

A Sense in Working Overtime: The Impact of the UK Working Time Regulations on Long Hours and Stress for IT Professionals

Ian Martin
Manchester Metropolitan University Business School
Aytoun St
Manchester
M1 3GH

i.martin@mmu.ac.uk
0161 247 3894

Abstract

Only a small amount of research thus far has investigated the relationship between the working conditions of those employed in technical professions, such as Information Technology (IT), and the implications for their well being (Sonnetag et al., 1994). In particular the IT profession in the UK appears to be at risk from a culture characterised by long working hours (Kodz, 2003). In addition to the established links between long-term computer use and upper extremity musculoskeletal disorders (Punnett & Bergqvist, 1997), previous research has also positively linked working for excessive hours as potential stressor to the mental health of employees (Sparkes et al., 1997; Spurgeon, Harrington & Cooper, 1997). A prevalence of mobile computer technologies has also meant the erosion of traditional boundaries between work and home (Venkatraman, Tanriverdi & Stoke, 1999). Furthermore IT professionals have faced a proliferation of complicated methodologies, a growing guilt reaction to a failure to keep pace with ever-changing technological advancements, and the pressure to develop and deliver software in shorter time scales (Perlow, 1998; Stokes, 1996). These very personal issues associated with the quality of working life also have serious organisational implications in terms of increased costs related to absenteeism, recruitment and training; impaired decision making; job dissatisfaction and low morale (Coolican, 2001).

The UK's Working Time Regulations (WTR), implemented in 1998, provide a current, normative representation of reasonable working time. This research paper compares the working patterns of a cluster of IT professionals within a large financial services organisation against this model in order to ascertain their position relative to this tolerable standard. The relationship between the subtleties in the way time is ordered and the reported perceptions of the affect of the WTR and other Human Resource initiatives to reduce the culture of long working hours are studied.

Whilst it is acknowledged that individual characteristics are important in determining an affinity and ability to work long hours and cope with stress, they are by no means the overriding aspects. Previous researchers such as Moore (1998) have cited adverse organisational factors as more significant in the etiology of work exhaustion than individual factors. This research examines some of those organisational factors and the perceived value of formal initiatives in reducing incidences of long working hours and concomitant pressures. The perceptions of stress and the efficacy of these formalised schemes are examined by observing and questioning those directly affected with regards to their working time, job stressors and work-life balance.

The findings indicate that although the organisation in question has made some high-profile attempts to promote a healthy balance between work and home, the efficacy of these efforts is questionable. The working limits set by the WTR are regularly exceeded and long hours are still entwined, and indeed often subtly promoted, within the organisation. Managers and the Human Resources (HR) department appear to send out confusing and contradictory messages. IT professionals, and their partners, are often publicly rewarded for working long hours while others are penalised for doing the same. The performance management system values those working on high-profile projects, with work on these projects often a key factor in gaining promotion. Yet due to the nature of the profession, the organisational sub-culture, and poorly considered workplace design, this work invariably requires the commitment of sustained long hours amid difficult circumstances. As HR try to drive through the principles of the WTR formally, or informally through initiatives such as *Work Smarter Not Harder* and *Go Home On Time* days, the unanticipated consequences of their actions and inactions present IT professionals with a stress-laden dichotomy.

Introduction

In 1998, the government of the United Kingdom (UK) finally adopted the European Union's Working Time Directive as the Working Time Regulations (WTR). The Directive, passed as European law in 1993, is a key component of the European Union (EU) Social Charter Action Programme and has at its heart the health and safety of employees (Barnard, 1999). The protective measures for employees contained within the regulations are:

- K1. An average limit of 48 hours per week measured over a 17-week period;
- K2. A minimum daily rest period of 11 consecutive hours;
- K3. A minimum, uninterrupted, weekly rest period of 24 hours, or 48 hours in a fortnight;
- K4. A minimum rest break of 20 minutes where the working day is longer than six hours.

