OVERTIME HOURS IN QUANTITY SURVEYING CONSULTANT FIRMS IN MALAYSIA

Sheikh Ilmi, Habizah and Rogbeer, Ishka Saakshee

Lecturer, School of Architecture, Building and Design, Taylor's University, Subang Jaya, Selangor, Malaysia Tel: 603 5629 5442

Email: Habizah.ilmi@taylors.edu.my, ishka0207@hotmail.co.uk

ABSTRACT

The construction industry in Malaysia is one of the few industries where mandatory overtime is used to be able to meet deadlines stipulated by clients. Whilst in the consultant firms, most employees tend to do either voluntary or mandatory overtime on a daily basis. However, previous studies that were conducted in other fields and other countries seem to suggest that overtime has a tendency to bring negative impact to both the firm and its employees if not properly moderated. The objective of this study is to find out the reasons why employees choose to do overtime and the actual effects of the overtime on firms and employees in the quantity surveying consultant firms in Malaysia. This research was carried out by distributing two sets of questionnaires to both employers and employees of quantity surveying consultant firms to obtain their views on the subject matter. Through this, the reasons and effects caused by the overtime were established. Excessive workload seemed to be the main reason for overtime. There are some suggestions on how to reduce the number of overtime hours worked in the firms.

Keywords: construction, employee, overtime, quantity surveying, workload.

INTRODUCTION

All over the world, different countries have different labour laws which state out the working terms and conditions which need to be followed by all companies, employers and employees. In Malaysia, those working rules and regulations are governed by the "MALAYSIA EMPLOYMENT ACT 1955". According to the MALAYSIA EMPLOYMENT ACT 1955 PART XII SECTION 60A – HOURS OF WORK, all employees are entitled to one full day of rest, and hence are required to work 6 days per week. The normal working hours per day should be 8 hours, thereby totalling up to a maximum of 48 working hours per week. If ever a company works less than 6 days per week, the employees should then be limited to a maximum of 10 hours per day (excluding breaks) and 48 hours per week. Under certain circumstances or mutual agreement, an employee might exceed those normal working hours stated above. These additional working hours will then be referred to as overtime, and will be paid a minimum of 1.5 times the hourly wage. Overtime can be classified as either mandatory or voluntary. However, employees are prohibited to work more than 104 hours of overtime per month, combining both voluntary and mandatory overtime.

Mandatory overtime is additional working hours which is imposed by an employer under special reasons. In the United States, the most common employees to be subjected to mandatory overtime are nurses who are usually required to work 12-hour shifts at a time (Geiger-Brown and Trinkoff, 2010). Since there is an abundant supply of labour in Malaysia, working shifts are shorter and hence mandatory overtime is not common. Voluntary overtime is additional working hours which the employee chooses to do, and which is not imposed by the employer. Voluntary overtime is becoming more and more popular in the Malaysian construction industry as employees are motivated by the fact that they are getting paid 1.5 times more than their normal wage per hour. However, if it is done unnecessarily and it is not supervised, voluntary overtime can have overall negative effects for both the employer and the employee.

PROBLEM STATEMENTS

Over the last 20 years, there has been a change in the pattern of average work time. At one time, workers were actually fighting to decrease the amount of time spent at work, but now, they seem to voluntarily spend more and more time at work, doing overtime (Campbell, 2002). Since these voluntary overtimes are not always supervised, the impact of this may not be always positive. It has been pointed out that there are many social problems that arise from long working hours. For example, the potential disruption of family life (Pocock, 2003; Townsend *et al*, 2003), sleep dysfunction (Dawson *et al*, 2001) and workplace health and safety risks (Spurgeon *et al*, 1997). Employees who do not know how to balance their work and non-work life end up having multiple problems such as job dissatisfaction, increased turnover, lack of general well-being, substance abuse, psychological and psychiatric problems (Boyar *et al*, 2003; Netemeyer *et al*, 1996; Allen *et al*, 2000).

Contrary to common belief, voluntary overtime hours are not always beneficial to companies. Researchers such as McCarthy and Rosenberg (1981), White (1981), and Nyland (1989) have documented evidence that productivity increased when working hours was reduced. It has been observed that given too much time to complete a task, an employee would feel less pressurized and hence deliver a lower grade piece of work. Also, Schor (1991) suggested that some reasons for this increase in productivity resulting from reduced working hours included increase in commitment and motivation of employees, less absenteeism and turnover, less stress and fatigue and reductions in unproductive or idle work time. Schuster and Rhodes (1985) debated that overtime work would lead to fatigue in the form of boredom, resulting into employees becoming inattentive, careless and more prone to making mistakes.

In the case of quantity surveying consultant firms, this would be a source of social and economic costs. As these firms deal with contract documents and money issues, any mistakes could prove to be detrimental to the firm. The aim of this study is to find out the reasons of doing overtime, to analyze the impact of implementing long working hours and to determine solutions to reduce overtime hours in the consultant firms of the Malaysian construction industry.

