WEB PAGE FOR CHAPTER 19

MULTIPLE CHOICE QUESTIONS

- 1 The Thurstone technique requires a large number of judges to assess each item in terms of its degree of favourability towards the object:
 - (a) no
 - (b) depends on the number of items
 - (c) depends on the level of reliability sought
 - (d) yes

2 The Semantic Differential technique always uses a seven point scale:

- (a) true
- (b) false
- (c) depends on the number of items
- (d) uses a fixed response scale
- 3 If an item has a scale score on Thurstone technique that has a very small standard deviation:
 - (a) it is a poor item
 - (b) it does not discriminate between respondents
 - (c) it is a good item
 - (d) it is unreliable
- 4 The Thurstone technique always uses a five point scale:
 - (a) true
 - (b) false
 - (c) never uses a fixed response scale
 - (d) always uses a three point scale
- 5 If you applied a Cronbach alpha to a Likert scale you would be attempting to assess:
 - (a) temporal reliability
 - (b) content validity
 - (c) predictive validity
 - (d) internal reliability
- 6 The advantage of the Likert technique over the Thurstone technique is that:
 - (a) it is easier and cheaper to construct
 - (b) it is easier to assess reliability
 - (c) it produces shorter scales
 - (d) it has higher content validity
- 7 Thurstone, Likert and the Semantic Differential Techniques all produce:
 - (a) nominal measures
 - (b) ordinal measures
 - (c) interval measures
 - (d) ratio measures
- 8 The major dimension measured by the Semantic Differential technique is:
 - (a) activity
 - (b) evaluation
 - (c) potency
 - (d) behaviour
- 9 Attitude scales tend to measure:
 - (a) cognitive aspects of behaviour
 - (b) affective aspects of behaviour
 - (c) knowledge of the object being assessed
 - (d) behaviour

- 10 Most attitude scales have positive and negative statements set at random. This is to prevent (a) lying
 - (b) artificially high scores
 - (c) the acquiescence response set
 - (d) judgements about the statements
- 11 Concurrent validity of an attitude scale can be assessed by:
 - (a) factor analysing the scale
 - (b) ensuring the content is appropriate to the topic
 - (c) splitting the scale in half and correlating the two halves
 - (d) applying the scale to criterion groups of known persuasion
- 12 Attitude scale scores reflect:
 - (a) human emotion
 - (b) the responses subjects are willing to reveal in a specific test situation
 - (c) real differences between individuals
 - (d) an attempt to justify behaviour
- 13 Which of the following would act as an external criterion to check the predictive validity of an attitude scale towards Chan's extra hot chilli and garlic pizzas?
 - (a) individual's breath smells of garlic
 - (b) seen leaving Chan's with an extra hot chilli and garlic pizza
 - (c) inspection of fridge at home reveals six frozen pizzas
 - (d) asks for a cheese, tomato and ham pizza without any chillis or garlic at the pizza shop

SPSS ACTIVITY

Access SPSS Chapter 19 Data File A. It contains data on 123 adults. There 18 variables of which eight are demographic in nature concerning gender, age, and items relating to employment status and political preference. The remaining 10 items are a short five point Likert attitude scale towards trade unions.

Focus on the 10 item attitude scale for now as this data file will be used again in the next chapter where we will investigate the relationships between the demographic and scale items. The tasks for this current chapter are:

- 1 Using the 10 item Likert scale, obtain some descriptive statistics in tabular and graphical forms. Calculate new summary statistics (means, and totals) on the attitude scale for each respondent.
- 2 Conduct a Cronbach alpha on the attitude items and make some decisions about the scale as it stands. Decide whether you need to reverse score any item(s). Are there any items that should be eliminated? (See below.)
- 3 Conduct chi square goodness of fit analyses on each of the 10 scale items and make relevant comments about the results.

Ensure you save the file with the reverse scored items on it. Check the way you did it with the comments at the end of this Web page.

CLASS DISCUSSIONS AND ACTIVITIES

- 1 Using the sample attitudes to accountancy as a career listed on page 471 in text, act as if you were one of Thurstone's judges. Assign to each item a number ranging anywhere from .00 to 11.0 on a scale in which a score of .00 is given to the item that is most unfavourable towards accountancy and 11.0 to the most strongly favourable item. The rating of 5.0 is given to a neutral item. Do not assign ratings according to how you feel about accountancy but on the basis of how strongly each item indicates favourability or unfavourability. When you have finished compare your judgements with:
 - (a) the average judgements of the class; and
 - (b) the average judgements of a large set of students given below. If there are large discrepancies between your judgements and the judgements below can you think of reasons why?

Item	Scale value	Item	Scale value	
1	3.3	6	3.7	
2	2.89	7	3.8	
3	2.4	8	8.8	
4	10.0	9	10.3	
5	2.0	12	4.9	

Judgements by students of statements in the accountancy example

- 1* I would not be happy to pay an environmental tax to help pay for cleaning up the environment.
- 2 I always try to buy products sold in recycled materials.
- 3* I am unwilling to accept a lower standard of living in order to conserve the environment.
- 4 I am concerned about environmental pollution on my family's health.
- 5 Organic farming is the way to go.
- 6 There should be heavy prison sentences for any person or persons polluting the rivers and lakes of this country.
- 7 Pollution standards must be improved, even if it means all leaded petrol cars are banned from the roads.
- 8* The burning off of forest to clear the land for farming must be accepted as an essential part of the agricultural economy of some countries.

Calculate your score. Remember to reverse score statements 1, 3, and 8.

Now complete the following task. Place a tick besides each of the following that you have engaged in at least once in the past six months.

Recycled bottles Recycled cans Recycled newspaper Been a volunteer on a community clean up Boycotted a company's services/products because of their record on environmental issues Made a donation to an environmental organization Walked or cycled rather than take the car Joined in a protest march about an environmental issue Written to a newspaper/political representative/government official, etc. about an environmental issue.

Count your ticks.

Place your data on SPSS. Does the environment concern score correspond with the environment behaviour score? What sort of validity are we trying to assess here? Can you explain any divergence.

3 Apply the activity in question 2 above to a wider range of others in your college or neighbourhood. Place the obtained data on SPSS. Assess internal reliability of the attitude scale with Cronbach alpha. Correlate rank order of total scores against rank order of number of ticks for the validating activities. Is there a significant correlation between attitude score and behaviour? Test for differences in overall score on the attitude scale between such groups as gender, age, or faculty groupings, etc. Try goodness of fit chi square and crosstabs on items in the list. Write a brief report.

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1 (d), 2 (b), 3 (c), 4 (b), 5 (d), 6 (a), 7 (b), 8 (b), 9 (b), 10 (c), 11 (c), 12 (b), 13 (b).

In class complete the attitude scale below towards environmental issues using the following ratings: Strongly agree = 5; Agree = 4; Neither agree nor disagree = 3; Disagree = 2; Strongly Disagree = 1

Comments on SPSS activity above

You probably realized that item 2 needed reversing (-ve correlation). This would become apparent if you performed a Cronbach Alpha before undertaking the reversal. The wording of item 2 suggests it needs reversing when compared to the way the other items are worded. Two options are available. Firstly you can reverse item 2 and recalculate alpha for 10 items, or omit item 2 and repeat the reliability test with only nine items. A sensible researcher would try both and determine which provides the better reliability.