The UK government has made it possible for individuals to sign opt-out agreements if they so wish, and collective opt-out agreements can also be made between employers and their workforce as a whole.

This research examines the effect of the introduction of the WTR on a cluster of fifteen IT professionals working for a large FTSE 100 listed financial services organisation at their IT headquarters in the Northwest of England. At the time of the study the job functions of the fifteen were varied and broadly representative of the typical roles undertaken by IT specialists. These included: software development, project implementation, post-live support and technical consultancy. The organisation was chosen because of a strong reputation for promoting family-friendly policies and a public stance of actively promoting a sensible work-life balance (Kodz et al., 1998).

It is perhaps worth noting that both the term Information Technology (IT) and the word 'professionals' have connotations associated with their use. The term IT professionals is used here as a convenient moniker to describe the nature of the type of work undertaken by those in the study. For the purposes of this paper the term IT and Information System (IS) are used interchangeably; the former being chosen because of its wider common currency.

The issue of long hours working is an important one for both the individual and the organisation. Concerns for personal health and well-being have been raised by previous researchers. Long-term computer use either explicitly, or implicitly as a typical feature of sedentary office life, has been associated with upper extremity musculoskeletal disorders (Punnett & Bergqvist, 1997) often categorised as Repetitive Strain Injury (RSI). Furthermore some have suggested a link between long hours and both mental health and cardiovascular disorders (Spurgeon, Harrington & Cooper, 1997), although this link is not well established (Sparkes et al. 1997). As well as these personal concerns regarding a healthy work-life balance there are also significant organisational implications. If the perceived quality of working life decreases then organisations are likely to see increases in direct costs associated with absenteeism, and the recruitment and training of new staff. Lack of job satisfaction and low morale may also have indirect impacts and costs as a result of a decline in the overall image and status of the organisation (Coolican, 2001).

Within the IS literature a small body of work has concerned itself with the human issues concerning the success of information systems; for instance the work of Mumford (1995) and Wastell & Newman (1996). However, the focus so far appears to have been largely upon improving the realization of information systems rather than a concern for the relationship between the health and the working conditions of those developing, delivering and implementing software projects. DeMarco and Lister (1987) have taken a more holistic people perspective that contends that software developers work to produce products of high quality and that long hours are often needed to compensate for bad workplace and job design. If these poor working conditions are addressed then not only does this provide for happier and healthier employees, but also provides the right environment for better software projects.

The IT profession appears to have some specific work-life balance issues that act as stressors with the potential to result in long hours working. Markus and Benjamin (1997) examined the guilt reaction within the profession of having to keep up with the ever-changing developments in new technology in order to gain peer recognition. They also found that a proliferation of complicated processes inherent in software development results in an increased workload for the IT specialist. As Stokes (1996) has detected there is also an imbalance within the IT profession caused by the demands of developing this software in shorter timescales coupled with the profession's intrinsic strong work ethic (Sonnentag et al, 1994). In order to cope with these stresses advice is offered that management skills, discipline and self-confidence are required to set and maintain appropriate personal boundaries. However a prevalence of mobile computing and communication technologies has led to the erosion of these traditional boundaries between work and home (Venkatraman, Tanriverdi & Stokke, 1999).