REASONS FOR OVERTIME

The most common reason for people to work overtime is for additional wages as a means to increase their monthly salary. This is as claimed by Mohd Khalid Atan, the president of the Malaysian Trade Union Congress (MTUC) that Malaysians do overtime as they need to earn more money (The Star, 2012). Furthermore, on a more global point of view, there was a survey conducted on a sample of 2,500 workers showed that 30% worked overtime hours as a source of extra money (The Independent, 2001). 14% of workers performed overtime to increase their chances of promotion and hence increase their salary in the long term (The Independent, 2001). It has also been suggested that working overtime hours can improve one's salary since employees paid per hour will earn more and employed people will tend to get more premiums and bonuses annually in exchange for investing longer hours at work (Scase et al, 1998; Steptoe et al, 1998).

Associates and partners in law firms in USA tend to use overtime as a measure of capability, good quality of work and determination, and hence uses overtime as an actual factor determining who deserves a promotion (Lander et al, 1996). Furthermore, data from British Household Panel Survey (BHPS) also indicated that working long hours did improve the probability of being promoted (Booth and Francesconi, 1997; Francesconi, 1999).

Another common reason for working overtime is workload, that is, the quantity of work expected to do in a specific job. Some components fuelling "workload pressure" are staff shortages, unevenly distributed workload, the need to meet deadlines or simply having too much work that would be impossible to complete in normal working hours (Kodz et al, 1998). The Chartered Institute of Personnel and Development (CIPD) (2001) confirmed in their survey that the major reason of doing overtime was because of the workload. Furthermore, in a survey conducted on members of the Institute of Managers, it was observed that 80% of the respondents answered that overtime hours were "necessary to meet deadlines", that is, they worked long hours mostly due to their heavy workload (Worrall and Cooper, 1999). Among managers, directors and executives, the most common reason for doing overtime is pressure of work (Hogarth et al, 2001). Since the construction industry usually involves hectic workloads with specific deadlines and huge projects, employees tend to do overtime to be able to cope with the work schedule.

Working culture and peer influence has been found to be one of the contributing factors in determining the amount of overtime worked by an employee (Kodz et al, 1998). An employee works in an environment where everyone around him tend to work long hours, the latter will have the tendency to follow the work "culture" set up by his peers, and also work overtime. It has been suggested that workers started adapting to the overtime culture in companies where long hours were valued and considered to be a sign of determination, commitment and hard work (Kodz et al, 1998). The importance of colleagues and co-workers influence was hereby denoted as one of the most contributing factors to long hours. Hogarth et al. (2001) compiled a survey for employers which did not identify the long hour culture as a contributing factor to doing overtime. Instead, the respondents answered that the main reasons for working long hours were temporary workload increase or accumulation of previous works. Kodz et al (1998) identified that employees believed that they were setting up a good example. Sometimes, working long hours simply become a habit, as all other colleagues have already spread their workload so as to finish late, and hence the employee feels obliged to comply with those overtime hours since they are used to doing it in the past (Kodz et al, 1998).

The factor of competition amongst colleagues was also confirmed by Landers et al. (1996) who observed that in United States law firms, employees had a tendency to increase their work hours whenever a senior colleague did so. This was described as a "rat-race" scenario, to impress employers or which was labelled as "competitive presentism" (Simpson, 1998b). In the United Kingdom, respondents to a survey conducted by CIPD (2001) admitted to doing more overtime even when they did not necessarily need to, whenever they shared an office with a workaholic or with anyone working a lot of overtime.

Perceived job insecurity is one important factor that influence the long hours of work of employees. This is more common in workplaces where employees have been fired in the past due to redundancy. Employees fearing that the same thing might happen to them will tend to work overtime to show their indispensability. Surveys conducted showed that about one-third of employees said that job insecurity was a reason for doing overtime (Knight, 1995; Kodz et al, 1998). The same scenario was reported in Malaysia where MTUC president Mohd Khalid claimed that he had received complaints from Malaysian employees who said that their employers or supervisors threatened to take action against them if ever they refused to work on their off days. Expedia's 2012 Vacation Deprivation Survey also showed that 40% of Malaysian respondents were afraid to go on holidays because their employers would not be happy about it (The Star, 2012).

Mohd Khalid added that he also received complaints from employees about their bosses reducing incentives and allowances if they went on annual leave. These factors contributed to put Malaysia in the 4th spot, having the most dedicated workforce after India, Brazil and Italy, with almost 90% of employees working even during holiday periods (Expedia, 2012). However, according to Booth and Francesconi (1997), working longer hours or doing more overtime did not affect the probability of being fired. The employer did not really take the number of hours worked into consideration before firing a specific employee. Therefore, it can be deduced that the response to job insecurity may be based more on a perceived thought rather than a real threat of losing one's job.

Some employees, especially those with higher paid jobs, admit to working long hours because they enjoy doing so. They choose to do overtime so as to be able to take their time to finish their job and produce a high quality piece of work, instead of rushing to finish in normal working hours. Some workers find it difficult to distinguish between work and enjoyment, as their employment consists of doing activities that other people consider as leisure time. Some examples of this type of jobs are sportsmen, academics, legislators and social workers (Gershuny, 2000). Generally, people tend to devote more time to things they value in life. This explains why employees having a high status job tend to spend more time at work doing overtime (Hochschild, 1997). Furthermore, United Kingdom surveys have also shown that a large proportion of people choose to work long hours because they are committed to their jobs and take pride in it. Some find enjoyment in working, being workaholic or are perfectionist about their jobs (Institute of Personnel Development and Harris, 1998). In the United Kingdoms, female managers that having children agreed they used work as a way to escape from home (Ceridian Performance Partners and Management, 2000).

