

Title of Research Subject	A cross-cultural study on health-related accidents in Asian countries
Background and Objective	<p>In recent years, the health condition of drivers has been a known risk factor for traffic accidents; in Japan, health-related accident prevention has been a significant issue for traffic accident countermeasure development. Nevertheless, health-related accident countermeasures have not yet been fully implemented, especially in Asia.</p> <p>In this project, we focused on a major traffic accident risk factor: driver drowsiness. Although previous studies have subjectively assessed driver drowsiness, the association between objective measure of drowsiness and traffic accidents has been limited. Driver drowsiness is multifactorial, with cultural and social backgrounds unique to each country potentially affecting driver drowsiness. Understanding the similarities and differences of the factors that contribute to driver drowsiness will help implement countermeasures to prevent health-related accidents tailored to conditions in each country.</p> <p>Therefore, based on the international network established by the 2020 Social Contribution Project of the IATSS, this project aims to clarify the association between driver drowsiness and traffic accidents through an online survey among occupational drivers in Japan, China, and Thailand to establish and promote awareness of health-related accident countermeasures in each respective country.</p> <p>Furthermore, in previous projects, we have conducted screening for sleep apnea syndrome (SAS) among occupational drivers and established a social prevention system for SAS in Japan; we have also performed screening for visual field defects, using the clock chart (a simple test for visual field disorders). In this project, we will also examine the feasibility of implementing the above-mentioned screening model for SAS and visual field defects among professional drivers in Asian countries.</p>
Expected Results	<p>This study will evaluate driver drowsiness subjectively using a self-administered questionnaire as well as objectively using an app version of the Psychomotor Vigilance Task. Usage of these quantitative measurements will demonstrate the impact of drowsiness on traffic accidents and help lead to the establishment of health-related accident countermeasures caused by driver drowsiness. Additionally, comparing cross-cultural factors will make it possible to implement measures to prevent health-related accidents that are culturally and uniquely tailored to each country. Moreover, through the development of the Japanese SAS screening model and visual field defect using clock charts in the Asian countries, the idea of focusing on the prevention of health-related accidents can be expected to gain international momentum.</p>