ANSWERS TO EXERCISES AND REVIEW QUESTIONS

PART ONE: GETTING STARTED

Before attempting these questions read through Chapters 1, 2 and 3 of the *SPSS Survival Manual*.

Designing a study

1.1 When choosing a scale for use in research, what are the two main characteristics you need to be aware of?
p.5 Reliability and validity

1.2 What are the two main types of reliability of a scale?
p.6 test retest reliability and internal consistency

1.3 What measure is often used to indicate the internal consistency of a scale?
p.6 Cronbach's alpha coefficient

1.4 If you read that a scale had a Cronbach alpha value of .4 what would you think?
p.6. It is less than the recommended value of .7. This may be due to poor internal consistency, or the scale may have very few items.

1.5 There are many different types of validity of a scale. Describe three.
p.6-7 Content validity – adequacy with which a measure has sampled from the intended universe of domain of content. Criterion validity – relationship between scale scores and some specified, measurable criterion. Construct validity – testing a scale in terms of a number of theoretically derived hypotheses concerning the nature of the underlying variable or construct.

1.6 If you were designing a questionnaire and wanted to measure respondents' ages, which of the following formats, (a) or (b), would be better? Explain your choice.

(a) Please tick one of the following categories to indicate your age:
18-30 ___
31-45 ___
46-60 ___
61-80 ___
81+ ___

(b) Please indicate your age in years: _____

p.8 The response format shown in (b) allows the collection of continuous (rather than categorical) data, making it suitable for a wider range of statistical analyses (eg. Correlational techniques).

Preparing a codebook

1.7 There are a number of rules that must be obeyed when choosing variable names to use in SPSS (see Chapter 2). Use the following questions to review some of these rules.

(a) Can a variable name start with a number?
p.13. No, a variable name must start with a number
(b) What is the maximum number of characters that a variable name can have?
p.13 a variable name can have up to 64 characters
(c) Can variable names contain spaces?
p.13 No, a variable name cannot contain spaces

1.8 For each of the following, indicate which is a suitable variable name. If not suitable, explain why.

(a) *q1	*Not suitable, a variable name must start with a letter*
(b) and	*Not suitable as it contains a SPSS command word*
(c) religion	*Suitable*
(d) martialstatus	*Suitable*
(e) q110a	*Suitable*
(f) incom.hous	*Not suitable as it contains a full stop*
(g) 5optim	*Not suitable, a variable name must start with a letter*
(h) optim5	*Suitable*

Getting to know SPSS

1.9 In Chapter 3 of the *SPSS Survival Manual* you are taken on a guided tour of the basics of SPSS. The best way to learn this program is by using it. Open the data file survey.sav. To get you familiar with the program, try some of the activities below.

(a) Using the **Data Editor** window, go to the bottom of the file (using the scroll bar) and find out the ID number of the last case in the file.

(b) Explore the different menus available in SPSS.

- Click on **Graphs** and find out what types of graphs are available.
- Click on **Analyze** and discover the wide range of statistics available.

(c) Practise using the dialogue and sub-dialogue boxes by clicking on **Analyze** and then on **Frequencies**. Next, highlight the following variables and move them into the **Variables** box: sex, age, marital, educ, op1, op2, op3, op4, op5, op6. Then, move these variables out of the **Variables** box and use Cancel to escape from the dialogue box.