IMPLICATIONS OF OVERTIME

Overtime has different implications for employees, employers and their companies. Effects on individual motivation, physical well-being, absenteeism, staff turnover and satisfaction caused by overtime have an overall influence on the productivity at the employer level (Shepard and Clifton, 2000). A survey performed by the Institute of Managers showed that 68% of the respondents believed their overtime hours were decreasing their overall productivity (Worrall and Cooper, 1999). Furthermore, a United States survey showed that shorter work hours and minimum overtime increases the incentive of workers to be more productive (US News, 1997 cited in La Jeunesse, 1999). Even though overtime hours help to adjust the pace and intensity of work, they can also be the cause for a higher absenteeism rate due to illnesses cause by long hours of work (Bonjer, 1968).

Shepard and Clifton (2000) deduced that the results obtained for some industries indicated an average decrease in productivity of 2% to 4% for a 10% increase in overtime. Shepard and Clifton (2000) hence concluded that as the number of overtime hours increase, the work week length also increases, and at a certain point the workers will start to become more and more inefficient. This appeared to match with the conclusion of White (1987).

It was observed that long and monotonous tasks that require high demand on attention, memory or speed of performance, were the ones that were mostly affected by lack of sleep resulting from working overtime. Even though some employees might be working on a complex, motivating and interesting subject, their output will still be affected by sleep deprivation (Spurgeon et al, 1997. It was discovered that with longer hours, employees tend to be less available and willing to help others (Sherrod and Downs, 1974 cited by Spurgeon et al, 1997). Also, employees who suffered to lack of sleep due to working overtime had trouble with speech: they tend to speak at a slower pace, were more repetitive, made softer unfinished statements, and had a lot of mispronunciations and omissions of syllables (Morris et al, 1960). It was also noted that employees suffering from sleep deprivation had less vigour and activation (Deary and Tait, 1987).

Spurgeon et al. (1997) identified two important features in relation to the effect of working long hours on health and safety at work. They are 1) the influence of tiredness on behaviour associated with safe work practices, that is, maintaining constant attention and tendency to take more risks, and 2) prolonged exposure to physical, chemical and other hazards in the working environment that may be detrimental to health. Spurgeon et al. (1997) cite studies on health and safety incidents resulting from long hours of work and overtime, involving airline flight attendants (Ono et al, 1991), phase shifting of junior doctors (McCall, 1988) and long distance drivers (Feyer and Williamson, 1995). These studies showed that some important factors influencing health and safety are behavioural response to fatigue, nature of mistakes, rest breaks, time of the day and in some cases, the perceived importance of tasks. Studies showed that tired employees who have been working extremely long shifts made much more risky choices, as compared to normal hour employees (Shingledecker and Holding, 1974).

Numerous studies have explored the relationship between long hours, fatigue, sleep related incidents and accidents among drivers (Labour Research, 1995). McCartt et al. (2000) cite down a list of previous research that succeeded in finding a relationship between hours of work, hours of rest and sleep-related driving incidents - Mackie and Miller (1998); Milter et al. (1988); Braver et al. (1992) and Lin et al. (1994).

Work-life balance has become an important factor in choosing to apply or stay in a particular organization. A survey conducted on graduate recruiters has demonstrated that balancing home life with work life has become an important aspect to retain graduate recruits (Sturges and Guest, 1999). Ceridian Performance Partners and Management Today (1999) also conducted a survey on 2,000 managers, which showed that one third of the respondents were willing to trade their job for a better work-life balance. Furthermore, work-life balance was also determined to be the most important factor influencing graduates in choosing their first job (Coopers and Lybrand, 1997). Moreover, an international survey conducted on 10,000 managers in Europe, USA, Russia and Japan also demonstrated that work-life balance was either the most or second most important factor of determining the quality of a job (Gemini Consulting, 1998). Another similar survey showed that individuals who are not satisfied with the long working hours are twice more likely to look for a new job and are much less willing to put in extra effort at work (The Guardian, 2001).

The research on overtime operated by the Institute for Employment Studies has observed that organizations known to have long hours culture has more problems recruiting new staff. Employers expressed their worry about their image as a good employer and their inability to recruit new employees (Kodz et al, 1998). By analysing the findings on the Workplace Employee Relations Survey 1998 (WERS98), a positive relationship between staff turnover and working long hours can be established. The results indicated that workplaces with high percentages of employees working over 48 hours also had high staff turnovers. This showed evidence that employees working in firms with longer working hours tend to quit their jobs more often than those working in firms with shorter working hours.

Another outcome of overtime hours is the negative effect that it sometimes has on an employee's motivation and morale. A survey conducted by the Institute of Management (1995) resulted in 66% of the respondents agreeing that the overtime hours affected their morale at work. However, the survey results showed that there can be good effects resulting from working overtime (CIPD, 2001) where the employees respect their managers for being a hard worker and for doing so much overtime as their managers are setting a good example and inspiring them to work harder to catch up with the latter's work enthusiasm and determination.

