ABSTRACT

The adoption of electric motorcycles in Indonesia requires further study. Electric vehicles (EVs) are widely regarded as the most suitable green technology for application in the automotive sector, offering a means to reduce energy consumption and CO2 emissions. This study develops a model of electric motorcycle adoption intention based on the Theory of Planned Behavior (TPB). The objective of this research is to identify the factors influencing consumer intentions to adopt electric motorcycles. Data were collected through a questionnaire distributed to 390 respondents. The research hypotheses were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that environmental concerns, perceived economic benefits, social influence, and brand awareness have a significant positive impact on consumer attitudes toward electric motorcycles. However, government policies do not significantly affect consumer attitudes or interest in purchasing electric motorcycles in Indonesia. Additionally, perceived risk demonstrates a negative correlation with attitudes, indicating that concerns such as limited range, inadequate charging infrastructure, and battery life issues negatively affect consumer perceptions. Meanwhile, consumer attitudes were found to have a significant positive influence on purchase intentions. These findings provide valuable insights for both the government and electric motorcycle manufacturers. Understanding consumer behavior is essential for designing effective strategies to promote electric motorcycle adoption in Indonesia.

Keywords: Electric Vehicle, Electric Motorcycle, Attitude, Purchase Intention, TPB