MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2013/2014

FIRST YEAR SECOND SEMESTER EXAMINATION FOR THE
DEGREE OF MASTER OF EDUCATION (SPECIAL NEEDS)

(KISE CENTRE)

EDU 804: COMPUTER APPLICATIONS IN RESEARCH

Date: 13ᵗʰ *Decembe, 2013*   *Time:* 8.00 – 11.00 a.m.

INSTRUCTIONS:

- **Answer ALL questions.**

Question one

i.   Produce and print the contents in the following two pages. Marks will be awarded for accuracy symmetry and balance

ii.   All margins are **1"**

iii.   The font type at the top right corner is **Arial**. The font size for the words is **10**.

iv.   The main heading which starts with the word "Japanese" is **Tahoma** font size **14**.

v.   All remaining text is in **Times New Roman** font size **12**.

vi.   The content under the heading experiment one has been arranged in **2 columns**

vii. Produce the table as it is using the APA format

viii. Line spacing through the document is **single spacing**

ix.   Insert your registration number as a **header**

ijbd

Japanese children and adult's awareness of psychogenic bodily reactions

Noriko Toyama

Since the 1980s, numerous studies have examined young children's naïve or intuitive biological concepts. These studies inquired into the development of children's knowledge of human bodily processes and of life processes of non human animals and plants. Biological understanding has been assumed to be one of three core domains of knowledge together with naïve psychological psychology, since these domains are distinguished by their evolutionary significance and centrality in human thought.

In this study we examined Japanese children awareness of psychogenic bodily reaction. The following were the research questions:-

1. Would Japanese children more easily accept the possibility of psychogenic bodily reactions
2. How do Japanese children think about both positive and negative psychogenic reactions
3. Why do children believe that mental states would cause bodily reactions?

Experiment 1

An experiment was conducted in which participants performed 12 tasks in which physical or psychological causes led to positive/negative reactions and responded whether or not each event could happen. When participants agreed that

Table 1 gives the mean scores by task type and age group. Preliminary analysis revealed no main effects for gender which was excluded from further analysis.

Table 1: Mean scores of agreement about causes of reactions by task type and age

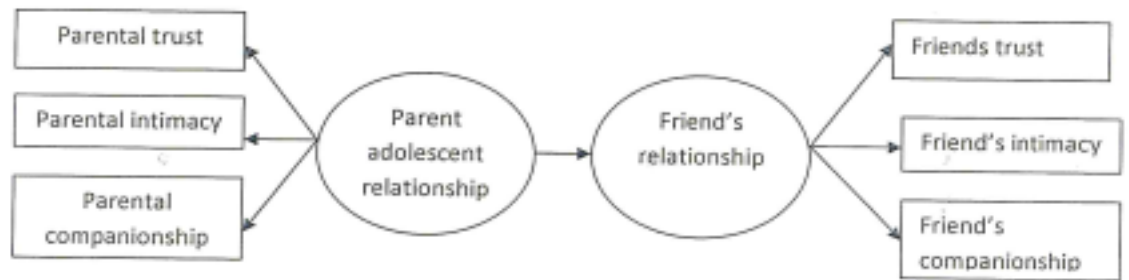|	*Positive reaction*		*Negative reaction*	
	Physical cause	*psychological cause*	*Physical cause*	*psychological cause*
5 years	2.50	1.05	2.10	1.15
6 years	2.74	1.37	2.00	1.21
Grade 2	2.77	1.45	2.45	1.68
Grade 5	2.88	1.71	2.63	2.13
adults	2.97	2.35	2.91	2.82

Note: Maximum score = 3

Figure 1: Multiple group SME analysis of cultural differences in links between parent and friend relationships.

(30 marks)

Question 2:

Table 2 shows data for 15 individuals and 5 variables whose variable labels and corresponding values are listed on appendix 1.

Table 2: Data for Input into the SPSS Data Editor

Age	Gender	Music	Math	Language
24.00	2.00	3.00	3.00	4.00
28.00	1.00	2.00	3.00	3.00
26.00	1.00	3.00	1.00	2.00
30.00	1.00	3.00	3.00	3.00
30.00	1.00	2.00	1.00	1.00
40.00	1.00	3.00	3.00	3.00
25.00	1.00	2.00	2.00	2.00
30.00	2.00	5.00	2.00	2.00
20.00	1.00	3.00	2.00	2.00
70.00	2.00	3.00	1.00	1.00
65.00	2.00	5.00	1.00	4.00
60.00	2.00	1.00	2.00	3.00
68.00	2.00	5.00	1.00	2.00
45.00	2.00	1.00	1.00	2.00
56.00	2.00	1.00	3.00	4.00

a) Key in the data in the SPSS editor, print and submit the output. (5 marks)

b) Construct a histogram for the variable music. Print and submit the output.
(2 marks)

c) Using the histogram in (b) which is the most preferred music? (1 marks)

d) Use SPSS to calculate the mean age for males and females. (2 marks)

e) Construct a bar chart representing the information in (d). Print and submit the output. (2 marks)

f) By use of appropriate test statistics determine whether the difference in mean age for males and females is statistically significant at alpha level of .05. (3 marks)

g) Use SPSS to calculate Pearson's correlation matrix for math scores and English scores. Write the correlation matrix in your booklet.
(3 marks)

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h) Construct and print a scatter plot for language scores against math scores. What is the nature of relationship between the two variables. (3 marks)

i) Perform linear regression analysis for language scores on math scores. Print and submit the output. (3 marks)

j) Write down the linear regression equation for language scores on math scores. (3 marks)

k) How much variance is shared between math scores and English scores? Write the answer in your booklet. (3 marks)

APPENDIX 1

Variable	Variable label	Values
Age	Age in years	None
Gender	Gender	1.00 = Male
		2.00 = Female
Music	Music preferred	1.00 = Classical
		2.00 = Soul
		3.00 = Blues
		4.00 = Rock
		5.00 = Don't like music
Math	Math test scores	1.00 = 0 – 5
		2.00 = 6 – 10
		3.00 = 11 – 15
Language	Language test scores	1.00 = 0 – 5
		2.00 = 6 – 10
		3.00 = 11 – 15
		4.00 = 16 – 20