

COMPUTER USAGE AMONG SECONDARY SCHOOL TEACHERS

A thesis submitted to the Graduate School in partial
fulfilment of the requirements for the degree
Master of Science (Management),

by
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ABSTRAK

Tujuan kajian ini adalah untuk meninjau sejauh manakah faktor-faktor demografik mempengaruhi sikap terhadap komputer dan seterusnya mempengaruhi penggunaan komputer di antara 400 orang **guru** sekolah menengah, Daerah Kinta, Perak. Faktor-faktor demografik guru yang dikaji adalah jantina, umur, bangsa, kelulusan akademik, pengkhususan, dan pemilikan komputer. Sikap terhadap komputer ditentukan melalui tiga skala, iaitu kekhawatiran, keyakinan and kesukaan terhadap komputer. Soalselidik Loyd dan Gressard digunakan untuk mengukur sikap terhadap komputer di kalangan guru. Perhubungan di antara faktor-faktor demografik, sikap terhadap komputer dan penggunaan komputer dianalisiskan dengan ujian-t, ANOVA dan analisis korelasi.

Keputusan kajian ini menunjukkan bahawa terdapat korelasi positif yang agak kuat ($r = 0.632$) di antara sikap terhadap komputer dan penggunaan komputer di antara guru. Didapati bahawa wujud satu perbezaan yang signifikan di antara sikap terhadap komputer dengan jantina guru pada aras keertian 5% ($\alpha = 0.05$). Guru lelaki mempunyai skor purata yang lebih tinggi dalam sikap terhadap komputer berbandingkan skor purata guru perempuan. Walaupun tidak ada perbezaan yang signifikan antara guru lelaki dan guru perempuan dalam penggunaan komputer, tetapi tahap penggunaan komputer di kalangan guru pada keseluruhannya masih agak rendah. Kajian ini juga menunjukkan tidak ada perbezaan yang signifikan di antara bangsa dan pengkhususan guru dengan sikap terhadap komputer dan penggunaan komputer. Sebaliknya, terdapat perbezaan yang signifikan di antara umur guru dan penggunaan komputer. Walaupun guru yang lebih tua mempunyai sikap yang positif terhadap komputer, tetapi tahap penggunaan komputer mereka adalah lebih rendah berbanding dengan guru yang muda. Juga terdapat perbezaan yang signifikan di antara pemilik komputer dan bukan pemilik komputer dalam penggunaan komputer. Pemilik komputer selain dari mempunyai sikap yang lebih positif terhadap komputer, juga mempunyai tahap penggunaan komputer yang lebih tinggi daripada bukan pemilik komputer. Akhirnya didapati guru yang telah menghadiri kursus komputer mempunyai sikap yang lebih positif terhadap komputer dan lebih kerap menggunakan komputer daripada mereka yang tidak pernah menghadiri kursus komputer.

ABSTRACT

The purpose of this study is to investigate the influence of demographic factors on attitude towards computers and in turn how these would affect computer usage among 400 secondary school teachers in Kinta District of Perak. The demographic factors investigated are gender, age, race, academic qualifications, subject major and ownership of computer. Attitude towards computers is determined through three subscales; computer anxiety, confidence and liking. The questionnaire developed by Loyd and Gressard is used to measure teachers' attitude towards computers. The relationship between demographic factors, attitude and computer usage are analysed using the t-test, ANOVA and correlation analysis.

The results show that there is a positive correlation ($r = 0.632$) between attitude towards computers and computer usage among the teachers. There is a significant difference in attitude towards computer at 0.05 level of significance ($a = 0.05$) between the male and the female teachers. The male teachers have a higher mean score on attitude towards computer than their female counterparts. There is no significant difference between male and female teachers in computer usage, but the overall level of computer usage among the teachers is still low. The study also shows that there are no significant difference between teachers' race and subject major with attitude towards computer and computer usage. However, there are significant differences between the different age groups of teachers, academic qualifications of teachers and computer usage. Although, older teachers have a positive attitude towards computers, their level of computer usage is lower than the younger teachers. There is also a significant difference between owner and non-owner in computer usage. Owners of computers have more positive attitude towards computer and a higher level of computer usage than non-owners. Furthermore, those teachers who have attended computer courses show a more positive attitude and use computers more often than those without attending any computer courses.

DEDICATION

The writer dedicates this study to his wife, Lee Gaik Wuat and their children, Chai Yuin and Chuin Chiat, who made tremendous sacrifices which enabled him to pursue his educational goal.

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CHAPTER ONE

INTRODUCTION

The use of computers as classroom instructional techniques and administration tools in schools is no longer a strange sight. In the past few years, educational use of computers has shown a remarkable increase in many countries. In Malaysia, computers have become more commonly used in education and administration and are becoming increasingly important.

Computers made their appearance in schools as early as 1960's. Their initial appearance was not easily accepted by the teachers and school administrators due to difficulties in operation, size and cost. It was too expensive and beyond the financial capability of the schools to purchase it. In the late 1970's, with the invention of microprocessors, the computers have became smaller and cheaper. Later, the introduction of personal computer (PC) had made computers a more familiar sight at work and at home and they were on their way to becoming a part of the education field.

However, as is often the case, the increased use of technology does not necessarily justify itself on sound pedagogical grounds. Using computers well is not merely a matter of obtaining suitable hardware and software, but also of designing an environment to maximize the benefits that computers may bring to education. Like any other technological innovation, computers need to be

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