



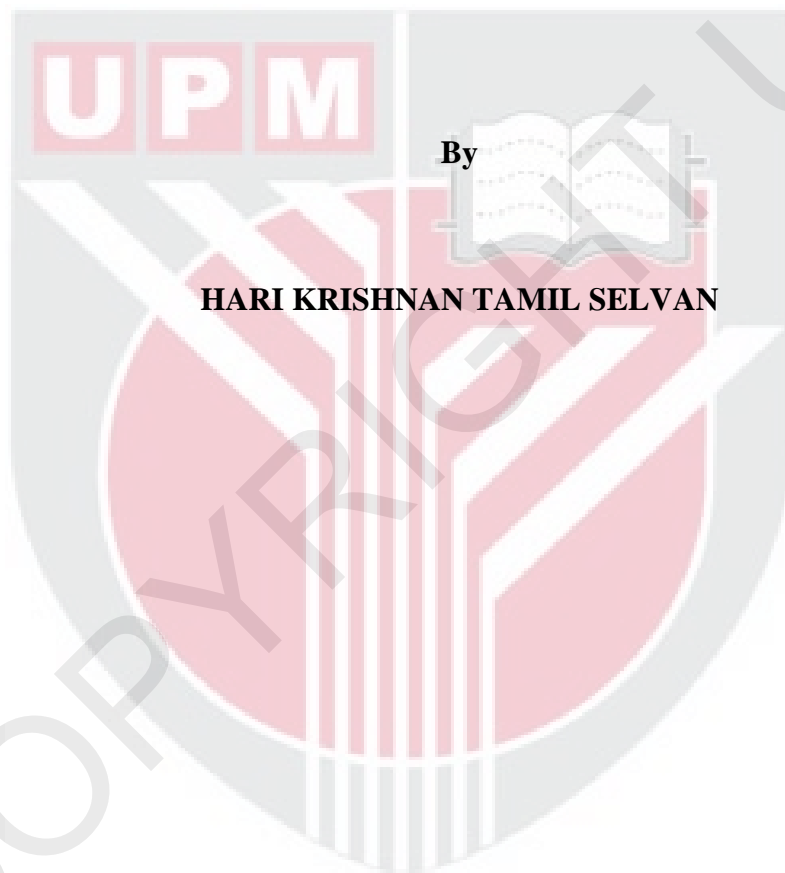
**UNIVERSITI PUTRA MALAYSIA**

**FACTORS ASSOCIATED WITH ROAD SAFETY BEHAVIOR AND ROAD  
RISK PERCEPTIONS AMONG PARENTS OF CHILDREN AGED 10 AND 12  
YEARS AT REMBAU, NEGERI SEMBILAN, MALAYSIA**

**HARI KRISHNAN TAMIL SELVAN**

**FPSK(m) 2012 13**

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By

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**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,  
In Fulfilment of the Requirements for the Degree of Master of Science**

**June 2012**

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

**FACTORS ASSOCIATED WITH ROAD SAFETY BEHAVIOR AND ROAD RISK PERCEPTIONS AMONG PARENTS OF CHILDREN AGED 10 AND 12 YEARS AT REMBAU, NEGERI SEMBILAN, MALAYSIA**

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**June 2012**

**Chairman: Kulanthayan K.C Mani, PhD**

**Faculty: Faculty of Medicine and Health Sciences**

A cross-sectional study was carried out at the district of Rembau, Negeri Sembilan to determine the prevalence and factors associated with the parental road risk perception and parental safe road behavior. Simple random sampling method was used for selection of respondents for the study. A total of 202 respondents participated in the research. Data was collected by face to face interview using a structured questionnaire from September to December, 2010. Descriptive, bivariate and multivariate analyses were carried out using PASW Statistics version 18. Prevalence of perception of road as a very dangerous environment for children when they are not accompanied by adults is 21.3% among the respondents while the prevalence of road safety behavior practice as always

