7
13	8	4	8
13	7	8	13

- Task 4: Thinking back to [Labcoat Leni's Real Research 4.1](#), Oxoby also measured the minimum acceptable offer; these MAOs (in dollars) are below (again, they are approximations based on the graphs in the paper). Enter these data into the SPSS Data Editor and save this file as Oxoby



(2008) MAO.sav.

Bon Scott group: 2, 3, 3, 3, 3, 4, 4, 4, 4, 4, 4, 4, 4, 5, 5, 5, 5, 5

Brian Johnson group: 0, 1, 2, 2, 3, 3, 3, 3, 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 1

- Task 5: According to some highly unscientific research done by a UK department store chain and reported in *Marie Claire* magazine (<http://ow.ly/9Dxvy>), shopping is good for you. They found that the average woman spends 150 minutes and walks 2.6 miles when she shops, burning off around 385 calories. In contrast, men spend only about 50 minutes shopping, covering 1.5 miles. This was based on strapping a pedometer on a mere 10 participants. Although I don't have the actual data, some simulated data based on these means are below. Enter these data into SPSS and save them as Shopping Exercise.sav.



Male		Female	
Distance	Time	Distance	Time
0.16	15	1.40	22
0.40	30	1.81	140
1.36	37	1.96	160
1.99	65	3.02	183
3.61	103	4.82	245

- Task 6: This task was inspired by two news stories that I enjoyed. The first was about a Sudanese man who was forced to marry a goat after being caught having sex with it (<http://ow.ly/9DyyP>). I'm not sure whether he treated the goat to a nice dinner in a posh restaurant beforehand but, either way, you have to feel sorry for the goat. I'd barely had time to recover from that story when another appeared about an Indian man forced to marry a dog to atone for stoning two dogs and stringing them up in a tree 15 years earlier (<http://ow.ly/9DyFn>). Why anyone would think it's a good idea to enter a dog into matrimony with a man with a history of violent behaviour towards dogs is beyond me. Still, I wondered whether a goat or dog made a better spouse. I found some other people who had been forced to marry goats and dogs and measured their life satisfaction and how much they like animals. Enter these data



into SPSS and save as Goat or Dog.sav.

Goat		Dog	
Animal Liking	Life Satisfaction	Animal Liking	Life Satisfaction
69	47	16	52
25	6	65	66
31	47	39	65
29	33	35	61
12	13	19	60
49	56	53	68
25	42	27	37
35	51	44	72
51	42		
40	46		
23	27		
37	48		

- Task 7: One of my favourite activities, especially when trying to do brain-melting things like writing statistics books, is drinking tea. I am

English, after all. Fortunately, tea improves your cognitive function – well, it does in old Chinese people, at any rate (Feng, Gwee, Kua, & Ng, 2010). I may not be Chinese and I'm not *that* old, but, I nevertheless, enjoy the idea that tea might help me think. Here are some data based on Feng et al.'s study that measured the number of cups of tea drunk and cognitive functioning in 15 people. Enter these data into SPSS and save

the file as Tea Makes You Brainy 15.sav.



Cups of Tea	Cognitive Functioning
2	60
4	47
3	31
4	62
2	44
3	41
5	49
5	56
2	45
5	56
1	57
3	40
3	54
4	34
1	46

- Task 8: Statistics and maths anxiety are common and affect people's performance on maths and stats assignments; women, in particular, can lack confidence in mathematics (Field, 2010). Zhang, Schmader, & Hall, (2013) did an intriguing study, in which students completed a maths test in which some put their own name on the test booklet, whereas others were given a booklet that already had either a male or female name on it. Participants in the latter two conditions were told that they would use this other person's name for the purpose of the test. Women who completed the test using a different name performed better than those who completed the test using their own name. (There were no such effects for men.) The data below are a random subsample of Zhang et al.'s data. Enter them into SPSS and save the file as Zhang (2013)

subsample.sav

Male			Female		
Female Fake Name	Male Fake Name	Own Name	Female Fake Name	Male Fake Name	Own Name
33	69	75	53	31	70
22	60	33	47	63	57
46	82	83	87	34	33
53	78	42	41	40	83
14	38	10	62	22	86
27	63	44	67	17	65
64	46	27	57	60	64
62	27			47	37
75	61			57	80
50	29				

- Task 9: What is a coding variable?
- Task 10: What is the difference between wide and long format data?

Answers & additional resources are available on the book's website at <https://edge.sagepub.com/field5e>



5 Exploring data with graphs

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