

Telework and Women: Case of Women Workers in the Northern States of Malaysia

Noorliza Karia
School of Management
Universiti Sains Malaysia, 11800 Penang,
Malaysia
Tel. +6 04 6533 888 ext 3426
noorliza@usm.my

Muhammad Hasmi Abu Hassan Asaari
School of Distance Education
Universiti Sains Malaysia, 11800 Penang,
Malaysia
Tel. +6 6533 215
hasmi@usm.my

ABSTRACT

Telework concept is new to women workers in the northern states of Malaysia. Further drastic measures need to be carried out by the government, agencies and organizations in the region to adopt the telework arrangement. Women workers were explored in their acceptance level on telework arrangement. Further, results indicated that women workers in the region do look forward for the telework arrangement to be implemented by their organizations.

Keywords

Telework, telecommuting, women workers, Malaysia

1 INTRODUCTION

In the context of women workers in Malaysia, telework needs to be exposed as the nation is going towards a develop country the year 2020 as visioned by the former Prime Minister Tun Dr. Mahathir Mohamad. Based on the Western studies, telework does improve quality of work life; apart from that it also improve productivity, morale, teamwork, flexibility, and work hours. Further, the mobile workforce is relatively new concept towards the women workers. Proponents say telecommuting makes the work force more efficient, cut costs and even help protect the environment (CNN, 1996). Many companies are developing telecommuting programs as a way to draw new employees. With today's tight labor market, companies that offer flexibility may have an edge over those who require all work to be done on site (Meyers, 1998). With the advancement of communications and information technology (ICT), the ability to log on the company's network with ease from any location as well as the availability of devices like notebook computers, smart mobile phones, and handheld devices has given rise to a trend of mobile computing and teleworking (Anonymous, 1999).

Telework has been foreseen way back as early as 1950s, it did not become practical until the advent of personal computers and portable modems in the early 1970s (USDT, 1993; Hill et al., 1998). As for Malaysia, there has been almost no study on the telework; therefore studies from Western researchers will be used as a basis in establishing the exploration of telework concept on women workers. Telework concept is a new concept towards Malaysian women workers. As for Malaysia, there has

been a minimal study on the telecommuting; therefore studies from Western researchers as basis in establishing the acceptance of the telecommuting concept. Individual workers if given an opportunity, they would like to be on the telework concept as they are more in control over their work and personal life.

Further being a woman, married with children, and career caused tremendous tasks to be carried out by women workers in Malaysia. Most mothers would like to take care of their own children until they are suitable and able to be placed in a nursery or daycare center. Therefore, views of women workers will be used in determining their acceptance of the telework concept. This study will explore the acceptance level of Malaysian women workers toward the implementation of telecommuting concept.

2 LITERATURE REVIEW

Various definitions of telework or telecommuting can be gathered from literature reviews. As indicated by the United Nations University for New Technologies (UNU/INTECH, 1999), telework was defined as 'remote' work performed away from the main office site using information and communication technologies (ICT) such as computers, coupled with either facsimile, e-mail/modems, or leased lines. Further, telecommuting meant that capability of individuals to work at home and communicate with their offices by using personal computers and communications equipment and software (Shelly et al., 1998). Williams et al. (1999) stated that computers and communications tools have led to telecommuting and telework centers, the virtual office and "hoteling," and the mobile workplace. Further, Johnson (1999) discovered e-mail and newsgroups are the primary forms of communication. He also discovered that telecommuter needs to convince their bosses that phone conferences will work just fine.

Williams et al. (1999) stated that virtual office is an often nonpermanent and mobile office run with computer and communications technology. Knight and Westbrook (1999) supported and referred telecommuting as to employees who work predominantly outside of their home office, but are associated with a traditional office and may be used a traditional office for some administrative support and to hold physical meeting. Moreover, the label "telecommuter" can fit anyone who works in a home or

mobile office for an employer somewhere else-whether it's daily or weekly, at a few miles' distance or halfway around the world (Johnson, 1999). In the other word, telecommuter is an employee who worked not in a main office but from their home, car, or other new work sites. Therefore, telework will be the new way of working in this competitive environment with the support of telecommunications and technology (Asaari and Karia, 2001).

As mentioned earlier, telecommuting has been promoted extensively in the US somewhere in the 70s when personal computer and portable modem had been made available (USDT, 1993; Hill et al., 1998). Telecommuting as defined by Williams et al. (1999) were as way of working at home with telecommunications – phone, fax, and computer – between office and home. It was the ability to connect computers to one another by modem or network and communications lines to provide online information access, such as the use of pocket pagers, portable computers, fax machines, and various phone and network services to conduct business.

