

# 國立臺北教育大學 104 學年度碩士班招生入學考試 心理與諮商學系碩士班 測驗與統計(含研究法) 科試題

## 一、解釋名詞(30 分)

以下是心理測驗三種常見的基本概念，請解釋名詞並舉例說明在測驗編製或應用時的功能或意義。

- (一) 測量標準誤(standard error of measurement)
- (二) 鑑別度(discrimination)
- (三) 探索性因素分析(exploratory factor analysis)

## 二、下列是摘錄自研究論文的摘要與依變項測量的部分內容，請概述依變項測量的方式，並就研究與測量的合理性，評析其優缺點。(20 分)

### **Turning Fantasies about Positive and Negative Futures into Self-Improvement Goals**

#### **Abstract**

*Contrasting fantasies about the future with reflections on reality that impedes fantasy realization creates a tight link between expectations of success and forming commitments to self-improvement goals. This effect applies to both fantasies about a positive future contrasted with impeding negative reality as well as fantasies about a negative future contrasted with impeding positive reality. In Study 1, with 63 student participants, contrasting positive fantasies about benefiting from a vocational training with negative reflections on reality impeding such benefits led to expectancy-dependent willingness to invest in the training, more so than indulging in the positive future and than dwelling on the negative reality..... Findings are discussed in terms of how mental contrasting facilitates self-improvement and personal development by making people form expectancy-dependent goal commitments to approach positively-perceived as well as negatively-perceived futures.*

### Dependent Variables

One week after the experiment, participants were asked to come in again and to fill out a short follow-up questionnaire that contained the dependent variables. To measure interest in the program we asked, “Would you be interested in joining the self-efficacy training?” The seven-point response scale ranged from 1 (*not at all*) to 7 (*very much*). As we had asked the same question at the very beginning of the experiment (before measuring expectations and incentive value), we assessed change of interest by treating the scores before the manipulation as a covariate.

Willingness to exert effort was assessed by three items pertaining to effort, money, and travel time participants would be willing to spend in order to participate in one of these courses. The first question measured effort: “There will be several training courses that last eight weeks but vary in scale. Please indicate by circling yes or no if you want to join one of these courses. If you do, please mark how many hours per week you would like to invest.” The response scale ranged from 1 hr to 7 hr per week. For participants who did not want to enroll in one of the courses, we filled in 0 hr. The second question measured the amount of money participants were willing to invest in the training program: “Some of the training courses can be offered at lower prices because they are taught by adjunct teachers. How much money would you be willing to pay for participation in one of the courses?” The eight-point scale ranged from zero Euro to equal to or more than 125 Euros. The third question measured the time people would be willing to travel in order to participate in one of these courses: “The number of people who are interested decides at how many places we will offer the training course. How far would you be willing to travel in order to participate in a course that takes place once a week?” Participants indicated the time they would be willing to travel in minutes. We z-transformed the response to each question as they had different response scales. Internal consistency was adequate (Cronbach’s  $\alpha = .76$ ).

To assess if participants were thinking and feeling favorably towards the training program, we asked them to answer the following question in writing: “What would you tell a person who may be interested in enrolling in the program about the SET training?” Two independent raters content-analyzed participants’ written answers by rating the favorableness of the arguments regarding the training program. The five-point scale ranged from 1 (*very unfavorable arguments*) to 5 (*very favorable arguments*). Inter-rater reliability was high ( $r = .86$ ). For example, one participant wrote, “The program will teach you how to concentrate and how to work well; it will motivate you to act assertively and independently.” Another participant more pessimistic about the beneficial effects of the program wrote, “It will take too much time until the benefits of the program will unfold, and teaching happens in groups; who knows if it fits everyone.”

資料出處 Oettingen G, Mayer D, Thorpe J, Janetzke H, Lorenz S. (2005). Turning Fantasies about Positive and Negative Futures into Self-Improvement Goals. *Motivation & Emotion*, 29(4), 236-267.

