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Title of the contribution: How Electric Vehicles Affect Driving Behavioral Patterns

Abstract: The gradual introduction of fully electrically powered vehicles into the market has extended the opportunities for sustainable mobility and a new technological era. In this paper we investigate the changes in driver behavior patterns compared with patterns of traditional vehicles with combustion engines after having acquired the necessary adjustments needed for driving an electric vehicle. We aim to expound upon the differences present in driving habits after the individual has become adjusted to the driving patterns of an electric vehicle. Results showed that there is a significant difference in the driving habits of an internal combustion vehicle and that of an electric vehicle. Particularly a development from stronger accelerating and decelerating within the first experiences with electric vehicles to a more calm driving after 5 months of experience was noticeable in acceleration and braking maneuvers. Additionally, results for constant driving proved that interaction with electric vehicles with one-pedal driving capability is not a barrier for efficient driving with constant velocity.

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