

**KAJIAN FAKTOR-FAKTOR PENENTU PEMILIHAN MOD PENGANGKUTAN BAGI  
PERJALANAN MEMBELI-BELAH MENGGUNAPAKAI MODEL PISAH RAGAMAN  
KAJIAN KES: JOHOR BAHRU**

**SARIMAWATI BINTI MISBARI**

**Laporan Projek ini dikemukakan sebagai memenuhi  
sebahagian daripada syarat penganugerahan  
Ijazah Sarjana Muda Perancangan Bandar dan Wilayah**

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**NOVEMBER, 2006**

## ABSTRAK

Pertumbuhan ruang lantai perniagaan dan komersil yang pesat seperti kompleks membeli-belah dan *hypermarket* di Johor Bahru menunjukkan potensi tarikan penjanaan trip yang tinggi untuk tujuan membeli-belah. Perletakan kompleks membeli-belah dan *hypermarket* di persimpangan lampu isyarat dan berdekatan jalan-jalan utama telah menyebabkan pertambahan isipadu lalulintas jalan-jalan yang menghubungkan pusat-pusat membeli-belah. Pemilikan kenderaan yang tinggi di Johor Bahru iaitu mencecah 261,757 kenderaan persendirian pada tahun 2005 berbanding 88,000 kenderaan persendirian pada tahun 1981 menunjukkan peningkatan taraf hidup penduduk Johor Bahru. Peningkatan pendapatan dan kuasa beli menjana perjalanan membeli-belah yang tinggi penduduk Johor Bahru. Kini, penjanaan perjalanan membeli-belah di Johor Bahru mencecah 267,125 trip setiap hari, manakala tahap perkhidmatan jalan-jalan utama di Johor Bahru semakin menurun. Oleh itu, kajian penyelidikan ini meliputi kajian soal selidik terhadap pengunjung mengenai ciri sosioekonomi pengunjung, ciri perjalanan, ciri sistem pengangkutan dan pandangan terhadap mod pengangkutan awam. Kawasan kajian adalah meliputi dua *hypermarket* dan dua kompleks membeli-belah di dalam kawasan pentadbiran Majlis Bandaraya Johor Bahru (MBJB). Teknik *simple random sampling* digunakan untuk menentukan bilangan responden. Seramai 400 responden dipilih untuk menjawab borang soal selidik di empat lokasi iaitu di City Square Johor Bahru, Plaza Pelangi Johor Bahru, GIANT *Hypermarket* dan XTRA *Hypermarket*. Skop kajian ini mengenalpasti pilihan mod perjalanan pengunjung *hypermarket* dan kompleks membeli-belah sama ada menggunakan kenderaan persendirian atau pengangkutan awam. Hasil penemuan kajian menunjukkan 72.3 peratus responden membuat perjalanan dengan mod pengangkutan persendirian manakala 22.6 peratus membuat perjalanan dengan mod pengangkutan awam. Kajian ini juga mengenalpasti perkaitan di antara mod pengangkutan dan faktor-faktor sosioekonomi, perjalanan dan sistem pengangkutan menggunakan analisis *crosstabulation* dan analisis *khi kuasa dua*. Faktor-faktor ini dimodelkan menggunakan model regresi *binary logistik* bagi menentukan faktor-faktor penentu pemilihan mod pengangkutan perjalanan membeli-belah. Penemuan kajian menunjukkan faktor-faktor penentu pemilihan mod ialah jantina, bilangan pemilikan kenderaan, masa perjalanan, masa berbelanja dan kos perjalanan. Pada akhir kajian, rumusan mod perjalanan membeli-belah ke kawasan kajian, dan rumusan faktor-faktor penentu pemilihan mod pengangkutan bagi perjalanan membeli-belah. Kajian ini mencadangkan langkah-langkah mengurangkan penggunaan kenderaan persendirian dan menggalakkan penggunaan mod pengangkutan awam bagi perjalanan membeli-belah.

## ABSTRACT

The rapid growth of commercial centre such as shopping complexes and hypermarkets in Johor Bahru affecting the number of shopping trip generation. Shopping complexes and hypermarkets usually located next to traffic light and arterial road junctions that cause the roads traffic volume to increase. On the other hand, the increasing of car ownership in Johor Bahru shows that there is an increasing quality of life among the Johoreans. In Johor Bahru, there are only about 88,000 car ownership in year 1981, and by year 2005, the number increases to 261,757 of registered car ownership. High purchasing power and increasing income generates a tremendous number of shopping trip in Johor Bahru. There are 267,125 shopping trips generated per a day in Johor Bahru whilst the level of services of main roads in Johor Bahru is getting worse. This research covers interviews among the shoppers regarding the socioeconomic characteristics, trip characteristics, and transportation system characteristics as well as the shoppers' point of views toward the public transportation. The case study area covers two hypermarkets and two shopping complexes in the Johor Bahru City Hall. The Simple Random Sampling helps to determine the total number of required respondents. Thus, 400 respondents are selected to answer questionnaires at four locations include City Square Shopping Centre, Plaza Pelangi Shopping Centre, GIANT Hypermarket and XTRA Hypermarket. The scope of this research is basically to identify the travel mode choice among shoppers whether by private transport or even the public transportation. The finding shows 72.3 percent of respondents traveled by private transportation while 27.6 percent of travel is by public transportation. The research also focuses on relationship and correlation between travel mode choice and shoppers' characteristics including the socioeconomic characteristic, trip characteristic and transportation system characteristic. Chi square test and cross tabulation analysis help to measure the connections between the mode choice and socioeconomic factors, travel factors and transportation system factors. The factors are formulated into the form of model, by which using binary logistic regression model to identify factors that influence mode choice for shopping trip. The findings also show that the factors of influence mode choices are gender, number of car ownership, travel time, shopping hours and travel cost involved. As conclusion, all the findings are summarized in a term of travel mode choice to case study area, and factors influencing travel mode choice. The research also suggests a transportation management to reduce shopping trip by private transport while encouraging shopping trip by public transportation.