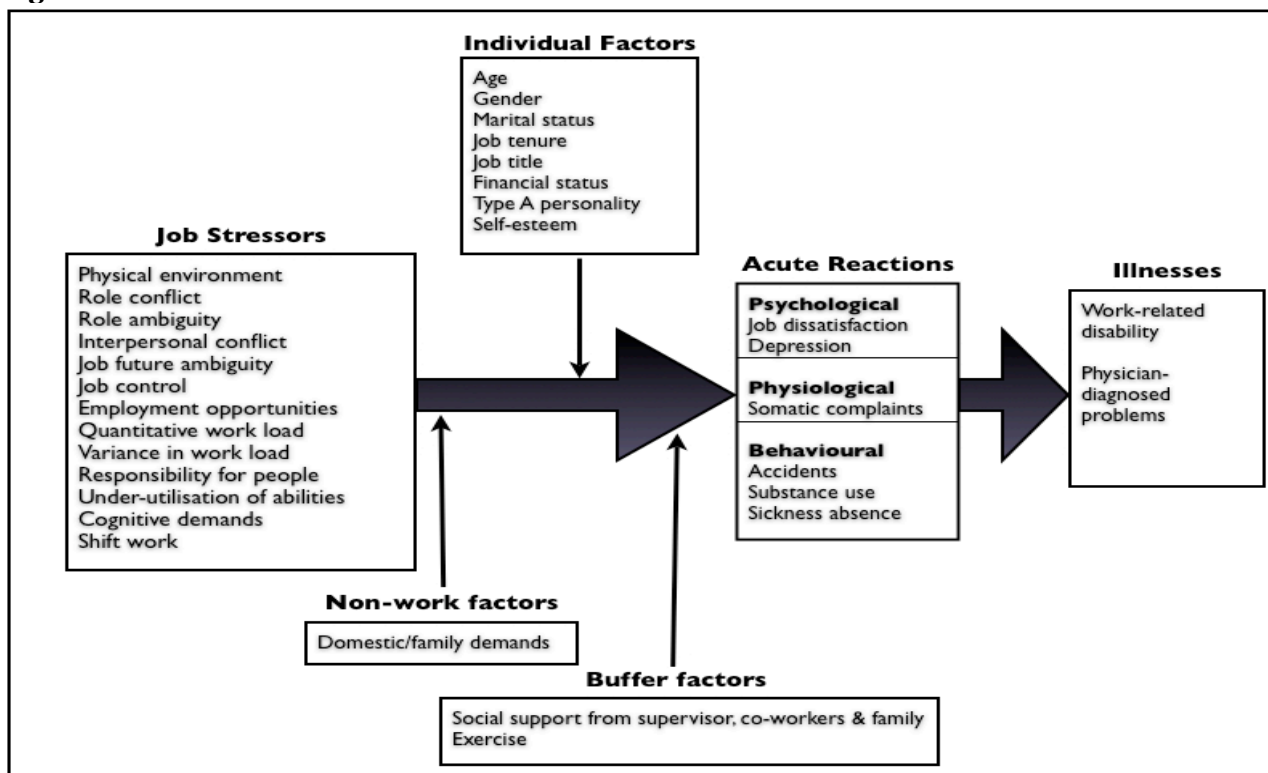
While some popular writers such as Bunting (2004) have dubbed the new generation of white-collar knowledge workers who voluntarily put in long hours, 'willing slaves', this paper builds upon the work of Perlow (1998) that has revealed ways in which working time is often subtly controlled by the organisation. The model behaviour set by managers and a well-rewarded peer can lead to longer hours working becoming equated with success, and in teams that appears to exist in constant crisis a hero mentality is further perpetuated by rewarding those who succeed against all odds (Perlow, 1999).

To disconnect long working hours as separate rather than a consequence of other stressors is a difficult task (Wastell & Newman, 1993; Murphy, 1995; Arnold, Cooper & Robertson, 1995). However it is important to consider that other potential stressors and moderating buffer factors, varying according to personal circumstance, may alter individual perceptions of long hours working. For instance, a lack of job satisfaction fuelled by role ambiguity and role

conflict was seen by Igarria and Siegel (1992) as a major source of dissatisfaction amongst IS personnel. Dittrich, Couger & Zawacki (1985) found that more latitude within a well-defined role was seen as a contributing factor towards job satisfaction. Keenan and Newton (1987) found that ‘people difficulties’ were seen as the strongest stressor while ‘technical difficulties’ were thought to cause the least strain in young professional engineers. A consensus reached by Worrall and Cooper (1999) in their study of the working patterns of UK managers was that too much to do over too long a period with constant deadline pressures and low levels of control can increase stress.