Telecommuters often used other communications media such as electronic mail, personal computer links to office servers and fax machines (Kurland and Bailey, 1999). Finlay (1999) indicates that telecommuters need to have a main computer, a second computer, a phone, a network, and a printer to help them in their telecommuting. Meanwhile, Schilling (1999) indicated that employee gave up costly office space and communicates with their company and their customers remotely by telephone, computer, or other technological tools. Lovelace (1995) mentioned that people who regularly work from locations outside the office, telecommuting to the office by phone, fax, and modem.

Certo (2000) indicated that several types of telework arrangements can be listed as occasional telecommuting – workers have fixed, traditional offices and work schedules, but occasionally work at home; hoteling – workers come into the traditional office frequently, but they are not allocated permanent office space. Instead workers can reserve a room or cubicle in advance of their arrival, sometimes called a “hotel room,” where they can receive and return telephone calls and link into a computer network; tethered in office – tethered workers have some mobility, but are expected to report to the office on a regular basis; home-based, some mobility – a home-based worker has no traditional office. The workspace of this type of worker could be a kitchen table or a bedroom desk. Most of the works were done via telephone; and fully mobile – a worker who is fully mobile works out of a car. The car is an office containing equipment like a cellular phone, portable computer, and fax machine.

As indicated by Goodrich (1990), the jobs that are suitable for telecommuting are the work that involved the use of computer. Further, most of the communications between teleworkers and the office is with the use of telephone and

email; besides the requirement of meeting in person in quite minimal. Jacobs and Van Sell (1996) indicated that possibilities of telework arrangement for professionals such as engineers, programmers, analysts, and architects.

As the case of women workers in Malaysia, the exploration needs to be done in order to look for factors that contribute to the introduction of telework concept. Further, as employees in Malaysia are not exposed to the telecommuting concept, the factors will be developed based on the literature reviews and findings by Westerners. Based on the literature reviews, many companies are developing telecommuting programs (CNN, 1996).

Based on the Western studies, telework does improve quality of work life; apart from that it also improve productivity, morale, teamwork, flexibility, and work hours. Telework has been foreseen way back as early as 1950s, it did not become practical until the advent of personal computers and portable modems in the early 1970s (USDT, 1993; Hill et al., 1998). Further, as firms in Malaysia were not exposed to the telecommuting concept, factors will be developed based on the reviews and findings by Westerners. Many companies were developing telecommuting programs (CNN, 1996). The studies showed that telecommuting could provide a substantial competitive advantage in workforce recruitment and retention, productivity, real estate and office overhead, customer service, and corporate image and goodwill (Anonymous, 1998).

Knight and Westbrook (1999) stressed that greater emphasis were been placed on hiring and retaining qualified workers, which often means dipping into a labor pool that requires greater flexibility, such as working parents and people with limited mobility. They also discovered that telework helps attract new employees, especially those who need flexibility, increases retention rates, reduces sick time and absenteeism, increases productivity and increases job satisfaction. In order to retain qualified workers, the organizations should allow people to telecommute from home, whether on a part-time or full-time basis. Telework had become a valuable tactic in the fight to hire and retain skilled workers (Straton, 2001; Fister, 1999).

Fortier (1998) indicated that employees need flexibility and a balance between their work lives and their personal lives. Meanwhile, Kurland and Bailey (1999) mentioned another reason to implement telework that it widens the talent pool available to the organization. It also might stem turnover by providing workers with flexibility that allows them to keep their jobs in the face of external demands or desires. Telework provided staffing flexibility where the staffs are able to work regardless of weather or traffic peaks (Langhoff, 1996).

Home-based telework provided an opportunity to improve workplace productivity (Kurland and Bailey, 1999 and Lovelace, 1995). Because telework employees experience greater schedule flexibility, they can work when they

prefer, and thereby improve their productivity. Further, Kurland and Bailey (1999) stated popular press accounts of successful telework programs often report that telecommuters take fewer sick days, are absent less, have higher job satisfaction, and have higher work performance ratings. These factors might positively affected productivity. Telecommuters had relatively distraction-free environments, as they are more open to receiving interruptions while at the traditional office (Kurland and Bailey, 1999). Together, these factors, related to the location of work, the timing of work, and the quality of work life, can increase productivity. Subsequently, telework improved productivity on the jobs (Fister, 1999; Ervin, 1998; Fortier, 1998; Hill et al., 1998; White Paper, 1997; Shellenbarger, 1997; Sullivan, 1992; and Janal, 1991). The improvement ranged between 20 to 70 percent (Ervin, 1998; Khairallah, 2001; Straton, 2001; and Verespej, 2001). This also supported by Hawkins et al. (1997), CNN (1996), Langhoff (1996), and Pacholczyk et al. (1995) as they stated that telework improved productivity and their organizations benefited from the practice.