The effect of long working hours on health has received much more attention in the research field as compared to other effects on employees. Scase et al. (1998) examined the BHPS data to find relationships

between long hours, health and family life. For men, they only detected a small increase in blood pressure with increasing working hours. However, they pointed out that this increase in blood pressure could be the cause of serious long term effects. For women, there were several reported health effects that resulted from working overtime such as, problems with arms, hands, legs, breathing, the digestive system, anxiety, blood pressure and depression. Results also showed that women who had constantly worked long hours for a minimum period of 3 years were 20% more prone to reporting health problems as compared to those working normal hours.

The survey of UK employees working over 48 hours per week (CIPD, 2001) also demonstrated several self-reported health effects that respondents associated with long working hours such as mentally drain or suffering from mental exhaustion, severe sleeping problems, constantly under too much pressure and suffering from chronic headache. The employees changing from standard hours to long working hours tend to start smoking or increase their daily cigarette intake (Scase et al, 1998; Shields, 2000). Similarly, the study also showed that women who moved from normal to longer hours tend to increase their alcohol consumption. However, this trend was not observed in men. Mayurama et al. (1995) discovered that employees working more than 10 hours per day were usually linked to poor physical exercise, poor sleeping habits and irregular eating patterns. The survey conducted by Mayurama and Morimoto (1996) also showed that managers working longer hours paid less attention to their nutritional balance, reported having an irregular daily life, and were more likely to experience a deterioration in their physical condition. Shields (2000) also established a strong link between employees working overtime hours and excess body weight in men. Men who increased their working hours were more likely to experience sudden unhealthy weight gain compared to those who remained on standard hours. Moreover, being overweight is a factor known to increase probability of other health issues such as heart diseases.

A review by the British Medical Association (BMA) states that the relationship between long hours and ill health is largely mediated by stress (BMA, 2000). However, stress has not been globally defined and is not easy to quantify (Harrington, 1994). Spurgeon et al. (1997) highlighted that long working hours and overtime could lead to increased stress levels, as they required continuous production at work coupled with growing levels of tiredness. From a survey conducted on medical staff, Kirkaldy et al. (1997) declared that self-reported stress was directly proportionate with long working hours. Mayurama et al. (1995) concluded from a survey that 50% of employees working over 10 hours per day believed to be suffering from acute mental stress, compared to only 25% of those working shorted hours. This study was later confirmed by Mayurama and Morimoto (1996).

Canadian health statistics have demonstrated that women who worked over 40 hours per week had 2.2 times the probability of being affected by depression, compared to those who worked standard hours. Another study conducted on dual earner household reported that overtime lead to increasing "role strain" (worries due to conflicting pressures of home and work) for both husbands and wives. Overtime was linked to higher probability of anxiety and depression for husbands, whereas for wives, long hours increase depression in their husbands, but not in themselves (Galambos and Walters, 1992). Scase et al. (1998) and noted that self-employed individuals worked longer hours but were less affected by stress and other health problems, as compared to regular employees. This could be mainly due to the quantity of choice and control that the workers have over their own times. Other research also suggested that jobs that usually have less control and autonomy are often linked with health complaints (Dhondt, 1997).

As for the Institute of Management study (1995), over three-quarters said they wanted to spend more time with family and friends and felt they did not spend enough time with their children. Over half of the respondents also admitted not having time for other activities after work. These opinions were further confirmed by an attitude survey conducted by CIPD (2001) which showed that 56% of respondents felt that they spent too much time of their life at work.

CIPD study (2001) also found that the respondents argued with their spouses over the past two months due to working overtime hours and the same percentage felt guilty for not having enough time to help their partners with household duty. They also believed that working long hours was detrimental to their social life and friendships and those who were parents felt that working overtime had damaged their relationship with their children. Similar responses were denoted by the Institute of Management (Worrall and Cooper, 1999; Weinberg and Cooper; 1999). Furthermore, interviews conducted in USA showed that partners of executives tend to complain about their spouse not being available for their family (Hochschild, 1997). Scase et al. (1998) observed that people working overtime tend to spend less time with their children and they did not have time to help their offspring with homework. This helped to conclude that those children could suffer from 'negative educational outcomes' from lack of parental support. Moreover, they realized that parents working long hours had more trouble handling and communicating with their children, compared to those who spent more time at home.

Even though extremely long hours were observed to have detrimental effects on health, it was also denoted that shorter hours or no hours at all seemed to have a negative effect on individuals. Joshi et al. (1996) pointed out that being unemployed or not feeling useful at work could be detrimental to health. Glass and Fujimoto (1994) while studying the incidence of depression found out employment that up to a number of working hours could have positive effects on mental health. Furthermore, a study indicated that individuals working less than 16 hours per week suffered from reduced psychological well-being (Bardesi and Francesconi, 2000). Scase et al. (1998) reported that some advantages of working longer hours were the possible link to higher pay and higher earning jobs. Steptoe et al. (1998) examined that it is better for an individual to experience an increase in working hours rather than a decrease, since a decrease might cause psychological distress due to the related reduction in income. It was concluded that previous overtime hours had a positive effect on increase of income. Over longer periods, this growth seems to be more pronounced (Cherry, 1999).