All these factors were acknowledged and encapsulated in a modified version of the American National Institute of Occupational Safety and Health (NIOSH) framework for job stress (see figure 1) that informed the research design. The importance of individual characteristics and circumstance was accepted, but the decision taken by this researcher was to continue in the vein of Moore’s (1998) work that cited adverse organisational factors as more significant in the etiology of work exhaustion than individual factors. The focus in this paper therefore remained firmly on the effectiveness of the introduction of the WTR and other HR initiatives in reducing long hours working and how those initiatives affected the perceptions of stress of those in the study group.

Figure 1: Modified NIOSH Job Stress Model



Context and Sample

The group of fifteen in the study worked within a wider team of some 200 staff who were all business focused specialists providing IT services to the financial organisation in which they were employed. The core values of this team—management edicts, akin to mission statements—contained the following declarations:

We constantly look for ways to improve the quality of what we produce, whether as individuals or as teams.

We work together to ensure that we deliver what the customer wants on time, each and every time.

We work as a team until overall targets are achieved, not just the specific tasks that are given to us.

The author was a full member of this team, and subject to the same environmental considerations, for twelve months while the study was undertaken. Those included were made fully aware of the researcher's participant observer status and a high-level of transparency regarding the research aims was maintained for ethical reasons.

Each member of the team was observed to work very much as an independent professional forming soft alliances with peers as and when was necessary. The team's position as an organization within an organization tended to fit somewhere between Mintzberg's (1983) notions of a professional bureaucracy and an adhocracy. That is, each team member was autonomous and capable of working as a lone professional, but at times the formation of temporary work projects was necessary in order to combine different knowledge and skills in order to solve problems. Scott's (1992) framework placed the organised subculture of the team as an open-rational system. One that was heavily influenced by the embracing cultures of the financial organisation which it served, the IT industry in general, and the prevailing social climate within the UK.

Staff within this group worked for a variety of different clients and adopted one or more of the following roles dependent on the client: software development, technical consultancy, performance management, system configuration, hardware and software upgrades, testing, and 24x7 on-call live support. Managers reviewed their work annually under a performance related pay scheme. Although the aim was to have a personal performance plan, many of the year's targets were generic and handed down in line with the core organisational values embedded in the declarations above. At the end of each year staff could either fail, 'succeed' or exceed their contracts. A percentage increase was paid according to category and a varying lump sum bonus according to percentage scale within the category.

All those observed participated in a flexi-time system with core hours between 10.00 and 16.00. HR rules stated that all staff were required to work a minimum of 140 hours in a four-week period. While an ID card system automatically recorded time in the office, this time was also recorded manually into 'buckets' for charging purposes. Any extra hours to be claimed as paid overtime had to be agreed with team leaders and charged to the business client accordingly unless it was an emergency call-out situation.

At the time of the study the climate within the organisation was very much one of change. There was a major focus on becoming more cost effective by providing IT solutions to business problems that gave real value for money. The very definite threat of outsourcing was ever present.

Methodology

This research focused on interpreting actors' behaviour based on insights gained from two overlapping social worlds: researcher as participant and researcher as interviewer. The second construct was possibly more fraught due to the twelve-month relationship that had been built up working as a member of the team. Potentially, to the interviewee, I was any one or multiple of: peer, superior, inferior, confidante, friend, academic, counsellor or informant. The complexity of these social situations was something I sought to unravel. As a holistic

ethnographer my research approach was one of trying to gain empathy with and an understanding of what was happening in this particular culture (Myers, 1999). This ethnographic approach facilitated a detailed understanding of the relationship between the WTR, individual working patterns, and professional and organisational expectations of work-life balance.

A framework that was built upon the broad literature base was employed and held readily open for modification as the research progressed. This framework was informed by the four principles of the WTR and the modified NIOSH model of job stress. The WTR model for working time was not chosen simply because of its legislative nature, but for its usefulness as a practical, normative model for reasonable hours at work. The selection of the NIOSH model did not imply its superiority to any other stress models, but that it contained the key features of many other models (Murphy, 1995). A further conceptual framework was drawn up to focus and bound the collection of data (Miles & Huberman, 1994). The semi-structured interview format was pinned upon seven major subject areas that were derived from the three frameworks. The intention was to allow each interviewee the opportunity to explore each of the subject areas with a free expression of thought in their own language (Oppenheim, 1992). In addition to the interviews extensive data was gathered by observing staff working patterns on a daily basis for a period of twelve months.

