Chapter 10: Exploring Bivariate Analysis

Assignment

Here you will find a description of the data file to be used in this assignment, and some background to the survey that collected the data. This is real data collected from a real survey.

The Survey: The Guidance Experience of Mature Students on Access Courses and First Year of a Degree

The data was collected as part of a survey of the educational and vocational guidance experience of mature students prior to starting and during their course. The data file is not a complete data set, but is a major proportion of the data collected from over 240 respondents. The study aimed to look at who they sought guidance from, what they sought guidance on, and their perceptions of quality of guidance in the light of their experience. The sample size was approximately 900, of which 246 responded.

The following section describes the questions included in your data set and the coding frame for the variables derived from the responses. You will need this information in order to understand the data set and be able to interpret and analyse the data effectively.

N.B: Questions 5 to 8 refer to guidance activity prior to a return to education – i.e. pre-entry guidance. Questions 9 to 12 refer to guidance and educational experience received during their course.

Coding Frame

Question	*Variable Name & Type*	*Response & Code*	
1. *FORMA was not a question but a means of distinguishing between Access and Undergraduate students*	FORMA (dichotomy)	1 = Access 0 = Undergraduate	
2. *Respondents age last birthday*	AGE (interval)	Age in years 999 = no response	
3. *Gender*	GENDER (dichotomy)	1 = male 2 = female 9 = no response	
4. *Please indicate which of the following statements best describes your circumstances?* *[This is a multi-response question in which a range of options were given. Respondents could select all those that applied]*.	FTED FTEMP PTEMP UNEMP GOVTRAIN SICK CARE_REL CARE_FAM RETIRED OTHER (dichotomy)	Full time education Full time paid employment Part time paid employment Registered unemployed Government training scheme Unable to work through sickness/disability Full time carer for sick relative Full time family carer Retired Other	0 = not selected 1 = selected 9 = no response

5.	*From whom did respondents seek guidance before returning to education?* *[This is a multi-response question in which a range of options were given. Respondents could select all those that applied].*	LEA_ADV EGA COL_ADV AD_TUT TEACHER COU_TUT UNKNOWN OTH_ADV UNKNOWN	LEA Careers Adviser Education Guidance Adviser College Careers Adviser/Counsellor Adult Education Tutor Careers Teacher Tutor for intended course Not known Other Did not discuss plans	0 = not selected 1 = selected 9 = no response (dichotomy)
6.	*When seeking **pre-entry guidance**, was the respondent only considering a return to education?*	RET_ED	0 = no 1 = yes 9 = no response (dichotomy)	

7.	*This question asked about the content of the discussion with the guidance provider. The options were*			
•	Options other than a return to education	OPTIONS	1 = in detail 2 = briefly 3 = not at all 4 = can't remember 9 = no response (nominal)	
•	Choice of degree course	CHOICE		
•	Career after completing your studies	CAREER		
•	Financing your studies	FINANCE		
•	Organising your personal financial arrangements	PER_FIN		
•	Effects of studying on the rest of your family	FAMILY		
•	Organising your life to adapt to studying	ADAPT		
•	The skills needed to study	SKILLS		
•	Childcare facilities	CH_CARE		
•	Course content	CONTENT		

8.	*This question used a scale based on semantic differentials to explore what respondents thought about some key qualities of the information, advice and guidance they **received prior to their return to study**. The pairs of words used were:*

• Accurate – Inaccurate	ACCURACY
• Comprehensive – Incomplete	COMPLETE
• Clear – Ambiguous	CLARITY
• Non-judgmental – Judgmental	JUDGE
• Independent – Biased	BIAS
• Friendly – Unfriendly	FRIENDLY
• Helpful – Unhelpful	HELPFUL
• Willing - Reluctant	WILLING

1	2	3	4	5	6	7
very	fairly	slightly	neither	slightly	fairly	very

9 = no response

(Ordinal)

9.	*This question looked at some of the areas that respondents may have wished to discuss with a tutor or guidance professional **during their studies**. The options were:*			
•	Depression	DEPRESS	1 = was able to discuss in detail 2 = brief discussion only possible 3 = there was no opportunity to discuss 4 = did not need to discuss 9 = can't remember or no response (nominal)	
•	General anxiety	GEN_ANX		
•	Exam anxiety	EX_ANX		
•	Family difficulties	FAM_DIFF		
•	Lack of confidence	CONF		
•	Career decisions	CAR_DEC		
•	Financial problems	FIN_PROB		
•	Personal illness	PER_ILL		
•	Difficulties with lecturers	LECTURER		
•	Travel difficulties	TRAVEL		
•	Difficulties with studying	STUDDIFF		

<table>
<tr><td colspan="3">10. This question was concerned with how respondents felt as a result of their educational experience. It is a semantic differential question using the following pairs of words.</td></tr>
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• Encouraged – Discouraged	ENCOUR	1	2	3	4	5	6	7
• Positive – Negative	POSITIVE	very	fairly	slightly	neither	slightly	fairly	very
• Contented – Discontented	CONT							
• Challenged – Under-challenged	CHALL							
• Involved – Isolated	INVOLVE	9 = no response						
• Valued – Under-valued	VALUED							
• Optimistic - Pessimistic	OPTIMISM	(Ordinal)						

11. *This question used a scale based on semantic differentials to explore what respondents thought about some key qualities of the information, advice and guidance they **received during their course**. The pairs of words used were:*

• Accurate – Inaccurate	ACC	1	2	3	4	5	6	7
• Comprehensive – Incomplete	COMP							
• Clear – Ambiguous	CLAR	very	fairly	slightly	neither	slightly	fairly	very
• Non-judgmental – Judgmental	JUD							
• Independent – Biased	BIAS2							
• Friendly – Unfriendly	FRIEND2	9 = no response						
• Helpful – Unhelpful	HELP							
• Willing - Reluctant	WILL	(Ordinal)						

12. *How satisfied with their educational experience were respondents?*	SATIS	Actual value (scale) calculated by aggregating responses to each item in question 10. 999 = no response to question 10 or an incomplete response so a scale for the respondent has not been calculated. (Interval developed from aggregating ordinal responses in question 10)

Suggested Approach

The best way to tackle data analysis is to ask questions and then seek the answers in the data. The sheer volume of data you will collect can be very daunting and may lead to a disorganised approach to seeking relationships by randomly choosing variables and seeing if they are related in any way. It is much better to ask questions like:

1. Were Access students more likely to be satisfied with their educational experience than undergraduates?
2. Is satisfaction level associated with quality of guidance?
3. Is satisfaction level associated with age or gender?

You may need to look at the variables and create new scales or indices to help you analyse the data and answer the questions you set yourself.