

**FORM TWO STUDENTS' PERCEPTION OF SCIENCE LABORATORY  
ENVIRONMENT: ITS RELATIONSHIP WITH SCIENCE  
ACHIEVEMENT, ATTITUDE TOWARD SCIENCE  
AND GENDER**

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## **Dedication**

It is with deep sorrow that I dedicate this study in remembrance of my late nephew, Andy Lau, who never had the opportunity to attend any formal education. He had always been my source of inspiration and may God bless his soul always.

### Abstract

The purpose of this study was to investigate the relationship between the students' perception of the science laboratory environment and the dependent variables of science achievement, attitude toward science and gender. The subjects of this study comprised 255 Form 2 students (133 boys and 122 girls) of Sekolah Menengah Hulu Kelang, Selangor. This study utilised the survey method to collect data. The students' perception of the science laboratory was measured by the Science Laboratory Environment Inventory (SLEI), their attitude toward science was assessed by the Attitude toward Science in School Assessment (ATSSA) and their science achievement was assessed by the Science Achievement Test (SAT). The findings showed that there was a significant relationship between the students' perception of the science laboratory environment and: (i) science achievement ( $r = .41, p < .001$ ), and (ii) the attitude toward science ( $r = .40, p < .001$ ). There was no significant difference at  $p < .05$  between the boys' and the girls' overall perception of the science laboratory environment.

## **Persepsi Pelajar Tingkatan Dua terhadap Persekitaran Makmal Sains: Hubungannya dengan Pencapaian Sains, Sikap terhadap Sains dan Jantina**

### **Abstrak**

Tujuan kajian ini adalah untuk menyelidik hubungan antara persepsi pelajar terhadap persekitaran makmal sains dengan pencapaian pelajar, sikap pelajar terhadap sains dan jantina. Subjek kajian ini terdiri daripada 255 orang pelajar (133 pelajar lelaki, 122 pelajar perempuan) dari Sekolah Menengah Hulu Kelang, Selangor. Penyelidikan ini menggunakan kaedah 'survey' untuk mengumpul data. Persepsi pelajar terhadap persekitaran makmal sains diukur dengan Inventori Persekitaran Makmal Sains (SLEI), sikap pelajar terhadap sains dinilai dengan Soal Selidik Sikap (ATSSA) dan pencapaian sains dinilai dengan Ujian Pencapaian Sains (SAT). Dapatan kajian ini menunjukkan bahawa terdapat hubungan yang signifikan antara persepsi pelajar terhadap persekitaran makmal sains dan: (i) pencapaian sains ( $r = .41, p < .001$ ), dan (ii) sikap pelajar terhadap sains ( $r = .40, p < .001$ ). Terdapat perbezaan yang tidak signifikan pada  $p < .05$  antara persepsi pelajar lelaki dan pelajar perempuan terhadap persekitaran makmal sains keseluruhannya.

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