THESIS INFORMATION

INTRODUCTION

Thesis title:	**Building a model to evaluate safe driving behaviour for two-wheeled vehicle riders - Case study in Phu Yen Province.**
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ABSTRACT

Phu Yen is a province on the south-central coast of Vietnam, known for having a high number of traffic accident casualties compared to other regions and cities. Notably, most traffic accidents involve two-wheeled motorcyclists aged between 15 and 23. This age group accounted for 47.6% of the total fatalities from traffic accidents, on average, over the years 2018 and the first half of 2019. Common violations made by these motorcyclists include speeding, driving in the wrong direction, failing to observe traffic, overtaking improperly, and not yielding the right of way.

Furthermore, traffic accidents predominantly occur in rural and border areas, with men being involved in accidents more frequently than women. High school students also tend to commit more traffic violations than university students, and driving experience, such as daily travel distance, correlates with accident rates.

To identify the underlying causes of driving behaviors that lead to accidents and to explore differences in driving attitudes and behaviors based on various factors (e.g., region, gender, education level, daily travel distance, and accident experience), a study was conducted involving 835 students. The study was divided into two phases.

Study 1:

The first phase surveyed 300 students using a questionnaire with 73 questions. The aim was to examine differences in driving attitudes and behaviors concerning factors such as region (rural, border, urban), gender, education level, and daily travel distance. The sample consisted of students aged 15 to 23 who used motorcycles, mopeds, electric bicycles, and bicycles. Statistical analysis revealed significant differences in driving behaviors across regions, demographic factors, and travel distances.

Additionally, a handbook on safe driving for two-wheeled vehicles was created, using real traffic accident scenes involving young drivers. After attending a safe driving instruction program, participants showed improvements in their behavior, with significant reductions in common violations. Specifically, speeding violations decreased by 11.7%, wrong-direction violations by 11.4%, failure to observe by 14%, turning violations by 13.5%, improper overtaking by 13.1%, and failure to yield by 12.9%.

The study also found that collision characteristics influenced the content of traffic accident reports, while weather conditions affected young drivers' behavior. However, neither collision nor weather conditions affected the accuracy of these reports.

Study 2:

The second phase focused on the causal relationship between personality traits (such as anxiety, sensation-seeking, anger, altruism, and normlessness) and accident-prone driving behaviors among adolescents in Phu Yen province. The study also examined the independent effects of personality traits and potential risk-reducing factors (such as risk perception, attitudes toward traffic safety, subjective norms, and perceived behavioral control) based on the Theory of Planned Behavior (TPB) concerning accident experience.

The sample included 535 adolescents aged 15 to 17, in grades 10 to 12, from three high schools in Phu Yen province. Results indicated that personality traits had both direct and indirect impacts on risky driving behaviors, mediated by other potential risk factors. Furthermore, structural differences were identified between personality traits and driving behaviors based on whether the participants had been involved in traffic accidents.

Conclusion:

The findings of this research are of practical significance for relevant authorities, providing a comprehensive overview of current traffic participation among minors. The insights gained from the study can inform targeted educational programs and awareness campaigns aimed at addressing negative personality traits that influence dangerous driving behaviors, both presently and in the future.

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