

壹、閱讀下述文章，然後用中文回答問題。（須標示題號並依序作答，不依序作答要扣分）（25 分）

**A Study Summary by Carrie Carpenter & Donna Howard**

**Drug use resistance self-efficacy (RSE) refers to one's beliefs about her or his capability to resist drug offers. Previous research suggests that RSE beliefs play an important role in preventing, delaying and curbing drug use among adolescents. Despite the potential impact of RSE beliefs on drug use, few carefully tested instruments are currently available to assess this construct among young adolescents. The purpose of this research was to develop and evaluate the underlying structure and initial psychometric properties of a newly developed instrument, the Drug Use Resistance Self-Efficacy (DURSE) scale.**

**Development and testing of the instrument occurred in four research phases: (1) a literature review; (2) expert review (n=10) and adolescent focus groups (n=15); (3) pilot testing of preliminary items (n=46); and (4) final scale administration (n=283) to examine main research questions (n=283). Exploratory factor analysis was used to test the factor structure of the DURSE scale and examine whether the DURSE scale captured aspects of RSE beliefs that differed from existing measures. Initial psychometric properties of the DURSE scale were evaluated.**

**Factor analysis demonstrated that many of the DURSE items loaded on two drug-specific dimensions of RSE beliefs though justification for separate subscales was not warranted. DURSE items measured a unique construct when compared with related scales. Initial psychometric properties of the DURSE scale, including internal consistency reliability and construct validity, were satisfactory. As predicted, students who reported higher RSE beliefs reported significantly higher academic grades ( $r = .147, p < .05$ ) and lower self-reported intentions to use drugs ( $r = -.329, p < .01$ ). Higher RSE beliefs were negatively associated with reported family drug use ( $r = -.060$ ) though the relationship was not significant. DURSE scores were significantly correlated with scores on the Social Desirability scale ( $r = .197, p < .01$ ) indicating that students may have answered certain DURSE items in a socially desirable way.**

系所組：心理輔導學系碩士班

日期節次：101 年 3 月 17 日第 2 節 11:00~12:30

科目：輔導研究法(含心理測驗與統計)

The initial development of the DURSE instrument offers a promising first step in the scale development process. It is left to future research to refine the DURSE scale and establish its factor structure and psychometric properties in a larger, more representative sample.

1. 本研究之問題背景或動機為何？(2分)
2. 本研究之主要目的為何？(2分)
3. 本研究之研究方法是什麼？(2分)
4. 本研究建立了何種信度？結果如何？(2分)
5. 本研究在效度的建立方面使用了哪些統計方法？(2分)
6. 本研究效度考驗結果為何？請分項陳述。(6分)
7. 根據本研究結果，作者提出什麼建議？(2分)
8. 本研究的題目如何訂定才是適切的？(4分)
9. 你對本研究的評論為何？(3分)

貳、1.何謂樣本平均數之抽樣分配的標準誤？(3分) 2.其公式為何？(3分) 3.標準誤的大小與推論統計之關係為何？(2分) 4.由此公式可知標準誤與抽樣的樣本數有何關係？(須標示題號並依序作答，不依序作答要扣分)(2分)

參、某學者想根據智力(X) 預測學業成績(Y)，求得積差相關係數  $r = .8$ 。Y 的變異數(SS<sub>t</sub>)為 20，1.試問回歸變異數(SS<sub>reg</sub>)=?，2.回歸變異數占 Y 的變異數的百分比=? 3.預測誤差變異數(SS<sub>res</sub>)=? 4.預測誤差變異數占 Y 的變異數的百分比=? 5.疏離係數 (coefficient of alienation) = ? (須標題號並依序作答，不依序作答要扣分)(25分)

肆、1. 何謂不偏估計變異數？(3分) 2.其公式為何？(3分) 3 在進行推論統計時，何時用到它？(2分) 4. 承第 3 題，使用它的理由為何？(2分)

伍、1. 何謂自由度(df)？(2分) 2.在統計中何時會用到自由度？(2分) 3.舉例說明什麼情形時  $df = N - 1$ ？(3分) 4.什麼情形時  $df = N - 2$ ？(3分)

陸、比較李克特量尺(Likert scale) 與賽斯通量尺(Thurstone scale)的主要差異。(10分)

柒、為瞭解學生的適應而實施語句完成測驗(Sentence completion test)，請問其原理為何？測驗結果如何分析與應用？(10分)