

※ 考生請注意：本試題不可使用計算機 請勿在本試題紙上作答，否則不予計分

1. Below is an abstract of a journal article. Please read it through and answer the questions below.

This paper investigates whether education buffers the impact of disability on psychological distress. And it investigates what it is about education that is most helpful, by controlling for related resources such as cognitive ability and social class. Two waves from the British National Child Development Study are used on the onset of a physical disability and psychological distress in early adulthood (between ages 23 and 33). We find that a higher education buffers the impact of disability on psychological distress. When the buffering effect of cognitive ability and social class are added simultaneously, however, the effect of education becomes insignificant. Implications of these findings are discussed.

- I. Please use box and arrows to illustrate the conceptual model of this study. (10 pts)
- II. What kind of study is this? Is this a cohort study? Experimental study? Or cross-sectional study? (10 pts)
- III. Is this kind of study a mediating study, or a moderation study, or both? Specify the statements from the abstract that support your answer. (10pts)

2. Assess the strengths and weaknesses of using experimental designs in social research. (10 pts)

3. Based on the table below, please discuss the effect of age and depression. Be sure to compare their effects based on all the three models (20 pts)

Table 2
Multivariate analyses for cognitive impairment, OR(95%CI)

	Model 1		Model 2		Model 3	
	OR (95%CI)	p	OR (95%CI)	p	OR (95%CI)	p
Older age	3.05 (2.14-4.35)	<0.001	3.18 (2.22-4.58)	<0.001	2.60 (1.79-3.78)	<0.001
Sex (Male)	0.28 (0.20-0.39)	<0.001	0.32 (0.22-0.46)	<0.001	0.34 (0.25-0.48)	<0.001
Marital status (Single)	1.05 (0.76-1.44)	0.77				
Education (years)						
Elementary school (0-6)	Reference group		Reference group		Reference group	
High school (7-12)	0.46 (0.25-0.86)	0.01	0.39 (0.21-0.70)	0.002	0.47 (0.26-0.85)	0.012
College (>12)	0.35 (0.10-1.19)	0.09	0.28 (0.09-0.87)	0.029	0.30 (0.10-0.95)	0.040
Ethnicity						
Fukienese	Reference group					
Hakka	0.82 (0.55-1.22)	0.33				
Mainlander	0.61 (0.34-1.06)	0.07				
Smoking			1.01 (0.66-1.54)	0.955		
Alcohol drinking			0.74 (0.44-1.24)	0.262		
Depression			1.40 (1.02-1.94)	0.039	1.18 (0.81-1.71)	0.391
Hypertension			0.98 (0.68-1.41)	0.945		
Diabetes			1.82 (1.15-2.88)	0.010	1.70 (1.06-2.74)	0.029
Cardiovascular disease			1.22 (0.82-1.80)	0.312		
Stroke			2.71 (1.25-5.86)	0.011	2.36 (1.06-5.26)	0.036
ADL disability					1.96 (0.85-4.54)	0.116
IADL disability					2.06 (1.38-3.09)	0.029
Functional limitation					1.42 (0.96-2.13)	0.082
Self perceived health						
Good					0.94 (0.57-1.58)	0.836
Fair					1.12 (0.78-1.60)	0.534
Poor					reference group	
Joining organized group activity					0.98 (0.71-1.35)	0.090

(背面仍有題目,請繼續作答)

系所組別：老年學研究所甲組

考試科目：社會研究法

考試日期：0224，節次：3

※ 考生請注意：本試題不可使用計算機 請勿在本試題紙上作答，否則不予計分

4. Based on the table below, please explain the effect of “male”, “age”, and “stressor*unhealthy” behaviors in Blacks and Whites. (20 pts)

TABLE 2—Results of Logistic Regressions Predicting DSM-III Depression at Wave 2 Among Blacks (n=864) and Whites (n=1887): Americans' Changing Lives Survey, 1986 and 1989

	Blacks, OR (95% CI)	Whites, OR (95% CI)
Control measures (wave 1)		
Male	0.90 (0.56, 1.46)	0.51* (0.37, 0.72)
Age, y	0.97* (0.96, 0.99)	0.99* (0.98, 1.00)
Residence in South	0.93 (0.60, 1.43)	1.19 (0.87, 1.61)
Meets CES-D depression criteria ^a	2.63* (1.70, 4.08)	2.40* (1.77, 3.27)
Socioeconomic measures (wave 1)		
Education, y	0.94 (0.86, 1.02)	0.97 (0.92, 1.03)
Poverty ratio ^b	0.99 (0.86, 1.14)	0.93 (0.86, 1.00)
Employed	1.80 (0.95, 3.41)	1.30 (0.87, 1.94)
Blue-collar occupation	0.56 (0.31, 1.02)	1.08 (0.71, 1.65)
Stressor and unhealthy behavior measures (wave 1)		
Stressors ^c	1.64* (1.22, 2.21)	1.15 (0.94, 1.41)
Unhealthy behaviors ^d	0.90 (0.69, 1.15)	0.97 (0.79, 1.18)
Stressors × unhealthy behaviors	0.81* (0.67, 0.97)	1.11 (0.98, 1.25)
Wald χ^2	61.9*	124.9*
Rescaled R ²	0.14	0.13

Note. CES-D = Center for Epidemiological Studies—Depression Scale; CI = confidence interval; DSM-III = *Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition*; OR = odds ratio.

^aAn 11-item measure scaled to 20 by multiplying the sum by 1.818. A CES-D score of 16 or higher represents meeting the criteria for clinical depression.

^bLower scores indicate more impoverished status.

^cStressors represent a count of stressful life events that respondents reported experiencing. The inventory of events included 9 events (e.g., loss of job, physical attack, serious injury, and so on).

^dUnhealthy behaviors include smoking (current or ever), drinking (ever), and being obese (defined as having a body mass index [weight in kilograms divided by height in meters squared] of 30 or higher). The Wald test of difference between Blacks and Whites for unhealthy behaviors is 7.70; $P = .09$; $df = 1$.

* $P < .05$.

5. Complete the following ANOVA table. (10 pts)

Source of Variance	Sum of Squares(SS)	Degrees of Freedom(df)	Mean Square(MS)	f-ratio	p-Value
Between groups		2			
Within groups	12.3	62			
Total	109.7				

6. Develop four hypotheses that could be tested with the independent t test, ANOVA, Linear regression, and logistic regression, respectively. (10 pts)