



PERCEPTIONS, POTENTIALS AND TRAVEL
IMPLICATIONS OF TELECOMMUTING AMONG
FEMALE EMPLOYEES IN KUALA LUMPUR,
MALAYSIA

BY

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ABSTRACT

Telecommuting has been recognized and promoted as a strategy for alleviating traffic congestion in urban areas, especially reducing rush-hour traffic. Substantial evidence in the literature suggests that Telecommuting is more suited to women who when compared to men, experience more work/non-work role conflict and more career interruptions. This research is being carried out at a time when the city of Kuala Lumpur is still experiencing traffic congestion, increased reliance on privately owned vehicles and a dwindling public transportation ridership. The relevant government agencies and authorities continue to invest huge amounts of money and effort in order to contain the traffic problem in the Malaysian capital. However, the vast majority of "supply-side" initiatives can be considered supply-side measures that aim to increase the carrying capacity of existing infrastructure and improving public transportation. The significance of this research lays in the fact that it attempts to explore the potential implications of a Travel Demand Management (TDM) tool which is essentially a demand-side strategy. Furthermore, this research targets working women who can potentially reap substantial benefits of this working arrangement. In addition, women have a very strong presence in the industries and employment categories that are suited to working in a decentralized location away from the traditional workplace. A total of 454 female managers, professionals, associate professionals and clerical workers were sampled from establishments involved in financial intermediation, real estate activities, telecommunications, and education. Two separate surveying instruments were used to gather the necessary data. Descriptive statistics at the univariate level; bivariate correlations; and exploratory factor analyses were carried out by the researcher. In addition, binary, ordinal, and multinomial logistic regression models were computed in order to predict the ability and willingness of the sampled employees to telecommute using socioeconomic, employment, travel, and perceptual characteristics. The models could be used by private companies and government agencies alike to assess the potential of promoting Telecommuting among their female employees in particular. Arithmetic models were used to estimate both the potential and actual travel implications of telecommuting by female employees in Kuala Lumpur. Findings strongly suggest that telecommuting is, in fact, a viable travel demand management strategy, however, it needs to be strongly backed by the relevant stakeholders, and applied in unison with other strategies in order to alleviate rush-hour traffic significantly in Kuala Lumpur. An overall reduction of nearly 4.7% of all SOVs entering Kuala Lumpur can potentially be achieved through the practice of telecommuting among female employees by 2019. However, a substantial gap between the actual and potential travel implications is expected to prevail. This research is expected to increase the awareness of telecommuting and its effectiveness as a traffic demand management tool, as well as being a cause for increased productivity, and reduced family-work related conflicts and pressures. This research is expected to provide the relevant authorities with empirical evidence of the travel implications of involving working women in home-based telecommuting. Such evidence might aid decision makers in the process of accepting and promoting a telecommuting culture. Finally, this research can act as a platform for future research in this area perhaps in different Malaysian cities in order to better understand the potential traffic-related implications of telecommuting.

خلاصة البحث

يعد العمل عن بعد، أو في مكان غير موقع العمل الرسمي (Telecommuting) من أحد الوسائل الفعّالة في تخفيف أزمات السير، وذلك عن طريق تقليل الحاجة لاستخدام الطرق خلال ساعات الذروة. وتشير دراسات كثيرة إلى أن طريقة العمل هذه تعود بفائدة أكبر للنساء العاملات، وذلك لأنهن يواجهن تحديات كبيرة لتحقيق الموازنة بين متطلبات العمل ومسؤوليات المنزل والعائلة، بالإضافة إلى ما يعانيه من صعوبة ارتقاء السلم الوظيفي بسبب توقفهن عن العمل لرعاية الأولاد. يسعى هذا البحث لمعرفة مدى تأثير عمل النساء من المنزل -ولو لأيام قليلة في الشهر- على حركة السير في الطرق المتجهة نحو العاصمة الماليزية كوالالمبور. يأتي هذا البحث في وقت تعاني فيه مدينة كوالالمبور من ازدحامات خانقة، واعتماد متزايد على وسائل النقل الخاصة في التنقل لأماكن العمل، وتراجع كبير في أعداد مستخدمي وسائل النقل الجماعي. اشتملت عينة البحث على ٤٥٤ موظفة في القطاعات الوظيفية الأكثر ملاءمة للعمل عن بعد، والمتمثلة في قطاع المالية والمصارف، والإنشاءات والنشاطات المتعلقة بها، والاتصالات، والتعليم. قام الباحث بجمع البيانات المتعلقة بالشؤون الوظيفية، والعائلية للموظفات، بالإضافة إلى انطباعاتهن حول فكرة العمل عن بعد، ومدى جاهزية الموظفات لممارسته. كما استخدم الباحث أداة خاصة لتسجيل تنقل الموظفات لمدة أسبوع. استعمل الباحث طرق تحليل إحصائية متعددة، كان من ضمنها التحليل الوصفي للبيانات (Descriptive Analysis)، وتحليل العوامل (Exploratory Factor Analysis) المرتبطة بانطباعات الموظفات حول فوائد ومضار العمل عن بعد، وبناء عدة نماذج تراجع سَوَاقِيَة (Logistic Regression Models) للتنبؤ بمدى قدرة الموظفات على العمل عن بعد، ومدى استعدادهن لتطبيقه، وأخيرا القيام بحساب آثار العمل عن بعد على حركة السير، والتنبؤ بما ستكون هذه الآثار بين عامي ٢٠١٤ و ٢٠١٩. أكدت نتائج البحث جدوى العمل عن بعد بوصفه وسيلة من وسائل تخفيف أزمات السير، ولاسيما إذا تم تكاتف جميع ذوي الصلة لأجل زيادة انتشاره. من المتوقع أن تساعد نتائج البحث الجهات الحكومية في عملية الترويج للعمل عن بعد، كما يشكل هذا البحث أرضية تبنى عليها دراسات وأبحاث أخرى من شأنها زيادة الوعي العام بظاهرة العمل عن بعد، وأثرها على حركة السير.

APPROVAL PAGE

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DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Mootaz Munjid Mustafa

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OF TELECOMMUTING AMONG FEMALE EMPLOYEES IN
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Affirmed by Mootaz Munjid Mustafa

í í í í í í í í í í í 0"í í í í í í í 00
Signature Date

To my parents

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