SCHOOL RISK MANAGEMENT PRACTICE:
A PILOT STUDY

A Thesis Submitted to the Graduate School of Universiti Utara Malaysia
in Partial Fulfillment of the Requirements for the Degree of
Master of Science (Management)

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ABSTRAK

Tujuan kajian ini ialah untuk menyiasat perhubungan di antara pengurusan risiko dan amalan-amalan keselamatan yang relevan oleh 28 orang pentadbir sekolah rendah dan menengah di bandar, Sungai Siput (U), Perak.

Faktor-faktor yang ditimbangkan dalam kajian ini adalah pembolehubah bebas: Pengenalan Risiko, Penilaian Risiko, dan Pengawalan Risiko, dan sifat-sifat peribadi pentadbir sekolah: jantina, umur, kategori perkhidmatan (paras pendidikan), tahun dalam perkhidmatan dan bangsa.

Suatu soalselidik telah dicipta untuk mengukur amalan keselamatan relevan oleh pentadbir sekolah dan pengukurannya dikenali sebagai Amalan Pengurusan Risiko. Kajian ini telah menunjukkan bahawa 64.28 peratus pentadbir sekolah sentiasa mengamalkan pengurusan risiko di sekolah masing-masing.

Hasil kajian ini menunjukkan bahawa Pengenalan Risiko, Penilaian Risiko, dan Pengawalan Risiko adalah berhubung secara signifikan dengan Amalan Pengurusan Risiko. Sifat-sifat peribadi pentadbir sekolah tidak menunjukkan sokongan terhadap hubungkait signifikan dengan Amalan Pengurusan Risiko.
ABSTRACT

The purpose of this study was to investigate the relationship between risk management and relevant safety practices of school administrators of 28 primary and secondary schools in the town of Sungai Siput (U), Perak.

The factors considered in this study were the independent variables: Risk Identification, Risk Assessment and Risk Control and the personal characteristics of the school administrators: gender, age, service category (educational level), years of service and race.

A questionnaire was developed to measure the relevant safety practices of the school administrator and its measurement is known as Risk Management Practice. The study conducted show that 64.28 percent of the school administrators carried out regularly risk management practices in their respective schools.

The findings of this study show that Risk Identification, Risk Assessment and Risk Control are significantly related to Risk Management Practice. The personal characteristics of the school administrators do not appear to be significantly related to Risk Management Practice.
I am indebted to my supervisor, Assoc. Prof. Dr. Adel Yaseen, for his invaluable insight, professional advice, encouragement, scholarly guidance and easy availability in the completion of the thesis; and to Mr. Nasruddin Zainudin for his commitment in reading the thesis.

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CHAPTER 1

1.0 Introduction

This chapter describes the background and purpose of the study: research problems, questions and hypotheses and significance of the study.

1.1 Background of the study

A working definition of Risk Management given by Gordon et al, (1994) of The Chartered Institute of Insurance, London is as follows:

The identification, analysis and economic control of those risks which can threaten the assets or earning capacity of an enterprise.

Risk Management is a management area in which many managers, principals and headmasters are unaware of i.e., possibly due to the limited knowledge of what it is or through hearsay only.

As educational institutions, be it a primary or secondary school, we are more likely than any type of organization to be involved in a major fire and we have
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BIBLIOGRAPHY


*SUNDAY MAIL*  
5 March 1995  
19 August 1995  
24 September 1995

**The New Straits Times**
- 4 March 1995
- 17 August 1995
- 19 August 1995

**THE STAR**
- 31 May 1995
- 2 June 1995
- 11 August 1995
- 16 August 1995
- 17 August 1995
- 19 August 1995
- 25 September 1995
- 30 September 1995
- 20 October 1995
- 24 October 1995
- 27 October 1995
- 31 October 1995
- 1 November 1995
- 5 December 1995
- 23 December 1995
- 24 January 1996
- 29 January 1996
- 4 February 1996