RESEARCH METHODOLOGY

For this research, two sets of questionnaires were designed: one for the employers and another for their employees. The reason for this is to get opinions on overtime from two different perspectives. The use of surveys or questionnaires is usually considered to be quantitative research. Survey respondents will give an answer that corresponds to a number. Their answers are then stored in a database and the database can be used for statistical analysis which can then be used to generate ideas. There are only 347 registered quantity surveying firms throughout Malaysia. Therefore, sampling will not be required as the number of potential respondents is reasonable.

Where Likert scale is used to measure perception or opinions by the weight and the frequency of occurrence, Relative Important Index (RII) analysis method is adopted in establishing the significance ranking among different variables.

DATA ANALYSIS AND DISCUSSION

The survey was conducted on all 347 registered consultant quantity surveying firms in Malaysia. Out of the 347 questionnaires sent, 25 employers and 32 employees answered, which represent 7.20% and 9.22% respectively. The data from the 2 sets of questionnaires were analysed separately.

The employer's questionnaire had 3 sections of questions: general information about the firm's practice, their opinion about the impact of excess overtime on their firm, and lastly, suggest methods to reduce overtime among their employees. 64% of the employers answered that they have more than 9 employees and 36% of them said the number of overtime hours that their employees work seems to be 1 hour per day. Only 16% of them answered that their employees work overtime more than 3 hours per day and 24%

claimed that there is none of their employees doing overtime. From the data gathered, it can be said that the average overtime is 1.8 hours per day and hence roughly 9 hours overtime per week. The responses showed that only 28% of them limit the number of overtime hours in their company, while the other 72% allow their employees to work as much overtime as they want. This data showed that the mode pay per overtime hour is between RM10.00 to RM20.00 which suggests a mean average of RM16.60 per overtime hour.

Table 1: Employer's perception of the impact of excess overtime on firm

Impact of excess overtime on the firm	RII Score	Ranking
Decrease in health and safety risk of employee due to	0.680	1
fatigue		
Overall decrease in productivity	0.632	2
Employees have a higher tendency to quit their job	0.632	2
Increase in error-making and mistakes in jobs	0.600	4
Lees people apply in firms having long working hour	0.592	5
cultures		
Increase in absenteeism	0.552	6

From Table 1, the majority of employers agreed that decrease in health and safety of employees due to fatigue is the major impact caused by excessive overtime, followed by decrease in productivity and tendency to quit job which fall in the second rank.

The employers' overall responses were neutral for all of the impacts suggested to them. This demonstrated that they do not actually believe that too much overtime can have negative effects on their firms. The only effect with a high score was decrease in health & safety of employees due to fatigue; it shows that only a few employers are actually aware or actually care about the effects of overtime on their employees' health. This can also explain why only 28% of the employers limit the number of overtime hours worked in their firm compared to the other 72% who allows the employees to work as much overtime as they want.

The employee's questionnaire had 5 questions: the number of overtime hours worked per day, the average pay per overtime hours worked, reasons for which they choose to do overtime, their perception on the effects on overtime on their lives and solutions that would encourage them to reduce their overtime hours. From the data gathered, the average overtime hour that the employees work is 1.84 hours per day and hence roughly 9.2 hours overtime per week.

Table 2: Reasons for working overtime

Reasons for working overtime	RII Score	Ranking
The workload is too heavy to complete in normal hours	0.900	1
To obtain extra money	0.706	2
To increase chances of being promoted	0.594	3
Influenced by colleagues to work overtime	0.568	4
Others such avoiding traffic, nothing better to do etc.	0.568	4
Working overtime is enjoyable	0.456	6

Table 2 shows that the respondents strongly agreed that the main reason for doing overtime is the quantity surveyor's workload that is too heavy to complete in normal working hours. The second in rank is where

many employees agreed that obtaining extra money is an incentive to work overtime. Majority of the respondents disagreed that working overtime is enjoyable which contributes the lowest score.

The main reason for doing overtime in quantity surveying firms is mostly due to the heavy workload which is, most of the time, not possible to complete in normal working hours. Obtaining extra money was the second most popular choice. The respondents did not seem to agree or disagree with the reason to increase chances of being promoted; this might be because quantity surveyors cannot really be promoted to a higher rank. They can only change job scope and become a project manager for example, by going through further studies. Also, the fact that the responses demonstrated an overall disagreement with the reason of working overtime is enjoyable. It can be deduced that whatever overtime that was done by the employees were generally involuntary but required.

Table 3: Employee's perception of the effects caused by working excessive overtime

Effects caused by working excessive overtime	RII Score	Ranking
Disruption in personal and health life	0.862	1
Psychological impacts such as stress and depression	0.838	2
Health problems such as headache, tiredness, high blood pressure	0.800	3
etc.		
Disruption in sleeping and eating patterns	0.788	4
Increase of bad habits such as smoking, drinking etc.	0.662	5

Table 3 shows that most of the respondents agreed that they were affected by doing too much overtime which causes a disruption in personal and family life, followed by psychological impacts and health problems. While they are unsure an excessive overtime can increase bad habits.