The interviews made use of Flanagan's (1954) useful critical incident technique that made for a powerful retelling of periods of long hours working. Tape recorded interviews were scheduled on average twice a week and an overlap with the analytical process was encouraged and embraced as part of the fluid nature of the research rather than viewed as an interference to the objectivity of the study (Easterby-Smith, Thorpe & Lowe, 1991).

Analysis

Qualitative analysis was performed by distilling interview transcripts into one-page contact summary sheets (Miles & Huberman, 1994). The transcription process allowed for closeness to the data in the spirit of an ethnographer and also to move away from the very linear medium of audiotape. The summary form together with field observations from a daily journal and Type A/B questionnaire data was collated as a single unit. A hermeneutic approach was taken to identify recurring themes within the transcribed texts on an individual basis. The nature of working time and the ramifications of the WTR were sought and compared in light of the interviewer-interviewee relationship, personal characteristics, non-work considerations, and the presence of buffers and other stressors. These themes and contradictions were then considered in light of observations made in the field. The data was then considered as a whole with a view to identifying any recurring interpretations that might relate to a common argument. A circumspect analysis was needed in order to understand the motivations behind the interviewees' responses. In an attempt to mitigate any presence of bias, a careful interviewing technique and a thorough analysis utilising all the different sources of data including: observation, interviews, personal characteristics, the interviewee/interviewer relationship, and the literature was employed.

Findings

The research was set within a company that has acknowledged publicly the potential for negative impacts from working long hours, both for the organisation and the individual, and has gained a reputation for promoting family-friendly policies. It has been seen to be working hard to reduce the working hours of its employees (Kodz et al., 1998). Therefore it was surprising to find a general lack of awareness concerning long hours working, and to discover so few of the group had been formally notified of the WTR. Only one of the fifteen had any

experience of intervention in the workplace as a result of the regulations. The remainder had a rather hazy knowledge of what the regulations were made up of, this information mainly gained from the media and talking with colleagues. The relative importance of the regulations was summed up by 'LB', who said:

There's probably been an e-mail but it's probably just passed over my head... Probably because I was too busy on project 'X' and things like the regulations just take second place at the time.

The volume of messages coming down from on high meant, for some, the message that long hours may be harmful was just another management fad. In spite of very public attempts to promote a balance between working life and home, many interviewees were cynical of the motives underlying such initiatives and viewed the company's concern for a better work-life balance as no more than a publicity stunt with little lasting value.

This was not to say that those studied thought excessive working hours was not an issue to be addressed. The overwhelming majority did; just not in their organisation or for themselves. They understood it was important to provide a balance between work and home, but most of the study group viewed this in terms of extremes and it was seen only as an important protective measure for others in organisations that may be abusing their employees by making them work long hours. The general feeling was that the WTR did not apply; not in organisations of this nature, or in the IT profession.

After being shown the four key points of the directive, 'BS' summed up his feelings:

I would have thought, you know, human rights, you know. As basic as that. [It's about] being fair to those people that are in a position where their [employers] work, you know, make them work every hour of the day for as little as possible. Which obviously does happen in a lot of countries and in lots of other industries... I suppose luckily in our job it doesn't really affect us too much, because the bank is obviously a good employer... I think the bank as an [employer] has got its own directives about working hours etc. and it's probably more stringent than the EU Directive in most cases.