among the respondents is 29.2% when accompanying their children on the road. Three variables were found to be associated with parental road risk perceptions. They included ethnicity ( $p=0.041$ ), household income ( $p=0.043$ ) and number of male children in the family ( $p=0.028$ ). On the other hand, education level of parents ( $p=0.012$ ), occupational class ( $p=0.012$ ), household income ( $p=0.033$ ) and the existence of playground ( $p=0.014$ ) appear to be associated with parental safe road behavior. Multiple linear regression analyses result shows that numbers of male children in the family ( $p=0.038$ ) were found to be the contributing factor for parental road risk perception and the model shows that number of male children in the family contributes 2.5% of variation. The higher the number of male children in the family, the lower the parental road risk perception. Household income more than RM 1000 emerged as a significant ( $p=0.004$ ) factor in parental safe road behavior. The model suggests that 7.0% of variation in the parental safe road behavior could be explained by this factor. Based on the model generated, for household income more than RM 1000, there will be increase of 1.827 safe road behavior score compare to parents' with household income less than RM 1000. In conclusion, the study accomplished all of its objectives. The findings from the research suggest that future intervention targeting parents to reduce the child road traffic crashes should be focused to parents of Indian ethnicity, low household income, high number of male children in the family, non-professional occupational class group and parents living in neighborhood without playground.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**FAKTOR FAKTOR YANG MEMPENGARUHI TINGKAH LAKU SELAMAT  
JALANRAYA DAN PERSEPSI RISIKO JALANRAYA DI KALANGAN  
IBUBAPA ANAK BERUMUR 10 DAN 12 TAHUN DI REMBAU, NEGERI  
SEMBILAN, MALAYSIA**

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Satu kajian irisan lintang telah dijalankan di Daerah Rembau, Negeri Sembilan untuk menentukan faktor faktor yang mempengaruhi persepsi risiko dan tingkah laku selamat jalan raya di kalangan ibubapa. Persampelan rawak mudah telah digunakan untuk memilih responden untuk kajian ini. Sejumlah 202 orang responden telah menyertai kajian ini. Data dikumpulkan secara temu bual bersemuka menggunakan borang soal selidik dari September hingga Disember, 2010. Analisis deskriptif, bivariat dan multivariat telah dijalankan menggunakan perisian PASW Statistics versi 18. Prevalensi persepsi ibubapa terhadap jalan sebagai persekitaran yang sangat merbahaya kepada anak mereka apabila tidak diiringi oleh orang dewasa adalah 21.3% manakala prevalensi

pengamalan sentiasa tingkah laku selamat jalanraya ibubapa adalah 29.2% apabila mengiringi anak mereka di jalan raya. Tiga pembolehubah telah dikenalpasti mempunyai hubungan dengan persepsi risiko jalan raya ibubapa. Ini termasuk etnik ( $p=0.041$ ), pendapatan isirumah ( $p=0.043$ ) dan bilangan anak lelaki dalam keluarga ( $p= 0.028$ ). Sebaliknya, tahap pendidikan ibubapa ( $p=0.012$ ), kelas pekerjaan ( $p=0.012$ ), pendapatan isirumah ( $p=0.033$ ) dan kewujudan taman permainan ( $p=0.014$ ) merupakan pembolehubah yang mempunyai hubungan dengan tingkah laku selamat jalan raya di kalangan ibubapa. Keputusan analisis regresi pelbagai menunjukkan bahawa bilangan anak lelaki dalam keluarga ( $p=0.038$ ) merupakan faktor penyumbang untuk persepsi risiko jalan raya ibubapa dan model menunjukkan bilangan anak lelaki dalam keluarga menyumbang kepada 2.5% perubahan variasi. Semakin tinggi bilangan kanak kanak lelaki dalam keluarga, lebih rendah persepsi risiko jalan raya ibubapa. Pendapatan isirumah ( $p=0.004$ ) merupakan faktor yang bermakna untuk tingkah laku selamat jalan raya ibubapa. Model menunjukkan bahawa 7.0% perubahan variasi dalam tingkah laku selamat jalan raya ibubapa boleh diterangkan melalui faktor ini. Berdasarkan model yang dihasilkan, untuk pendapatan isi rumah lebih daripada RM 1000, akan terdapat peningkatan sebanyak 1.827 skor tingkah laku selamat jalan raya berbanding ibubapa yang mempunyai pendapatan isi rumah kurang daripada RM 1000. Kesimpulannya, kajian ini mencapai objektifnya. Hasil daripada kajian ini, dicadangkan bahawa intervensi masa depan yang menyasarkan ibu bapa untuk pengurangan kemalangan jalan raya di kalangan kanak kanak harus difokuskan kepada ibu bapa beretnik India, pendapatan isi rumah yang rendah, bilangan kanak kanak lelaki yang tinggi dalam

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I certify that an Examination Committee has met on 28<sup>th</sup> June 2012 to conduct the final examination of Hari Krishnan Tamil Selvan on his Master of Science thesis entitled “Factors Associated with Road Safety Behavior and Road Risk Perception Among Parents of Children Aged 10 and 12 Years at Rembau, Negeri Sembilan, Malaysia” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulation 1981. The committee recommends that student be awarded the Master of Science.

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## DECLARATION

I declare that the thesis is my original work except for quotations and citations which has been duly acknowledged. I also declare that it has not been previously, and not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.



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HARI KRISHNAN TAMIL SELVAN

Date: 28 June 2012

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