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Research article

Electric vehicles' choice behaviour: An emerging market scenario

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ABSTRACT

Worldwide, the adoption of electric automobiles is gaining momentum, owing to a steady rise in customers' sustainability consciousness. So far, electric vehicle-related studies have investigated consumer motives, attitudes, and intentions toward adoption. However, empirical research on enablers and inhibitors of electric vehicle choice behaviour has not been fully explored, particularly in an emerging market context, (e.g., India). The present study employed a judicious mix of three notable theoretical lenses of dual-factor theory, innovation resistance theory, and the stimulus-organism-response model to empirically scrutinize electric vehicle adoption enablers and inhibitors by analysing data collected from 391 young Indian sustainability-oriented electric vehicle users. The sample was gathered via the purposive sampling method, and the data was analysed employing structural equation and PROCESS macro modelling. The research posits that consumer sustainability consciousness (CSC) is a stimulus with a positive influence on enablers (e.g., personal motives, social motives, and incentive policy) as well as inhibitors (e.g., usage, value, and risk barriers). Additionally, product involvement and perceived marketplace influence significantly moderate the relationship between choice behaviour and facilitators and inhibitors. The research offers a few useful strategic decision-making insights for electric vehicle manufacturers, green marketers, and policymakers from emerging markets.

1. Introduction

Due to growing economic and industrial development, India is predominantly considered an emerging market (Deka et al., 2023; Mehmood et al., 2024). Among all emerging economies, India contributes to more than 7 per cent of greenhouse gas emissions worldwide and suffers from severe air quality issues (Gajbhiye et al., 2023; Jaiswal et al., 2022a). Transportation is a critical factor contributing to air pollution and is India's fastest-growing emitter of carbon gases (Jaiswal et al., 2022b; Patel et al., 2024). The environmental impacts of transport, including steel-based industries, contribute more significantly to global warming (accounting for nearly 27% of global greenhouse gas emissions) and climate change in comparison to any other sustainability threat (Mandić et al., 2024; Zhang et al., 2021), as transport is the largest consumer of the world's petroleum, making it a major energy user and responsible for substantial air pollution (EPA, 2022; Singh et al., 2023). Therefore, innovating, promoting, and popularizing energy-efficient and eco-friendly vehicles is a key contributor to ensuring the sustainability mandate proposed by the United Nations Sustainable Development Goals (SDGs) that form the core of the 2030 agenda (Koch et al., 2022; Secinaro et al., 2022). Owing to electric vehicles' potential benefits for environmental protection and decreased pollution, global electric vehicle retail sales reached 6.6 million in 2021 (Shahbaz et al., 2023; Statista, 2022), evidencing consumers' rising interest in sustainability-oriented products such as electric vehicle adoption (Kautish and Sharma, 2020; Sahoo et al., 2022). Researchers have attributed this growing adoption to a variety of reasons such as concern for the adverse effects of rising pollution levels (van Heuveln et al., 2021; Upadhyay and Kamble, 2023), increased consciousness of sustainable consumption (Kautish and Sharma, 2021), and incentives offered by policymakers (Egnér and Trosvik, 2018; Jaiswal et al., 2022a; Liao et al., 2017).

According to conventional consumer beliefs, electric vehicles are more environmentally friendly (Asadi et al., 2021), psychosocially and

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