

國立成功大學  
111學年度碩士班招生考試試題

編 號：304

系 所：護理學系

科 目：護理研究

日 期：0220

節 次：第 3 節

備 註：不可使用計算機

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

一、選擇題（每題 4%，共 15 題，60%）

1. The process in which each participant has an equal and known probability of being assigned to either the control or the experimental group is:
  - (A) Randomization
  - (B) Manipulation
  - (C) Research control
  - (D) Validation
  
2. The authors hypothesize that new diagnosed cancer patients who receive support from other cancer patients who achieve remission have less anxiety and more positive thinking than other patients. This statement is an example of:
  - (A) Null hypothesis
  - (B) Statistical hypothesis
  - (C) Non-directional hypothesis
  - (D) Directional hypothesis
  
3. The degree of consistency with which an instrument measures the attribute it is supposed to be measuring is called:
  - (A) Validity
  - (B) Reliability
  - (C) Sensitivity
  - (D) Objectivity
  
4. Which is the best method of data collection when subpopulations within an overall population vary?
  - (A) Stratified random sampling
  - (B) Simple random sampling
  - (C) Cluster sampling
  - (D) Purposive sampling
  
5. A researcher is interested in the effects of eating behaviors on body weight. A group of 300 college students is selected to participate in a research study. This group of students is called:
  - (A) The independent variable
  - (B) The population
  - (C) The sample
  - (D) The dependent variable

6. Which is not a characteristic of quasi-experimental design?
  - (A) Experimental and control groups may be nonequivalent
  - (B) Less powerful than true-experimental design
  - (C) Limited confidence in the internal validity of the study
  - (D) Random assignment of units to comparison groups
  
7. Which research design is more appropriate to find out disease prevalence in a community?
  - (A) Case control study
  - (B) Cohort study
  - (C) Cross-sectional study
  - (D) Experimental study
  
8. Which of the following is called non-probability sampling?
  - (A) Quota sampling
  - (B) Cluster sampling
  - (C) Stratified sampling
  - (D) Simple random sampling
  
9. Which of the following statements about theoretical and conceptual framework is wrong?
  - (A) Both theoretical and conceptual framework suggest the direction of the research hypothesis
  - (B) Conceptual framework is based on a single theory and the proposition of theory are used
  - (C) Conceptual framework may serve as basis for future theoretical framework
  - (D) Conceptual framework not as developed as theoretical framework because of lack of research
  
10. Which of the following statements about data collect method is wrong?
  - (A) Self-report questionnaire is less expensive and less time consumption
  - (B) Interview maintains subject's sense of anonymity and collect in-depth data
  - (C) Biophysiologic data can be collected by vivo and vitro measures
  - (D) Ecologic momentary assessments collect data that close in time to experience
  
11. Which of the following statements about constant error and random error is wrong?
  - (A) Random error varies from one measurement to the next
  - (B) Constant error affects the measurement of the variable in the same way
  - (C) Random error underrepresents the content and affects the validity
  - (D) Constant error influences the ability to arrive at true differences among subjects

12. The process of matching would allow the research to:
- (A) Match of factors in doubt
  - (B) Evaluate the matched variable(s)
  - (C) Include the matched variable(s) as confounding variable(s) in analysis
  - (D) Avoid other influence on independent variable(s)
13. The degree to which an instrument measures what it is supposed to be measuring is its:
- (A) Validity
  - (B) Internal consistency
  - (C) Sensitivity
  - (D) Equivalence
14. Which of the following statements about study design is wrong?
- (A) Cohort study measures changes in variable(s) over time in the same subjects
  - (B) Cross-sectional study is hard to establish causal link between variables
  - (C) Case-control study is good for rare events/diseases
  - (D) Surveillance study describes detailed information of an unusual case or disease
15. Which refers to the extent to which the results of the study can be generalized to the larger population?
- (A) Internal validity
  - (B) Predictive validity
  - (C) External validity
  - (D) Content validity

二、請說明採用「隨機抽樣」與「隨機分配」之目的分別為何？（10%）

三、請根據下列文章摘要回答下列三個問題（共 20%）

1. 此篇文章屬於何種研究設計？（2%）
2. 此研究之自變項、依變項與中介變項分別為何？（8%）
3. 請說明此篇文章主要的結果為何？（10%，除專有名詞外，請以中文描述）

**ABSTRACT**

The study aim was to examine the relationship between socioeconomic status (SES) and dietary behaviors through psychological and environmental mediators among African Americans with overweight or obesity. We conducted a cross-sectional study in 225 African American men and women. Data were analyzed using structural equation modeling with bootstrapping procedures. In the multiple mediation model, SES had a significant indirect effect on dietary behaviors through psychological and environmental factors ( $\beta = -.27$ ;  $p = .01$ ; 95% confidence interval [CI] =  $-0.59$  to  $-0.10$ ), but it had no significant direct effect on dietary behaviors ( $\beta = .06$ ;  $p = .70$ ; 95% CI =  $-0.21$ – $0.39$ ). SES had significant direct effects on psychological ( $\beta = .52$ ;  $p = .01$ ; 95% CI =  $0.31$ – $0.77$ ) and environmental factors ( $\beta = -.40$ ;  $p = .03$ ; 95% CI =  $-0.53$  to  $-0.25$ ). Psychological ( $\beta = -.31$ ;  $p = .02$ ; 95% CI =  $-0.68$  to  $-0.04$ ) and environmental factors ( $\beta = .26$ ;  $p = .01$ ; 95% CI =  $0.04$ – $0.47$ ) also showed significant direct effects on dietary behaviors. Thus, psychological and environmental factors mediated the relationship between SES and dietary behaviors in African Americans with overweight or obesity. Interventions that enhance psychological and environmental factors such as self-efficacy, perceived barriers to healthy eating, health perceptions, and physical and social environments may improve dietary behaviors among socioeconomically disadvantaged African Americans.

**Reference:** Jung, S., Whittemore, R., Jeon, S., & Nam, S. (2021). Mediating roles of psychological factors and physical and social environments between socioeconomic status and dietary behaviors among African Americans with overweight or obesity. *Research in Nursing & Health*, 44(3), 513-524.

四、下表呈現 Jordan 高中生於 COVID-19 期間，影響其憂鬱徵狀之相關因子的迴歸分析結果，請根據表中數據說明解釋研究結果 (10%)

**Table 3.** Regressing Sociodemographic and Personal Characteristics of Senior High School Students on Depression.

Model		B	SE	$\beta$	t	p Value
Depression	Age	1.40	0.68	.10	2.06	.040
	Gender	2.97	0.69	.21	4.32	<.001
	Type of school	1.29	0.96	.07	1.34	.180
	GPA	0.43	0.37	.06	1.19	.237
	Working status	3.31	2.00	.08	1.66	.099
	# Family members	0.23	0.15	.08	1.51	.133
	Father's level of education	-1.83	0.47	-.21	-3.85	<.001
	Mother's level of education	1.36	0.49	.16	2.80	.005
	Difficulties in online education	-3.21	0.77	-.21	-4.19	<.001
	Family history in mental illness	2.88	2.67	.052	1.078	.282
	Father's work	0.63	0.42	.075	1.498	.135
		$R^2 = .178$		$F(11, 384) = 7.23, p \leq .001$		

Note.  $N = 384$ .

**Reference:** AlAzzam, M., Abuhammad, S., Abdalrahim, A., & Hamdan-Mansour, A. M. (2021). Predictors of depression and anxiety among senior high school students during COVID-19 pandemic: The context of home quarantine and online education. *The Journal of School Nursing*, 1059840520988548.