The employees' answers demonstrated that they agreed on most of the impacts that overtime had on their health and personal life. This shows that despite being aware and actually feeling the negative effects of overtime in their daily life, they are obliged to work overtime for the reasons stated above. This reflects the trend that has been developing recently to value family and home life above work.

To find out employer's opinions on the methods to reduce employee's overtime, the 3 most popular methods are derived and ranked in order of preference. They are 1) Increasing the number of employees (56%), 2) Allowing employees to work on a flexible timetable (52%) and 3) Giving bonuses or incentives for jobs completed before a deadline during normal working hours (48%). Only 8% of them agreed that hiring a supervisor would be an effective way to reduce overtime.

The employees seem to choose the preferred way to reduce overtime by increasing the number of employees (75%). The second and third options were the ability to work on a flexible time instead of having fixed working time (53%) and giving bonuses or incentives for job s completed before a deadline during normal working hours (47%).

Along the way, a few general findings were made regarding overtime. It seemed that the responses obtained by the employers and employees seemed to correlate on many levels. They seemed to agree on the amount of overtime hours worked per day, which was suggested by the employers to be an average of 1.8 hours per day compared to 1.84 hours per day estimated by the employees. As for the overtime pay per hour, the employers estimated it to be an average of RM 16.60, while the employees' average was RM 16.56. It can be observed that the answers obtained are almost similar, which suggests that the data obtained were reasonably accurate.

Once again, the percentages obtained seemed to match on a certain level: 53% of the employees and 52% of the employers believed that the ability to work on a flexible timetable would help to reduce overtime; while 47% of employees and 48% of employers agreed that giving out bonuses for jobs completed before the deadline during normal working hours might motivate employees to finish their job earlier instead of doing overtime. The most preferred solution however seemed to be increasing the number of employees so as to reduce the workload which was selected by 56% of the employers, and an astounding 75% of the employees. This suggests that a lot of quantity surveying firms tend to take out too much workload compared to the workforce they actually possess.

RECOMMENDATIONS FOR FUTURE STUDIES

The findings discovered above provide the following insights for future research, especially on the financial aspects of overtime on the firm. Further studies have to be carried on to be able to measure the amount spend by firms on overtime and hence determine whether this capital could be used to decrease the amount of overtime hours worked without decreasing the profitability of the firms. As mentioned before, one of the methods to reduce overtime would be by giving out bonuses to employees to motivate them to finish their work in normal working hours. Further financial research has to be done to determine whether this solution could indeed be applied and whether the firms might save money by doing so. Also, although this study clearly shows that most firms are lacking the required workforce to cope with the workload; further investigation is required to find out why exactly the firms refrain from employing more quantity surveyors. Does that because of they can save money by paying overtime instead of paying new staff? The reasons for not employing more quantity surveyors is a key factor that needs to be investigated in further studies in order to be able to reduce overtime.

CONCLUSION

Despite the overtime hours being reasonable, the employees still claim to suffer from the negative effects of overtime. The employers, on the other hand, seem to be unaffected by the overtime hours and tend to disregard the effects it has on their employees. This might be due to either unawareness of the effects that overtime may have, or simply because they choose to ignore the impacts and concentrate purely on getting the work done. Further research has to be conducted in order to find out how to encourage the employers to apply the methods to reduce overtime, in order to improve the health and well-being of their employees, which as a result might increase the overall productivity of their firms.

REFERENCES

Allen, T.D., Herst, D., Bruck, C.S. and Sutton, M. (2000), "Consequences associated with work-to-family conflict: a review and agenda for future research", *Journal of Occupational Health Psychology*, Vol. 5 No. 2, pp. 278-308.

Bardasi, E. and Francesconi, M. (2000), The Effect of Non-standard Employment on Mental Health in Britain, Institute of Social and Economic Research, Working Paper No. 2000-37, University of Essex

Barnett, R. and Gareis, K. (2000), 'Reduced-Hours Employment', Work and Occupations, Vol. 27, No. 2, pp. 168-187

Bonjer, F. H. (1968), 'Relationship Between Working time, Physical Working Capacity, and Allowable Caloric Expenditure', in Rohmert W (ed.), Muskelarbeit und Muskeltraining, Stuttgart: Gentner Verlag Booth, A. and Francesconi, M. (1997), Career Mobility in Britain, working papers of the ESRC Research Centre on Micro-social Change, Paper 97-21, Colchester: University of Essex

Boyar, S.L., Maertz, C.P., Pearson, A.W. and Keogh, S. (2003), "Work-family conflict: a model of linkages between work and family domain variables and turnover intentions", *Journal of Management Issues*, Vol. 15 No. 2.

Braver E.R., Preusser C.W., Baum H.M., Beilock, R. and Ulmer, R. (1992), 'Long Hours and Fatigue: a study of tractor-trailer drivers', *Journal of Public Health Policy*, 13 (3), pp. 341-366

British Medical Association (2000), Implications for Health and Safety of Junior Doctors Working Arrangements, British Medical Association.

Campbell, I. (2002), "Extended working hours in Australia", *Labour and Industry*, Vol. 13 No. 1, pp. 91-110.

