

An Analysis of the Relationship between Driver Age Group and Law Violation in Single Vehicle Accidents

- Accident Statistical Analysis by Drivers' Age Group and Behavior Types -

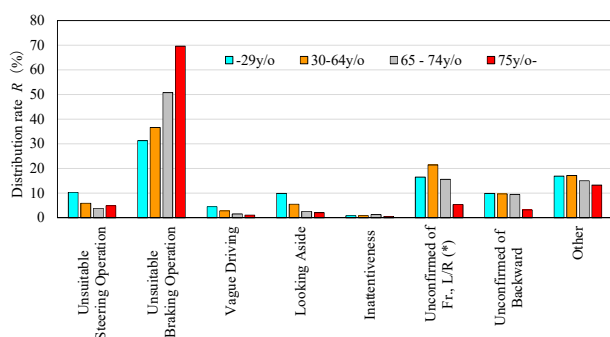
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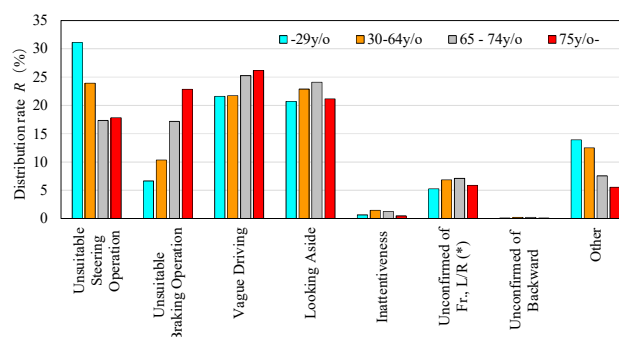
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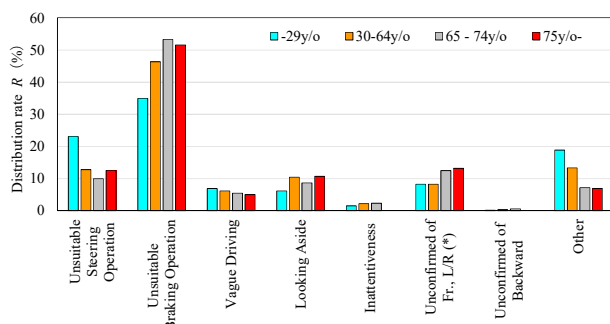
According to the Cabinet Office Traffic Safety White Paper (2021), the percentage of traffic fatalities aged 65 and over has continued to increase since 1971. And the percentage in 2020 has reached 56.2%. In addition, the percentage of occupants aged 65 and over in the number of deaths while riding vehicles in 2020 is as high as 51.8% (the percentage of people aged 75 and over is 31.5%). Therefore, the opinion that "elderly people should return their driver's license" has been increasing in recent years. This opinion holds true in metropolitan areas where public transportation is plentiful. However, in local areas where public transportation is inconvenient, returning a driver's license from the elderly is not always a wise countermeasures. It is also important to consider countermeasures to prevent accidents from occurring without depriving the elderly of their freedom of movement by equipping their vehicles with driving assistance technology that supports elderly drivers to drive safely. In order to consider effective driving support for elderly drivers, it is necessary to clarify the characteristics of accidents of elderly drivers by analyzing traffic accident statistical data. In a previous study, the author analyzed accident statistical data on the relationship between drivers' behavior types and law violations in pedestrian accidents. Then, it was clarified that the number of "Unsuitable Braking Operation" for drivers aged 75 and over is higher than that of other age groups when "Start" or "Go backwards". In this report, the author analyzed accident statistical data on the relationship between drivers' behavior types and law violations in single vehicle accidents. Then, it was also clarified that in single vehicle accidents, at "Start", "Go straight (Constant or acceleration)", "Go straight (Deceleration)", "Go backwards", the number of "Unsuitable Braking Operation" for drivers aged 75 and over was higher than young age groups.



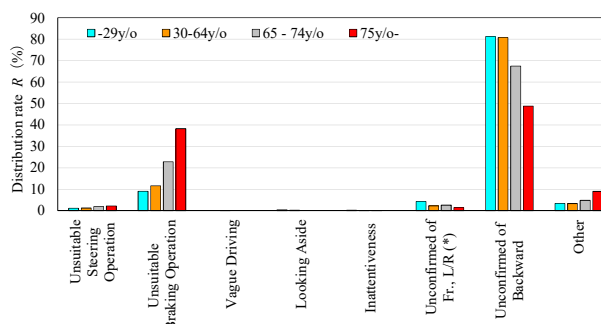
(a) Start



(b) Go straight (Constant or acceleration)



(g) Go straight (Deceleration)



(h) (Go backwards)

Fig.1 Distribution rate of drivers' age group by law violations by behavior-type (Ordinarily motor vehicles)

* Unconfirmed Fr. L/R : Unconfirmed Frontwards, Left or Right