

※ 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 每題五分，共五題 25%**

1. The building blocks of a theory are:
  - a. Concepts
  - b. Empirical testing
  - c. Hypotheses
  - d. Models
  
2. The independent variable in the research question, "What is the effect of atmospheric humidity on heart and respiration rate of NICU patients at National Cheng Kung University Hospital?" is:
  - a. National Cheng Kung University Hospital
  - b. atmospheric humidity
  - c. NICU patients
  - d. heart and respiration rate
  
3. The purpose of an operational definition is to:
  - a. Assign numerical values to variables
  - b. Specify how a variable will be defined and measured
  - c. State the expected relationships among the variables under investigation
  - d. Designate the overall plan by which the research will be conducted
  
4. A study that followed users and nonusers of oral contraceptives over a 20-year period to find long-term effects would be called a:
  - a. Predictive study
  - b. Retrospective study
  - c. Prospective study
  - d. Descriptive correlational study
  
5. Discussion of the extent to which a measuring instrument gives consistent results over time relates to the instrument's:
  - a. Reliability

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- b. Validity
- c. Sensitivity
- d. Efficiency

二、請仔細閱讀下列研究論文之英文摘要，請列出該文章之研究族群 (5%)、研究設計 (10%)、此研究的結果變項 (10%)、測量時間及次數 (5%)、主要的研究結果 (10%)、以及請用 APA 格式書寫該文章的出處 (10%): 50%

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**Therapeutic play intervention on children's perioperative anxiety, negative emotional manifestation and postoperative pain: a randomized controlled trial.**

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**AIM:** To examine if therapeutic play intervention could reduce perioperative anxiety, negative emotional manifestation and postoperative pain in children undergoing inpatient elective surgery.

**BACKGROUND:** Children undergoing surgery commonly experience anxiety and postoperative pain and exhibit negative emotional manifestations.

Previous studies have shown inconsistent conclusions about the influence of therapeutic play on children's perioperative anxiety, negative emotional manifestation and postoperative pain.

**DESIGN:** A randomized controlled trial was used.

**METHODS:** Suitable children were recruited from November 2011-August 2013. They were randomized to receive either routine care (control group, n = 47) or a 1-hour therapeutic play intervention (experimental group, n = 48). Children's state anxiety, negative emotional manifestations and postoperative pain were measured at baseline, on the day of surgery and around 24 hours after surgery. Repeated measures analysis of covariance (ancova) and

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univariate anova adjusting for all possible confounding factors were used in the data analysis.

**RESULTS:** The time effect of state anxiety was significant, but no group and interaction (group x time) effects between the control and experimental groups were found. Compared with the control group, children in the experimental group demonstrated significantly lower scores of negative emotional manifestations prior to anaesthesia induction and postoperative pain.

**CONCLUSIONS:** Therapeutic play intervention is effective in reducing negative emotional manifestations before anaesthesia induction and in reducing postoperative pain in children undergoing inpatient elective surgery. These results suggest that it is useful to give children with therapeutic play intervention prior to inpatient elective surgery.

三、請仔細閱讀 Table 3，請簡要敘述該表格的結果：25%

**Table 3** Comparisons of children's negative emotional manifestation and postoperative pain intensity between groups ( $n = 95$ ).

Variable	Experimental group ( $n = 48$ )	Control group ( $n = 47$ )	F	P value
	mean (SD)	mean (SD)		
CEMS scores	6.53 (1.91)	8.66 (3.30)	13.452	<0.001**
Postoperative pain	2.11 (2.02)	3.60 (2.42)	10.536	0.002**

\*\* $P < 0.01$ .

CEMS, Children Emotional Manifestation Scale; Univariate analysis of covariance adjusted for gender, age, ethnicity, nationality, previous hospitalization and types of surgery. For the postoperative pain, the univariate analysis of covariance also adjusted for body weight, duration of operation, length of hospitalization and consumption of pain medication.