Ceridian Performance Partners and Management Today (1999), The Price of Success, London: Ceridian Performance Partners

Cherry, M. (1999), Why Employees Work Long Hours When They Are Not Paid For Each Hour, Dissertation, Binghampton University, State University of New York

Coopers and Lybrand (1997), International Students Survey Report, London: Coopers and Lybrand

Dawson, D., McCulloch, K. and Baker, A. (2001), Extended Working Hours in Australia - Counting the Costs, *The Centre for Sleep Research*, The University of South Australia, Adelaide.

Deary, I. J. and Tait, R. (1987), 'Effects of sleep disruption on cognitive performance and mood in medial hours officers', *British Medical Journal*, Vol. 295, pp. 1513-1516

Dhondt, S. (1997), Time Constraints and Autonomy at Work in the European Union, European Foundation for the Improvement of Living and Working Conditions

Expedia (2012), "Vacation Deprivation Survey", http://www.expedia.com/p/info-other/vacation_deprivation.htm. As accessed on 06.11.2015.

Feyer, A. M. and Williamson, A. M. (1995), Work and rest in the long distance road transport industry in Australia, Work and Stress 9: pp. 198-205

Francesconi, M. (1999), The Determinants of Promotion in Britain: Evidence from Panel Data, Institute for Social and Economic Research Working Paper, pp. 99-06, for methodology

Galambos, N. and Walters, B. (1992), 'Work hours, schedule inflexibility and stress in dual-earner spouses', *Canadian Journal of Behavioural Science*, Vol. 24, No. 3, pp. 290-302

Geiger-Brown, J. and Trinkoff, A. M. (2010), Is it time to pull the plug on 12-hour shifts? Part 3. Harm reduction strategies if keeping 12-hour shifts. *Journal of Nursing Administration*, 40(9), pp. 357-359

Gemini Consulting (1998), International Workforce Management Study: Capitalising on the Workforce, London: Yankelovitch Partners Inc

Gershuny, J. (2000), Changing Times: Work and Leisure in Post Industrial Society, Oxford University Press

Glass, J. and Fujimoto, T. (1994), 'Housework, Paid Work, and Depression Among Husbands and Wives', *Journal of Health and Social Behaviour*, Vol. 35 June, pp. 179-191

Harrington, J. M. (1994), 'Working Long Hours and Health', *British Medical Journal Supplement*, Vol. 308, pp. 1581-1582

Hochschild, A. R. (1997), The Time Bind: When Work Becomes Home and Home Becomes Work, Metropolitan Books, CIPD.

Hogarth, T., Hasluck, C., Pierrre, G., Winterbotham, M. and Vivian, D. (2001), 'Work-Life Balance 2000: Baseline study of work-life balance practices in Great Britain', Institute for Employment Research Institute of Management (March 1995), 'Finding the time: a survey of managers' attitudes to using and managing time'.

Institute of Personnel and Development, and Harris (1998), 'Survey into Long Hours' for Panorama BBC 28 September 1998.

Joshi, H., Macran, S. and Dex, S. (1996), 'Employment after Childbearing and Women's subsequent Labour Force Participation': Evidence from the British 1958 Birth Cohort', *Journal of Population Economics*, Vol. 9, No. 3, pp. 325-48

Kirkaldy, B., Trimpop, R. and Cooper, C. (1997), 'Working Hours, Job Stress, Work Satisfaction, and Accident Rates Among Medical Practitioners and Allied Personnel', *International Journal of Stress Management*, Vol. 4, No. 2, pp. 79-87

Knight, A. (1995), The Family Friendly Workplace: An Investigation into Long Hours Culture and Family Friendly Employment Practices, Austin Knight UK Ltd, London

Kodz, J., Kersley, B. and Bates, P. (1998), Breaking the Long Hours Culture, IES Report No. 352

Labour Research (1995), Can Long Working Hours Kill?, Labour Research Vol. 84 No 3

La Jeunesse, R. (1999), 'Toward an efficiency week', Challenge Vol. 42(1), pp. 92-109

Landers, R., Rebitzer, J. and Taylor, L. (1996), 'Rat Race Redux: Adverse Selection in the Determination of Work Hours in Law Firms', *American Economic Review*, Vol. 86, pp. 329-348

Laws Of Malaysia: Employment Act 1955, http://myhos.mohr.gov.my/eAkta/akta_perburuhan/akta_kerja1955.pdf, as accessed on 9.9.2015

Lin, T. D., Jovanis, P. P. and Yang, C. Z., (1994), Time of Day Models of Motor Carrier Accident Risk, Transportation Research Record 1457, National Academy Press, Washington, DC

MacKie, R. R. and Miller J. C. (1998), Effects of Hours of Service, Regularity of Schedules, and Cargo Loading on Truck and Bus Driver Fatigue, DOT-HS-5-01142, Human Factors, Goleta, CA

Maruyama, S., Kohno, K. and Morimoto, K. (1995), 'A study of preventive medicine in relation to Mental Health among Middle Management Employees (Part 2) - Effects of long Working Hours on lifestyles, perceived stress and Working Life Satisfaction', *Japanese Journal of Hygiene*, Vol. 50, No. 4, pp. 849-860

Maruyama, S. and Morimoto, K. (1996), 'Effects of long hours on lifestyle, stress and quality of life among intermediate Japanese managers', *Scandinavian Journal of Work Environment Health*, Vol. 22, October, pp. 353-359

McCall, T. B. (1988), 'The impact of long working hours on resident physicians', *N England Journal Med.*, 318, pp. 775-778

McCarthy, M.E. and Rosenberg, G. (1981), Work Sharing Case Studies, W.E. UpJohn Institute, Kalamazoo, MI.

