Thesis Titel

Factors Affecting Accidents by Bus-Drivers in Bus Operation Zone 4,

Bangkok Mass Transit

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Master of Science (Public Health)

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## Abstract

The purpose of the research was to study factors affecting accidents by bus-drivers in the bus operation zone 4, Bangkok Mass Transit. The cross-sectional survey was applied to this study by interviewing one hundred and five bus drivers operating in zone 4, during January 5 to March 15, 1993. Accident record forms and questionnares were used for data collection. The chi-square test and discriminant statistical analysis were applied for data analysis. Thirty-eight factors were included for this study.

The result of this research revealed that there were ten factors identified by chisquare test, associated with accidents. The factors were the driver's attitude toward bus driving
occupation, driver's attitude toward bus driving, the driver's accident experience, the
inspection of specific equipment and mechanisms prior to driving (the head lights, the brake
lights, the rear-view mirror, the horn, the transmission and the clutch). Futhermore, it was
found that accident occurrence was significantly affected by eighteen discriminating variables.
These variables, listed in order from the most to the least important, were the driving attitude
of the bus driver, the inspection of rear lights condition prior to driving, the driver's
accident experience, inspection of clutch condition prior to driving, the driving experience of

the bus driver, the inspection of transmission condition prior to driving, the inspection of general vehicle condition prior to driving, the inspection of turning lights condition prior to driving, the external locus of control (external influences on the bus driver, e.g., police, boss, other drivers), inspection of head lights condition prior to driving, the physical condition of the driver (energy level), the inspection of rear-view mirror condition prior to driving, the chance locus of control (unexpected events), the level of driver's urge to hurry, the driver's experience of injury from accidents, the inspection of horn condition prior to driving, the driver's feeling of hunger and the internus locus of control (driver's self control). A discriminant fuction measured 79.05 percent of corrected classification.

The results of the research indicated that a health education programe should be provided to these bus drivers and the study should be extended to other categories of drivers.