THE KOREAN VERSION OF THE STROKE DRIVERS' SCREENING ASSESSMENT: A PILOT STUDY

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This paper presents the potential for predicting driving ability following stroke using an adapted version of the Stroke Drivers' Screening Assessment (SDSA), which is a set of cognitive tests to evaluate fitness to drive in stroke patients. We adapted the original United Kingdom (UK) version of the SDSA to make it suitable for use in Korea by replacing all UK-specific traffic situations and road signs with their Korean equivalents. Due to cross-cultural differences in sensitivity to a road sign, i.e. Korean drivers are known to be less sensitive to a road sign; the road sign recognition test was carefully investigated with healthy younger and older drivers and revised the road scenarios to fit Korean traffic environment.

In the pilot study, 22 stroke drivers were assessed using the Korean version of the SDSA (K-SDSA) and stroke participants' driving performance was evaluated in a driving simulator. The pass/fail SDSA equations of the original UK version of the SDSA were applied to predict the pass/fail outcome of participants' driving evaluation. The K-SDSA predicted stroke participants' driving ability with around 90% accuracy in a driving simulator.