Although seemingly not applicable here, *all* interviewees were working in excess of one or more fundamental points of the WTR. There was no typical example of working time for the fifteen because their work was very much organised into peaks and troughs. This meant that the 48-hour working week had been sustained for seventeen weeks or more (K1) by four of the subjects. The peaks, lasting anywhere from one to four months, saw the minimum daily (K2), weekly (K3), and in-work (K4) rest breaks regularly exceeded by *all* of the fifteen interviewees. The troughs were observed to be in fact periods of 'normal' working (35-hour weeks) which were times for 'recharging batteries.' This paradigm of working time for the IT professionals in this organisation did not sit comfortably with the WTR definition of 'reasonable' working time. One interviewee whilst coming to the conclusion that maybe what the regulations offered was a standard definition of reasonable working hours, thought the potential at this moment in time was for their introduction to *increase* stress:

An 11-hour break between work periods is stress-inducing I think. In the sense that... particularly the kind of work we do quite often you can spend eleven hours getting to the point where you think, 'Well another three hours and we will finish something and that is it I don't have to do it again.' But if you have to start rolling it back to do the same again next week then I don't think it's particularly helpful.

This feeling was echoed by many who perceived the introduction of another external obstacle to getting the jobs done as a problem rather than a solution. The findings suggested that introduction of working time limits would remove a necessary degree of control from the performance of complex tasks.

None of the interviewees were aware of any accurate records being kept in order to compare their working patterns objectively against the WTR. The flexi-time system provided a computerised log of working hours, but did not include details of any overtime. This was kept in a separate spreadsheet-based system and detailed hours of *paid* overtime. In addition to these two systems, staff were required to log all their hours worked in a web-based information system that was used for budgeting and charging purposes. All described this as notoriously inaccurate. There was no consolidated information from these three disparate systems that could readily highlight excessive working over and above the WTR. This was a major issue in an organisation concerned with promoting a sensible work-life balance, as the perceptions of those interviewed were resoundingly that they thought the regulations wouldn't affect them in the work they did. These perceptions were overly cautious as illustrated by 'BP' in this account of an on-going piece of work that he thought might have breached the guidelines:

Well, I've done a full day's work here and then I've worked right through the night to do project 'Y' work and then I've come in here again next morning to do a few hours till about 12 o'clock. Then I go home. I would have thought that might have done it.

This was in fact a reported 26 hours continuous work with the only break being 2 hours sleep snatched at his mother's house in between work locations. Because this was a peak that he managed in relation to other troughs, or periods of 'normal' working, he deemed this practicable and acceptable. Others, after the interview was concluded and the tape recorder switched off, confided in me and told me that the figures they'd quoted for an average working week were probably less than what they really worked.

When any attempts had been made by managers to question, or limit, the long working hours all the interviewees saw this as purely a budgetary decision to reduce costs. The management motives were seen as purely financial when they offered days off in lieu as opposed to paying overtime. This was the response of 'GC' to the offer of days off in lieu:

It generally wasn't an option because we have so much work to do. It was always mentioned but never, or very rarely, for my health's sake or for my family's sake. More because they didn't want to pay the overtime.

However there was no reported overt pressure from line managers to work long hours and the general feeling was that at any time the respondents could say no and management would understand. Some had developed reasoned arguments that aimed to rationalise the negative effects of long working hours and de-personalise their effects when talking to management. Their argument was that when they were tired they were more error prone and likely to jeopardise crucial live systems, increasing downtime and decreasing the profits for the bank. Although, at times, working on high-profile projects meant that the clients themselves applied enormous pressure in order to meet project deadlines. 'LB' reported:

I was constantly being asked by the project to stay late. Our management told us if we were prepared to do it, do it. If not, go home. I was one of those who, more often than not, stayed behind for the project.

There was evidence of a strong dedication to task from many. This was not especially a commitment toward the organisation, with whom many currently felt disillusioned, but instead a strong work ethic that was based on the provision of a quality service for the client. This neatly tied in with the organisational mission statements that placed client satisfaction as a key component of the yearly performance appraisals.

