

# Effects of Virtual Reality on Driving Comfort in Post-Stroke Individuals

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## Abstract

**Purpose/Objective:** The purpose of this study was to examine the effectiveness of Virtual Reality as an intervention to increase adults' driving comfort following a stroke.

**Method:** This study had a quasi-experimental design, which included a pre- and post-test of the Day and Night Driving Comfort Scales (DCS). This study used a quantitative approach to explore the comfort level with driving in post-stroke patients, before and after three sessions using the virtual reality system, Virtual is motorway simulation. Participants were recruited through the dissemination of a flyer to local occupational and physical therapists. Results: For the DCS day scale, three of the four participants had an increase in confidence in their ability to drive during the day. One participant had no change in perceived confidence in driving during the day. For the DCS night scale, all four participants increased their perceived confidence of driving during the night. The mean increase in driving comfort during daytime driving was 17.8% and 25.8% during nighttime driving.

**Conclusion:** This study concluded that Virtual is VR motorway simulation participation increases comfort level in day and night driving in post-stroke patients.

**Key Words:** Virtual is, Virtual Reality (VR), Cerebrovascular accident (CVA), Stroke, Driving, Driving Comfort Scale (DCS).