McCartt, A., Rohrbaugh, J., Hammer, M. and Fuller, S. (2000), Factors Associated with Falling Asleep at the Wheel among Long - distance Truck Drivers, Accident Analysis and Prevention, Vol. 32, No. 4, pp. 493-504

Milter, M. M., Carskadon, M. A., Czeisler, C. S., Dement, W. C., Dinges, D. F. and Graeber, R. C. (1988), 'Catastrophes, sleep and public policy' Sleep 11 (1), pp. 100-109

Morris, G. O., William, H. L. and Lubrin, A. (1960), Misperceptions and Disorientation during Sleep Deprivation, AMA Archives of General Psychiatry, Vol. 2, p. 247

Netemeyer, R., Boles, J. and McMurrian, R. (1996), "Development and validation of work-family conflict and family-work conflict scales", *Journal of Applied Psychology*, Vol. 81 No.4, pp. 400-10

Nyland, C. (1989), Reduced Working and the Management of Production, Cambridge University Press, Cambridge.

Ono, Y., Watanabe, S., Kaneko, S., Matsumoto, K. and Miyao, M. (1991), Working Hours and Fatigue of Japanese Flight Attendants, J.Hum Ergo, (Tokyo) 20, pp. 155-164

Pocock, B. (2003), The Work/Life Collision: What Work Is Doing to Australians and What to Do about it?, Federation Press, Sydney.

Scase, R., Scales, J. and Smith, C. (1998), Work Now — Pay Later? The Impact of Long Work Hours on Health and Family Life, ESRC Connect Insights, November

Schor, J.B. (1991), The Overworked American, Basic Books, New York, NY.

Schuster, M. and Rhodes, S. (1985), "The impact of overtime work on industrial accident rates", Industrial Relations, Spring, Vol. 24 No. 2, pp. 234-46

Shepard, E. and Clifton, T. (2000), 'Are longer hours reducing productivity in manufacturing?', *International Journal of Manpower* 21(7), pp. 540-552

Sherrod, D. R. and Downs, R. (1974), 'Environmental Determinants of altruism: the effects of stimulus overload and perceived control in helping', *Journal of Experimental Social Psychology*, 10, pp. 468-479

Shields, M. (2000), 'Long working hours and health', Statistics Canada, *Perspectives on Labour & Income* Vol. 12, No. 1, pp. 49-56

Shingledecker, C. A. and Holding, D. H. (1974), 'Risk and effort measures of fatigue', *Journal of Motor Behaviour*, 6, pp. 17-25

Simpson, R. (1998b), 'Presenteeism, Power and Organisational Change: Long Hours as a Career Barrier and the Impact on the Working Lives of Women Managers', *British Journal of Management*, Vol. 9, pp. 537-552

Spurgeon, A., Harrington, J. and Cooper, C. (1997), 'Health and safety problems associated with long working hours: a review of the current position', *Occupational Environmental Medicine* June 1997, Vol. 54, No. 6, pp. 367-375

Steptoe, A., Wardle, J. and Lipsey, Z. (1998), 'Longitudinal study of workload, and variations in psychological well-being, cortisol, smoking and alcohol consumption', Annals of Behavioral Medicine, Vol. 20, No. 2, pp. 84-91

Sturges, J. and Guest, D. (1999), Should I Stay or Should I Go Issues relating to the retention of graduates, Warwick: Association of Graduate Recruiters

The Chartered Institute of Personnel and Development (CIPD) (2001), 'Married to the Job?', Chartered Institute of Personnel and Development

The Independent (2001), 'Workforce 'Close to Breaking Point' Over Britain's Long Hours Culture' http://www.highbeam.com/doc/1P2-5166186.html. As accessed on 06.11.2015

The Star (2012), "Malaysians put in long hours at work out of necessity", http://www.thestar.com.my/story.aspx?file=%2f2012%2f11%2f24%2fnation%2f12366159&sec=nation. As accessed on 08.02.2016.

Townsend, K., Russell, B., Peetz, D., Houghton, C., Fox, A. and Allan, C. (2003), Working Time Transformations and Effects, Queensland Department of Industrial Relations, Brisbane.

US News/Bozell (1997), Worldwide poll, conducted by KRC Research and Consulting, New York

Weinberg, A. and Cooper, C. L. (1999), 'Workload, Stress and Family Life in British Members of Parliament and the Psychological Impact of Reforms to their Working Hours', Stress Medicine

White, M. (1981), Case Studies of Shorter Working Time, Policy Studies Institute, London.

White, M. (1987), Working Hours: Assessing the Potential for Reduction, International Labour Office: Geneva

Worrall, L. and Cooper, C. (1999), 'Quality of Working Life: 1999 Survey of Managers' Changing Experience', Institute of Management