Motivating Factors to Use Electric Vehicles Based on Behavioral Intention Model in South Korea

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Abstract : The global warming crisis forced humans to consider their place in the world and the earth's future. In this regard, Electric Vehicles (EVs) are a significant step toward protecting the environment. By identifying factors that influence people's behavior intentions toward using Electric Vehicles (EV), we proposed a theoretical model by extending the Technology Acceptance Model (TAM), including three more concepts, Subjective Norm (SN), Self-Efficacy (SE), and Perceived Behavior Control (PBC). The study was conducted in South Korea, and a random sample was taken at a specific time. In order to collect data, a questionnaire was created in a Google Form and sent via Kakao Talk, a popular social media application used in Korea. There were about 220 participants in this survey. However, 201 surveys were completely done. The findings revealed that all factors in the TAM model and the other added concepts such as subjective norms, self-efficacy and perceived behavior control significantly affect the behavioral intention of using EVs.

Keywords: electric vehicles, behavioral intention, perceived trust, perceived enjoyment, self-efficacy

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