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**THE RELATIONSHIP BETWEEN SAFETY BEHAVIOUR AND SAFETY AWARENESS TOWARDS COMMUTING ACCIDENT AMONG EMPLOYEES IN ONE OF GOVERNMENT-LINKED COMPANIES**

**<sup>1</sup>Niu Soon Yen, <sup>2</sup>Amirul Afizan Mohd Bidin, <sup>3</sup>Rathiga Arumugam, & <sup>4</sup>Siti Noorjannah Abd Halim**

<sup>1,2&3</sup>Master of Science Student, Occupational Safety and Health Management Program,

<sup>4</sup>School of Business Management, Universiti Utara Malaysia, Malaysia

*<sup>1</sup>Corresponding author: [soonyen.niu@gmail.com](mailto:soonyen.niu@gmail.com)*

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**ABSTRACT**

Road safety has been raised as a critical problem among Malaysian employees. Safety awareness had influenced employee safety behaviour directly and indirectly. This study aimed to access the relationship between safety behaviour and safety awareness towards commuting accidents among one of Government-link Companies' (GLC) employees. The hypothesis for this study were developed based on research questions and objectives to express the relationship between safety behaviour (safety participation and safety compliance) and safety awareness (safety knowledge and safety motivation). A self-administrative questionnaire was used for data collection which involved 160 employees from one of the GLCs in Kuala Lumpur. Data collected were analysed using Statistical Package for the Social Science (SPSS) Version 25.0 specifically for descriptive and inferential analysis. The regression analysis revealed that safety participation has a positive significant relationship towards safety knowledge and safety motivation. Thus, it is important to conduct more campaigns and awareness programmes to cultivate road safety among employees. Employees also should be given training related to road safety to reduce commuting accident. Comprehensively, this study may provide guidance on enforcement of strict traffic rules and procedures to reduce accident rates in Malaysia.

**Keywords:** safety behaviour, safety participation, safety compliance, safety awareness, safety knowledge and safety motivation.

## **INTRODUCTION**

Every day, thousands of road traffic accidents occur across the world. Premature deaths, hospitalizations, illnesses, and social damages are all common outcomes of road traffic accidents. Due to the absence of high-quality knowledge in the health and related industries, the issue remains hidden and unacknowledged (Sahani et al., 2024). However, with the consistently expanding number of vehicles on road, have resulting in a larger number of road traffic accidents. Due to their mind-boggling individual, social, and financial consequences for the lives of individuals involved, road traffic accidents have become a massive problem of modern society. A road accident is widely accepted as the main cause of death worldwide, and Malaysia is no exception. According to the World Health Organization (WHO), road traffic deaths will become the fifth major cause of death by 2030. Every year, 20 to 50 million people are injured, and road accidents claim the lives of 1.3 million people per year around the world. Human errors contributed to the highest percentage of road accidents, which is 80.6%, accompanied by road condition (13.2%) and vehicle condition (6.2%) (MIROS, 2016). Based on the statistic, around 598,635 road accidents have happened in 2023, and the number of road accidents in Malaysia for the period between 2014 and 2023 were reported to be on the rise every year. In 2014, about 476,196 accident cases have been reported and the figure increased to 598,635 accident cases in year 2023. This numbers indicate an intense alarming situation on road accidents in Malaysia.

## **LITERATURE REVIEW**

The continued sharp rise in road injuries suggests that these losses are certainly impeding international economic and social development, as well as contributing to suffering and hardship among the poor (Mehtar & Agarwal, 2013). Seldomly a case in which a single object or individual is the sole cause of the accident. Accidents can result from a combination of three primary factors which are road user, negligence, and deficiencies in the road environment, and vehicle malfunctions (Mustafa et al., 2023). According to Ahmed Al-Naggar and Al-Jashamy (2010), accidents are often triggered by carelessness, thoughtlessness, and overconfidence rather than ignorance. Additional factors that contribute to the rise in road traffic accidents in developing countries include the rapid increase in motorization, insufficient road maintenance, poor road condition, and weak law enforcement (Abd Rahman et al., 2023). Other than dangerous driving conduct, bad driving habits and experience, as well as a disregard for road and safety laws, are the obvious problems and undeniable concerns (Lindgren et al., 2008).

In Malaysia, 6,674 people died in road accidents in 2014, accounting for 1.6% of the country's GDP. Since 2002, the number of traffic deaths in Malaysia has risen, with males accounting for 81% of the total. Riders of motorized 2- or 3-wheeled vehicles (59%) were the most affected by road traffic accidents, followed by drivers of 4-wheeled cars and light vehicles (15%), passengers of 4-wheeled cars and light vehicles (11%) and pedestrians (9%) (ASEAN Regional Road Safety Strategy, 2016).

