

ABSTRACT

Telecommuting is one of the Transportation Demand Management (TDM) measures that aimed at reducing peak hour traffic congestion. It allows commuters to work from home or a nearby telecommuting centre on certain days of the week. It is designed not only to help commuters to save their driving time to work, but more importantly to eliminate some vehicle trips. The purpose of this research is to investigate factors influencing the stated preference of the employees towards telecommuting adoption at the International Islamic University Malaysia (IIUM) and their perceptions on various aspects of telecommuting. The increasing number of staffs and students has contributed to the high number of private vehicles in IIUM. The increase in the private vehicle usage by the IIUM community (staff and students) is posing a strain on the capacity of the existing roads and the related infrastructure, to cope with the increasing traffic volume and parking demand within the campus. The existing traffic scenario in the IIUM has necessitated a study on the applicability of telecommuting as an alternative work arrangement. Therefore, it is necessary to investigate the level of acceptance of the telecommuting adoption and look into the initiatives of implementing it at the institutions of higher educational campuses. Particularly, the benefits that it will bring to the employees, and to address the current traffic and parking problems. Three hundred respondents participated in this study through survey questionnaire. The questionnaire included demographic profile, trip characteristics, work characteristics and perceptions of telecommuting. Three principal hypotheses and ten sub-hypotheses highlighting the relationship between the preference to telecommute and the presence of young children, married females with children, commuted distance, travel time, delay time, length of service, as well as frequency of face-to-face communication were formulated. The data collected indicate that 20.2% and 26.9% of administrative and academic respondents were very familiar with telecommuting concept. The findings of this study also show 29% and 19.2% of the academic and administrative staff preferred to telecommute while 44% and 52.5% reported that they might consider adopting telecommuting, if they were given the option. Chi-square test, Kendall's correlation coefficient and Cramer's V were conducted to test the statistical significant relationships between the preference to telecommute and demographic, trip characteristics, work characteristics and perceptions on the aspects of telecommuting. The presence and the number of young children, frequency of face-to-face communication and frequency of using emails were found to be significant factors that contributed to the propensity towards telecommuting for both administrative and academic staff. Marital status, nationality, commuted distance, travel time, delay time, commuted cost, allocation of time spent on research were significantly associated with the choice of telecommuting for academic employees. Given that the University does not have an official policy on telecommuting arrangement, some recommendations called for the penetration of telecommuting in the IIUM were proposed. Such as, (i) establish formal policy of telecommuting arrangement in the university; (ii) provide monetary assistance for necessary equipment; (iii) implement a telecommuting pilot project and (iv) monitor employees' productivity and quality of work through Key Performance Index (KPI) every half yearly.