Consumers' intention to adopt eco-friendly electric airplanes: The moderating role of perceived uncertainty of outcomes and attachment to eco-friendly products

ABSTRACT

Greening is undeniably one of the emerging issues in the airline industry. Yet, empirical research on passengers' behaviors pertinent to eco-friendly airplanes is scant. This study was designed to deepen the theory of planned behavior by integrating perceived uncertainty of outcomes and attachment to eco-friendly products in order to provide a clear understanding of decision formation for adopting eco-friendly electric airplanes from the customer perspectives. A quantitative approach with a survey methodology was employed. A structural equation analysis and test for metric invariance were utilized. Our results showed that volitional and non-volitional factors played an important role in forming adoption intention. In addition, the effectiveness of the theory of planned behavior for the prediction of intention was apparent. Moreover, the test for metric invariance revealed that perceived uncertainty of outcomes significantly reduced the magnitude of the influence of volitional and non-volitional factors on intention and that attachment to eco-friendly products significantly strengthened the degree of the impact of attitude on intention. Our results offered a sufficient understanding of customer decision-making process for eco-friendly electric airplanes.

Keyword: Airline; Attachment to eco-friendly products; Intention to adopt electric airplanes; Passenger behavior; Perceived uncertainty of outcomes