According to Mokhtar et al. (2023), road accidents in Malaysia are projected to cause an annual economic loss of about RM 7 billion due to injury or death, loss of manpower, loss of production, high medical costs, expensive management, property harm, and other factors. In a recent study by Glendon et al. (2014), the adequacy of road safety intervention was assessed by investigating attitudes toward dangerous behavior and risk perception. According to research, when individual attitudes are targeted rather than general

behavior change, differences in attitudes toward road safety and self-detailed driving behavior are discovered (Iversen et al., 2005). Evaluations are important for leveraging the benefits of initiatives by evaluating their effects on road safety, recognizing areas that require further attention, and encouraging resources to put research into practice (Iversen et al., 2005). According to Mahmud (2009), road safety can be improved by utilization of education, engineering, and enforcement.

Social Security Organization (PERKESO) (2020) statistics indicated that commuting accidents are on the rise, nearly doubling in the last decade. Based on the statistics, 89% of the accidents happened while travelling to and from work, with 52.1% occurring on the way to work and 36% occurring on the way back home. A commuting accident has a much greater impact than a workplace accident since commuting accidents often include multiple injuries; additionally, such injuries are more traumatizing and usually worse compared with injuries caused by workplace accidents.

Longer periods of injury, higher medical costs, higher impairment scores, and, more importantly, if the worker loses his or her ability to perform economic and social tasks, their physical and psychosocial abilities can be impacted. According to the PERKESO report, there were 35,243 commuting accidents in 2018. This is a rise of 85% from 2008, when there were 19,041 of such accidents, making it one of Malaysia's most concerning occupational hazards. However, the percentage increase in 2019 and decrease drastically in 2020 to 2021 due to the pandemic COVID-19 quarantine. Table 1 showed the number of commuting accidents in Malaysia from year 2013 to 2022.

**Table 1**

*Commuting Accident Reported (2013 – 2022)*

<b>Year</b>	<b>Number of commuting accidents</b>
2022	33,421
2021	24,714
2020	30,618
2019	37,846
2018	35,243
2017	33,324
2016	31,314
2015	28,579
2014	28,037
2013	27,659

*Source: PERKESO's Annual Report, 2022*

According to Hoe (2014), majority of commuting accident deaths occurred on the way to and from work (88.5%), during morning shifts (68.8%) and includes less than five kilometres of travel (55.0 %). Aside

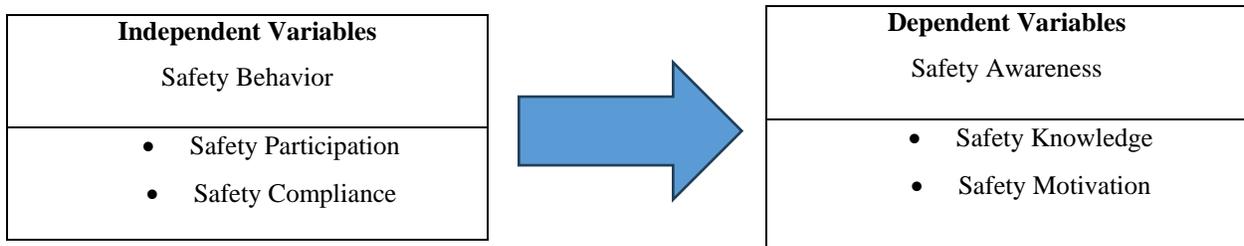
from that, sleep deficiency, which has been attributed to a decrease in neurocognitive activity, is linked to a rise in fatigue-related accidents (Folkard, 2006).

**Research Framework**

The research framework, according to Sekaran (2005), is a conceptual model of how one conjectures the relationships among a few factors that have been distinguished as critical to the issue in research. This study was designed to explore the relationship between safety behaviour and safety awareness towards commuting accidents among employees from one of the GLCs. A comprehensive research framework was developed based on the literature review. The framework of this study consists of two independent variables of safety behaviour where these independent variables would later be tested their relationship on the dependent variable, the safety awareness namely safety knowledge and safety motivation as illustrated in Figure 1.

**Figure 1**

*Research Framework of this Study*



**METHODOLOGY**

**Research Design**

This study utilizes quantitative methods and questionnaires as a medium for data collection. The questionnaires were developed from the adaptation of previous studies on similar topics were safety behaviour as independent variables and safety awareness as dependent variables. This study used questionnaires as an instrument for data collection. The questionnaire consists of demographic profile, safety participation, safety compliance, safety knowledge and safety motivation. The study involved 160 respondents and were selected randomly from the whole population. The main purpose of this study was to determine whether safety behaviour can affect the safety knowledge and motivation towards commuting accidents among employees from one of the GLCs.

According to Sekaran (2005), an independent variable is one that has a positive or negative effect on the dependent variable. It's the point at which the independent variable and the dependent variable are both present, and each unit of shift in the dependent variable increases or decreases the independent variable. To be specific, the independent variable accounts for the difference in the dependent variable. Since the dependent variable was the researcher's primary concern, the researcher's aim was to understand and define it, as well as to clarify and forecast its variability. To put it another way, it's the key variable that lends itself to being investigated as a viable factor. It is possible to find answers or solutions to the problem by

investigating the dependent variable. To execute this, we must first determine and gauge the dependent variable, as well as any other variables that affect it.

