UNIVERSITY OF SWAZILAND



TITLE OF PAPER:

STATISTICAL DATA PROCESSING

COURSE CODE

ST 206

TIME ALLOWED:

TWO (2) HOURS

INSTRUCTIONS:

ANSWER ANY THREE QUESTIONS.

Question 1

Identify the symmetry and asymmetry between the following data processing concepts;

- a) Coding Book vs. Coding Scheme
- b) Editing vs. Imputation

(20 Marks)

Question 2

The Central Statistical Office(CSO) is currently conducting the 2016 Swaziland Household Income and Expenditure Survey. Next year, it will implement the 2017 Population and Housing Census. A common national development indicator that will come out of the two exercises is the Sex Ratio. If in 2018 two different estimates are disseminated, outline technical advice (i.e. Mean Square Error of Sex Ratio) that CSO should give to her stakeholders (hint: use the concept of Mean Square Error of Sex Ratio)

(20 Marks)

Question 3

Draft an SPSS Syntax program using the questionnaire in APPENDIX A that can be run and open a data file in the Data Editor with variable and value labels.

(20 Marks)

Question 4

A researcher wants to use the questionnaire in APPENDIX A, and is aware that survey responses must be transformed into numeric form. Outline, clearly, the procedural steps that (s)he should follow to fulfill this survey requirement.

(20 Marks)

Question 5

Outline how issues of data quality hinge on survey data processing.

(20 Marks)

SAMPLE SURVEY QUESTIONS:

1) On a scale of $1-10$ with 10 being the most positive, how would you describe the overall atmosphere of physician- nurse- staff relationships at your hospital?							
□ 1 □ 2 □ 3 □ 4	□ 5 □ 6 □ 7 □ 8 □ 9 □ 10						
Very negative > Barely Positive > Somewhat Positive > Mostly Positive > Very Positive							
2) Have you ever witnessed disruptive behavior from a physician at your hospital?							
☐ Yes ☐ No							
3) Have you ever witnessed disruptive behavior from a nurse at your hospital?							
☐ Yes ☐ No							
4) Are there any particular settings where disruptive behavior is most prevalent? (Check all that apply)							
☐ ICU ☐ OR ☐ ED	OB Med-Surg Units Other						
5) Are there any particular physician specialties where disruptive behavior is most prevalent? (List all that apply)							
6) On a scale of 1-10 with 10 being the strongest influence please rate the following factors as to their likelihood of contributing to communication difficulties.							
No effect > Minimal effect > Moderate effect > Strong effect							
Cultural/Ethnic differences	1 2 3 4 5 6 7 8 9 10						
Generational differences	1 2 3 4 5 6 7 8 9 10						
Gender differences	1 2 3 4 5 6 7 8 9 10						
Personality Differences	1 2 3 4 5 6 7 8 9 10						
Training Differences	1 2 3 4 5 6 7 8 9 10						
Other	1 2 3 4 5 6 7 8 9 10						

4 3								
•								
6) How often do you think disruptive behavior results in the following?								
		Never	Rarely	Sometimes	Frequently	Constantly		
	Stress Frustration	H	H					
	Loss of concentration			· 🗏				
	Reduced RN/MD collaboration							
	Reduced information transfer	님		H	님	H		
	Reduced communication Impaired RN/MD relationship							
	7) How often do you think there is a link between disruptive behavior and the following?							
		Never	Rarely	Sometimes	Frequently	Constantly		
	Adverse Events							
	Errors	H			H	H		
	Patient safety Quality of care	H		H	* H	Η		
	Patient mortality	H	Ħ	Ħ		H		
	Nurse satisfaction							
	Physician satisfaction							
	Patient satisfaction Overall staff satisfaction	H	H					
	8) Are you aware of any speci	ific adverse ev	vents that did	occur as a resu	lt of disruptive	e behavior?		
	Yes No							
	, <u> </u>	-						
	If yes, please describe:							
	Could this have been prevented?							
	Yes	No						
	If yes, please describe:							
	9) Is there a code of conduct/ professional behavior standard at your hospital? If yes, is the policy effective?							
	☐ Yes ☐ No	☐ Yes	☐ No					
10a). If you know of a physician who has been counseled about his or her behavior, on a scale of1-10 with 10 being completely satisfied, rate the success of this process.								
	□ 1 □ 2 □ 3	4 🗆	5 🗌 6	7	8 🗆 9 🗆	□ 10		
	Not Satisfied > Minimally	Satisfied > Som	newhat Satisfied	d> Mostly Satisfied	i> Completely Sa	ntisfied		
.er								