Telework saved company's money (Schilling, 1999). Employers initiated a telework program to save on leasing costs (Gage, 1998). Further, Robertson (1998) indicated that mobile teleworkers are able to help the organization improve their level of customer service by reducing cost associated with office space and daily travel to the corporate office. Therefore, employees gave up costly office space and communicate with the company and their customers remotely by telephone, computer or other technological tools. Fortier (1998) indicated telework can help alleviate the office space crunch and are a great alternative to expensive new buildings.

Further, Girard (1997) discovered that companies should save as they implement telework. This supported by Martin (1994) as he indicated that expense reduction for the corporation has been a major impetus for this large increase in the virtual office. Straton (2001) indicated that their company had decreased office space by 35% nationwide resulting in annual cost savings of over \$3 million dollars. Meanwhile, Milkovich (2001) stated that the cost savings in annualized rent of as much as 25%. AT&T saved about \$25 million in real-estate costs through teleworking (Khairallah, 2001).

Fortier (1998) stated that telework can help organization to reduce absenteeism among employees due to illness, childcare, eldercare, and the need to be home to take care of personal business – all of which can average several days per year. Further, he stated that telework could mitigate business disruption during strikes, floods, bad weather, and other emergencies. In addition, CNN (1996) mentioned that those who could benefit most are women. By the turn of the century, an estimated four out of five women of childbearing age will be in the work force. Telework and new technologies could help those women to better adjust their work schedules with motherhood.

Telework could improve organization's concern on the social responsibility towards the environment. As indicated by Lovelace (1995), telework could avoid long commutes on congested highways or city streets, and to adjust their workday according to their needs, unbounded by traditional office hours. Meanwhile, society also benefits from teleworking such as energy consumption, environmental degradation, reduce traffic congestion, and reduce pollution (Straton, 2001 and Milkovich, 2001). Moreover in London, teleworking solved the chronic overcrowding by 25% reduction in the number of public transport users, cars, and people (Khairallah, 2001).

3 METHODOLOGY

The purpose of this study is to explore the factors that encourage the women workers in Malaysia towards the acceptance of telework concept. Therefore, studies by Westerners will be replicated and used in carrying out the research. Further, the study will identify which factors that contribute the most towards the acceptance of telework concept. Finally, do Malaysian women workers discover that telework concept as a new way of pursuing their career, personal life and family life?

The dependent variables in the study were derived from various reviews that were discovered. Nineteen variables were analyzed through factor analysis; they were grouped into 5 factors:

Factor 1:

1. Working from home.
2. Work flexibility.
3. Increase my work productivity.
4. Saving the environment from pollution.
5. Conducive working environment.

Factor 2:

1. Discussion on office matters through email.
2. Helping my employer to save on rental of office space.
3. Discussion on office matters through telephone.

Factor 3:

1. Sexual harassment.
2. Savings on my transportation costs.
3. Involved in community activities.
4. Traffic congestion on my way to work.

Factor 4:

1. Take care of family matters.
2. Take care of personal matters.
3. Send my children to school by myself.
4. Helping my employer to save on overhead.

Factor 5:

1. Transfer of work location.
2. Working outstation.
3. Work satisfaction.

The independent variables in this study will focus on the acceptance of women workers towards telework concept in relation to their marital status and type of employer. A structured questionnaire was developed based on the evidence from the literatures. A Likert scale (from 1 to 5) was developed to identify the degree of agreement of the factors.

Respondents of this research were taken from women workers in the service industry in the northern states of Malaysia – Penang, Kedah, Perlis, and Perak. The selection of the organization is based on the information from government web sites and private firms that are providing services to customers.

Questionnaires was distributed and administered toward human resource managers of public and private firms in the northern states of Malaysia. The questionnaires were divided into three parts that sought demographic information, factors of concern on telework concept, and working information. This research has been ongoing and most of the questionnaires were gathered from time to time.

Data will be analyzed by using SPSS program. Initially, frequencies will be run in the having the feel of the data. Further, descriptive analysis will be done in looking further for some descriptive of the population. Mean of the variables will be generated in looking for some indicators from the population.