## **RESULTS AND DISCUSSIONS**

### **Respondents' Demographic Background**

The respondents' demographic profiles indicated that female respondents were the majority. There were 123 female and 37 male respondents from out of 160 respondents. Female respondents constituted to 76.9% and male respondents constituted to 23.1% of the total 160 respondents. It showed that, the result of the study mostly derived from the female respondents' opinion. Throughout the analysis, the majority respondents involved were Malay who resembled the total of 93.1%, followed by Indian 5% and Chinese 1.2%. The respondents were between 25 to 34 years old which constituted of 58.1% of the respondents. This was followed by respondents age between 35 to 44 years old (18.8%) and 45 to 54 years old (11.3%). In terms of marital status, 107 respondents (66.9%) were married and 48 respondents (30%) were single. Thus, the result showed that most of the respondents who provided feedback in this study were married employees in the organization.

The largest group of respondents were executive officers (50%), followed by operation staff (30.6%), administrative officers (10.6%), senior executives (6.9%) and manager (1.9%). This means that the result of the study was mostly derived from the executive and operation staff's opinion who engaged with the operational work rather than manager who involved more in the management work. Apart from that, respondents also vary in terms of working experience in the current organization. The largest group of respondents have been working for 1 to 4 years which consisted of 33.1% of the total respondents. This was followed by those who had worked between 5 to 9 years (25%), 10 to 14 years (17.5%), 20 years and above (11.3%), less than 1 year (7.5%) and 15 to 19 years (5.6%). Majority of the respondents (107 or 66.9%) responded that they do not have any history of road accident. Only 53 respondents (33.1%) responded that they have met with an accident.

### **Relationship between Safety Behaviour and Safety Awareness**

The study's findings highlighted a significant positive relationship between safety participation and both safety knowledge and safety motivation. Employees who actively engage in safety practices are more likely to have better safety knowledge and higher safety motivation. In other words, safety participation positively influences safety awareness. The implications are clear: to enhance safety awareness and reduce commuting accidents. Thus, companies should prioritize and improve safety participation among their employees through regular training and active involvement in safety initiatives.

In contrast, the study found no significant direct relationship between safety compliance and safety knowledge or motivation. This suggests that merely complying with safety rules does not necessarily lead to improved safety outcomes unless accompanied by active participation. Thus, while compliance is important, it is not sufficient on its own to foster a culture of safety awareness. Organizations should therefore focus on promoting active safety engagement rather than relying solely on compliance measures.

These findings advocate for a more robust approach to road safety campaigns and training programs. Given the positive impact of safety participation on safety knowledge and motivation, it is crucial for organizations and policymakers to invest in strategies that enhance employee engagement in safety-related activities. This could involve interactive workshops, safety drills, and regular briefings. Additionally, policymakers should

consider implementing stricter traffic regulations and improving public education on road safety to address the issue comprehensively.

### **Limitation of Study**

The study's limitations related to sample size and demographic homogeneity, may impact the generalizability of the findings. Future research could benefit from a more diverse sample and explore other factors influencing safety behaviour and awareness. Longitudinal studies could also offer insights into the long-term effects of safety interventions. In conclusion, the study emphasizes the critical role of safety participation in enhancing safety awareness and highlights the need for comprehensive safety strategies to reduce commuting accidents.

### **Research Implications**

Theoretically, this study provides empirical evidence that safety participation has a strong relationship with safety knowledge and safety motivation among employees from one of the GLCs while commuting to work. Through this study, the organization can improvise its' current safety compliance to improve commuting safety. Moreover, the employees should be exposed to safety trainings so that they can gain enough knowledge on road safety. While employers cannot exercise the same control over hazards to employees when they were driving or riding on the road as in the workplace, there were practical steps they should take to reduce the risks. Work-related road safety can only be effectively controlled if it is integrated into arrangements for managing health and safety at work. For example, employer can take into account the total number of hours worked, and not just the number of hours spent at wheel, when planning driving schedules.

The findings also indicate that safety participation has a relevant relationship on both safety knowledge and safety motivation. Apparently, there should be more campaigns on cultivating road safety for employees while commuting to work. Other than that, the employees also should be given training and information related to safety to increase awareness of road safety related issues. Additionally, this study may provide information to guide the enforcement of strict traffic rules and procedures in future. This study has the potential to be extended to other academic researchers.

## **CONCLUSIONS**

The results showed the validity and reliability of safety behaviour on safety knowledge and safety motivation towards commuting accidents among employees from one of the GLCs. Direct effects of safety behaviour on components of safety awareness which consists of safety knowledge and safety motivation were also identified. The study highlighted on the safety participation as an important factor to minimize accidents while commuting to work. In a nutshell, it is believed that this study would be beneficial to all relevant parties, especially those involved in academic research in identifying the mechanism which can improve road safety while commuting to work.

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