

ABSTRACT

This study examines the determinants of transport mode choice among student commuters in the Jabodetabek metropolitan region, Indonesia. Unlike prior studies that pool motorcycle and car users into a single model, this study applies three separately estimated binary logistic regression models stratified by vehicle ownership, consistent with the feasible choice set principle: the General Student Population model (N=3,569), the Motorcycle Ownership model (N=2,838), and the Car Ownership model (N=817), all estimated using standard binary logistic regression with household-clustered standard errors. Data are drawn from the 2023 BPS Jabodetabek Commuter Survey. Private motorcycles dominate students' travel (74.03% of the sample), and the perceived speed advantage of private vehicles emerges as the strongest and most consistent determinant of private-vehicle preference, exerting a large and highly significant negative effect on the probability of public transport use across all three models. Gender is the most robust socio-demographic predictor: male students are significantly less likely than female students to choose public transportation in every model. Household car ownership shows a marginally significant, counterintuitive positive association with public transport use in the General Population Model. Spatial characteristics emerge as a further major determinant: travel distance has a significant negative effect across all three models, students domiciled in Bogor are significantly more likely to use public transport than those in DKI Jakarta, and out-of-city school location has a significant negative effect in Bodetabek but not in Jakarta. These findings imply the need for student transport policies segmented by vehicle ownership and tailored to spatial context.

Keywords: transport mode choice, student commuters, binary logistic regression, vehicle-ownership stratification, spatial heterogeneity, Jabodetabek.