4 RESULTS

Based on the preliminary data that was gathered, majority of the respondents were married (85%) as compare to single of 15%. Respondents indicated that 61.5% from public sectors and 38.5% from private sectors. Based on the respondent's age, almost 62% were in the 30s. Majority of the respondents indicated that 24 respondents (92.3%) had gone through a formal education at the college or university level. Most of the respondents' incomes, 46.2%, were in the bracket of RM2,001-3,000 per month. Based on the type of employer, 61.5% indicated that they were working in the public sector and 38.5% in the private sector. In terms of work positions, majority of them (53.8%) were professionals.

Other personal information were asked, respondents indicated that all of them were having a car and being used as ways of getting them to the work place. Majority of the respondents indicated that they were having a baby with an age of less than one-year (38.5%). Further, respondents that takes care sick family members were 23.1%.

In terms of equipment and technology, almost 90% indicated that they had a personal computer at home. Further, almost 60% of them were connected with the Internet. Fixed phone line at home, 80% indicated that they do have a phone at home. Finally, respondents with a cellular phone were 92%.

Based on the question, "allowed to work from home," almost 81% indicated that they were willing to do so. Further, almost 40% of the respondents indicated that they were willing to telecommute for 2-day in a week and 31% for 3-day in a week. Further, respondents indicated that most of their work could be done from home (62%). Nineteen items were process through Factor Analysis and they were grouped into 5 factors. The overall mean score for the acceptance of telework concept is depicted in Table 1. Majority of the women workers in Malaysia indicated their high concern on Factor 5, with the mean of 22.96. Further, Factor 1 was indicated with the mean of 21.31.

Table 1: Mean for Telework Factors

	Mean	SD	Min	Max	N
Factor 5	22.96	3.25	16	29	25
Factor 1	21.31	2.56	18	25	26
Factor 3	14.85	2.65	9	19	26
Factor 2	10.28	2.39	4	14	25
Factor 4	4.38	0.75	3	5	26

5 DISCUSSIONS

Based on age of the respondents, in the 30s, this can be seen that majority of the women workers are energetic towards contributing their expertise and knowledge. Further, the level of education supports that majority of the women workers are the holders of diploma, degree, and/or master. It is so unfortunate for the nation if that group is left behind in their opportunity of pursuing a career. Moreover, majority of the women workers are professionals.

Current phenomena of two-income earners for the family play an important impetus for us to consider telework concept implementation. Therefore, the awareness of the concept among women workers needs to be addressed. Further, the indicator for the number of days that the respondents are willing to telecommute can be considered as a positive towards the acceptance of the telework concept. Moreover, the respondents also indicate that they can handle their work from home.

In relation to the technology exposure, the respondents are equipped with the relevant information and communication technologies (ICT). This can be seen as the government has created the Multimedia Super Corridor (MSC) as the backbone of the future Malaysia's ICT involvement. What can be said of the respondents that they are updated with the current and requirement of ICT in pursuing their career and at the same time as a wife and also mother.

As this research is still on going, apparently we discovered that the top most concern of the respondents are work satisfaction, productivity improvement, conducive working environment, work flexibility, and take care of family matters. On the other hand, the most unconcern are helping the employer to save on rental of office space, transfer of work location, send the children to school by themselves,

sexual harassment, and working outstation. Details of the mean are indicated below.

	<u>Most concern</u>	<u>Mean</u>
1.	Work satisfaction	4.65
2.	Increase my work productivity	4.62
3.	Conducive working environment	4.50
4.	Work flexibility	4.46
5.	Take care of family matters	4.38

	<u>Most unconcern</u>	<u>Mean</u>
1.	Helping employer to save on rental	3.04
2.	Transfer of work location	3.35
3.	Send my children to school by myself	3.52
4.	Sexual harassment	3.54
5.	Working outstation	3.54

Most of women workers in Malaysia stress on work satisfaction and productivity. Moreover with the support from the employer in providing favorable work environment and work flexibility, this strongly indicates that the workers are looking forward for telework concept. Finally as most Malaysian women workers are married, they indicate a high mean for taking care of family matters; this shows that the level of concern on the family is high among women workers.

The awareness among the women workers in Malaysia can be considered minimal as the mean for "working from home" is low. Further, the level of acceptance of the telework concept also can be considered as low due to the low mean shown. Therefore, aggressive steps need to be taken by the Ministries, agencies, corporations, and individuals in promoting and making awareness of the availability of the telework concept. Moreover, the culture of working from the conventional – going to the "actual office" – needs to be replaced gradually with the telework concept – the "virtual office."

