THE INFLUENCE OF AUTOMOTIVE KNOWLEDGE ON THE INTEREST IN SWITCHING TO HYBRID AUTOMATIC MOTORCYCLES

Supervisor: (Azamataufiq Budiprasojo, S.T., M.T.)

By:

M. Irhamul Huda
Automotive Engineering Study Program, Department of Engineering
State Polytechnic of Jember

ABSTRACT

Hybrid vehicles represent a type of automobile that utilizes a dual propulsion system, incorporating both a conventional internal combustion engine and an electric motor (BLDC). This study aims to examine the extent to which knowledge in the field of automotive engineering influences individuals' interest in transitioning to hybrid vehicles. A quantitative research approach was employed, with data processed using SPSS software. The distribution of questionnaires was facilitated through Google Forms, targeting a sample of 100 respondents. Validity and reliability tests were conducted on a subset of 30 respondents, with results indicating that all items were valid (r-calculated > rtable = 0.361) and reliable, as evidenced by a Cronbach's Alpha value of 0.958 $(\alpha > 0.05)$. Normality testing yielded a significance value of 0.000, indicating non-normally distributed data. Consequently, the Spearman rank correlation method was applied, resulting in a correlation coefficient of 0.761, which suggests a strong relationship between automotive knowledge and interest. Nonetheless, the findings of this study indicate that automotive knowledge does not have a statistically significant influence on the public's interest in switching to hybrid automatic vehicles. The likelihood of adopting such vehicles is comparable among individuals with and without automotive expertise.

Keywords: Knowledge, Interest, Hybrid