### 三、研究情境題

#### Abstract

This study explores factors that influence problem-solving coping style across cultures. There was no significant difference in applying problem solving across U.S., Taiwanese, and Chinese samples. The effective predictors of problem solving in the U.S. and Chinese samples were self-efficacy and trait resilience, respectively. In the Taiwanese sample, predictors were self efficacy and trait resilience. Trait resilience was found to mediate the effect of self-efficacy on problem solving in the Taiwanese and Chinese samples. Practical implications are discussed. Findings imply that clinicians can pay close attention to the effects of globalization and localization to understand their client's issues and develop culturally sensitive treatments.

**Keywords:** problem-solving coping style, trait resilience, self-efficacy

#### Definition:

**Coping Style**--The problem-solving coping style is a coping style characterized by managing or altering the problem or Stressor. The coping style influences people to rearrange things around them, set clear goals, make careful action plans, and try different approaches to deal with a stressful situation (Amirkhan, 1990).

**Self-Efficacy**--Self-efficacy is task related and refers to people's perceptions of their capacity for performing in a certain situation and ability to achieve desired goals (VandenBos, 2007). This perception motivates people to apply strategies to solve problems, promoting problem-solving efficiency (Hoffman & Schraw, 2009).

**Trait Resilience**--Trait resilience reflects an individual's ability to adapt well to stressful situations (Ahern, Kiehl, Sole, & Byers, 2006; Wagnild & Young, 1993). The trait is also task oriented. Resilient people (those who have higher levels of trait resilience) tend to hold a positive attitude toward life challenges (Li & Nishikawa, 2012) and take actions to solve problems (Li & Yang, 2009).

**Secure Attachment**—Secure attachment, compared with trait resilience and self-efficacy, is more relationship oriented. Secure attachment is a positive cognitive schema associated with one's belief that others are generally accepting and responsive (VandenBos, 2007).

#### Participants:

We recruited 177, 179, and 166 college students living in the United States, Taiwan, and China, respectively. All three samples were convenience samples.

#### Instrument:

*Resilience Scale (Wagnild & Young, 1993)*. The RS is a 7-point Likert-type scale that contains 25 items. Wagnild and Young (1993) reported that the scale's internal consistency ranged from .76 to .91, and the test-retest reliability of the RS was between .67 and .84. In addition, they demonstrated concurrent validity of the scale.

請回答以下問題(以中文撰寫) (50分)

- (一) 仔細閱讀摘要後，請分別描述台灣樣本、中國樣本以及美國樣本的研究結果。(6分)
- (二) 請你給這篇研究作品一個適合的題目。(6分)
- (三) 作者修正理論模式後，得到資料與模式間的適配。請問在自由度為2的情況下，卡方考驗統計數可能為多少?(3分)  
請推估其顯著性大概為多少?(3分)
- (四) 摘要指出「There was no significant difference in applying problem solving across U.S., Taiwanese, and Chinese samples.」請寫出恰當的資料分析方式(2分)，請估計一個合理的考驗統計數據與準確的自由度(2分)、以及合理的顯著性數據(2分)，最後請畫出此考驗統計數的分配並塗黑顯著性的位置與適當的大小(2分)。
- (五) 根據摘要所描述「Trait resilience was found to mediate the effect of self-efficacy on problem solving in the Taiwanese and Chinese samples.」請你畫出這幾個變項所形成的關係(研究架構圖)。(6分)
- (六) 請解釋 mediate 的意涵，其與 moderate 有何不同?(3分)  
請根據上題之變項關係，改變其中的 mediator，替換成 moderator，作為例子說明之。(3分)
- (七) 關於 participants，作者提及「We recruited 177, 179, and 166 college students living in the United States, Taiwan, and China, respectively. All three samples were convenience samples.」請問何為 convenience sample?(3分)  
請解釋何以 convenience sample 可以代表母群。(3分)
- (八) 關於 Resilience Scale 量表，如果把7點量表改為常用的5點量表，請估計 internal consistency 的變化，以及 test-retest reliability 的變化，為何有此變化(3分)?在規劃量表點數時，你的建議是甚麼(3分)?