Factor analysis indicated that Factor 5 is regarded as the main motivator for the women in Malaysia toward their acceptance of the telework concept. This can be seen on their concern of work location transfer, working outstation, and work satisfaction. Moreover, Factor 5 can be seen as their intention to work from home, they require work flexibility, their concern on the work productivity, their love to protect the environment, and appreciate conducive working environment. Therefore from the factors listed, Malaysian women regarded the telework concept is the new way of doing and getting work done.

Based on the independent samples t-test being conducted on the marital status of women, it was discovered that single and married workers indicated a significant difference on Factor 1, significance of 0.010 ($p < 0.05$). Thus, married women workers were in preference of the telework concept more than the single workers. Further based on the type of employer, there was a significance difference between public and private organization on Factor 3, significance of 0.075 ($p < 0.10$). This shown that women workers the public sectors gave a high preference

of accepting the telework concept as compared to workers in the private sectors.

6 CONCLUSIONS

In Malaysia, women workers are considered as the contributor towards the nation's economy. They are the considered as the think-tank and the brain of the future. Therefore, in making them versatile with the globalization era, certain measures need to be taken in making them aware of the telework concept. Further, various involvement from the government and organizations in accepting and promoting the telework concept is required as to ensure its implementation.

Finally, what we need to see in the country that women workers are given the opportunity for them to show and prove themselves that they are also capable of doing things that men did in their contribution towards the nation's economic wealth.

ACKNOWLEDGEMENT

The authors acknowledge the research grant provided by Universiti Sains Malaysia, Penang that has resulted this article. Ref no. 304/PMGT/634133.

REFERENCES

- Anonymous (1998). "The 3 Whys of Telecommuting," TSI Services, Inc., April 7.
- Anonymous (1999). "Demand for Mobile Devices on the Rise," *Computimes Malaysia*, September 30.
- Asaari, M.H.A.H. and Karia, N. (2001). "Factors Toward Telecommuting: An Exploratory Study," *Malaysian Management Review*, 36:1, June.
- [CNN] Cable News Network (1996). "Despite Its Advantages, Telecommuting Slow to Catch On," September 11.
- Finley, M. (1999). "Making a Telecommuting Wish List," *Computer User*, Minneapolis, 8:8, August.
- Goodrich, J.N. (1990). Telecommuting in America, *Business Horizon*, July-August.
- Hill, J.E., Miller, B.C., and Weiner, S.P. (1998). "Influences of the Virtual Office on Aspects of Work and Work/Life Balance," *Personnel Psychology*, 51:3, Autumn.
- Jacobs, S.M. and Van S.M. (1996). Telecommuting: Issues for the IS managers, *Information Systems Management*, Winter.
- Johnson, D. (1999). "Flexible Hours, Flexible Rules," *Home Office Computing*, 17:7, July.
- Khairallah, K. (2001). "Get a Life, Leave London," *New Statesman*, 130:4526, 02/26/2001.

- Knight, P.J. and Westbrook, J. (1999). "Comparing Employees in Traditional Job Structures vs. Telecommuting Jobs using Herzberg's Hygiene & Motivators," *Engineering Management Journal*, 11:1, March.
- Kurland, N.B. and Bailey, E.D. (1999). "Telework: The Advantages and Challenges of Working Here, There, Anywhere, and Anytime," *Organizational Dynamics*, 28:2, Autumn.
- Lovelace, G. (1995). "Creating the Framework for a Mobile Workforce," *Telesis*, 100, October.
- Meyers, J. (1998). "Free-From Office Work," *Sacramento Business Journal*, November 16.
- Roseberry, C. (2001). "Make Sure You Have the Tools to Succeed," 4:34, August 31, <http://telecommuting.about.com>.
- Robbins, S.P. and Coulter, M. (1999). *Management*, Sixth Edition, International Edition, Prentice-Hall, Inc., New Jersey.
- Shelly, G.B., Cashman, T.J., Waggoner, G.A. and Waggoner, W.C. (1998), *Discovering Computers 98: A Link to the Future*, Course Technology, Massachusetts, USA.
- Schilling, S.L. (1999). "The Basic of Successful Telework Network," *HR Focus*, 76:6, June.
- Straton, M.C. (2001). "Public and Private Approaches to Telecommuting," *FDCH Congressional Testimony*, 9/6/2001.
- [USDT] U.S. Department of Transportation (1993). "Transportation Implications of Telecommuting," Washington DC: Author.
- Verespej, M.A. (2001). "The Compelling Case for Telework," *Industry Week*, September.
- Williams, B.K., Sawyer, S.C. and Hutchinson, S.E. (1999), *Using Information Technology: A Practical Introduction to Computers & Telecommunications*, 3rd. Edition, Irwin McGraw-Hill, USA.