Opinion was divided on whether working long hours was a factor in gaining promotion. Some seemed resentful after having worked very long hours, and putting in lots of extra effort, only to find it wasn't adequately rewarded when it came to their annual performance review. This was treated with some rancour by 'HC' when asked if she thought long hours were a promotion factor:

No. No. No. No. Because in one review it's counted as a weakness... [The management] use it to their advantage I think. Because if you work [long hours] it's bad management. Bad *time* management. You know, *you* can't get the work done in the seven hours.

There was a strong feeling amongst all interviewed that an office presence was required during the core hours of nine till five, even after a bout of long hours. This was structured by the flexi-time system that required a presence in the office and a general climate that dictated that technical staff were not generally permitted to work from home. The highly secure environment in which the organisation operated meant that access from outside the firewall was also a potential security loophole and was only granted for emergency on-call purposes.

Inside, the open-plan office environment was raised as a major obstacle to any work that involved long periods of concentration or quiet time. The many distractions from phones and noise from fellow colleagues in other teams were cited as major problems. There was a strong call for more partitions in order to curb unwanted noise. When work was carried out outside of core hours it was felt that this could be done quicker than equivalent work during the day, but only if the work wasn't undertaken too late at night. The absence of distractions in the office meant that it was easier to focus on the task in hand. When asked about the office environment 'GC' commented:

I can get an entire day's work done from say five till seven. Purely because I'm not being interrupted... In the evening when people are leaving and the phone goes quiet, even though I may want to go home, there's a temptation to stay and get the stuff done.

For some however working later than this, particularly when called out at night, meant a difficult readjustment of the body clock and an absence of the usual management and technical infrastructure. Each interviewee had their story to tell of a critical mistake that had been made when they had worked long hours outside the normal core office time. These mistakes, which were often very costly for the organisation, were seen as a rite of passage.

Those working on development projects thought a major contributory factor to working weekends during the project life cycle were unrealistic deadlines because of an emphasis on 'speed to market.' In the process of trying to leverage their significant IT investment for a competitive advantage, unrealistic demands were put on the human resources allocated to meet those deadlines. Brooks (1995) has argued that estimating and monitoring techniques for software developments projects are often poorly developed; and bad planning was a key issue here, with many complaining that the technical complexities of their work were not represented or understood early enough in the planning process. As a result, insufficient time seemed to have been allocated in the project plan for them to perform a quality job.

This quality of work was important to all those interviewed. They exhibited a strong professional pride in their work and felt ashamed when they were forced to do a sub-standard job because of time constraints. 'BS' expressed his concerns:

I think there was a part of our testing which I was almost embarrassed to be using... [W]e'd been under pressure to use it instead of saying stop, we can't have this ready for a week. And if you give us a week now then it might save us two weeks next month... It's almost [always] do it now; have it done now. I suppose they expect all these things to be written in advance anyway. So again I suppose it's another misunderstanding of the [nature of our] work.

More often than not the work of the fifteen took place towards the end of the project life cycle particularly in the integrated testing phases. Inevitably this was where time pressures were the greatest and where the cumulative stresses from all the previous stages were most keenly felt (Glass, 1997).

The management treatment of this long hours work was confusing and contradictory. On the one hand they wanted to reduce long hours for financial and health reasons, but on the other staff expected to get rewarded, not punished, when they had done something over and above the norm. This had resulted in a disparity dependent on line manager with some employees receiving clauses in their contract that they shouldn't exceed the WTR, whilst others were publicly rewarded for doing so. It seemed very much ingrained upon those interviewed that they expected some reward for 'putting themselves out' and working long and often unsociable hours. 'HM' summarised this succinctly:

To a certain extent I think it's quite a mixed message that's sent out. Because you get all this, don't work more than 'da de da de da,' and [yet] you see people getting flags and rewarded for basically [pulling out all the stops] to get the job done. So on the one hand you're being told to work within the legislation, and on the other hand you think well actually the people who don't are rewarded for it.

Impressions of expectations of working time handed down from the senior management, who generally had been promoted from technical specialist roles in the past, did not promote the idea of a sensible work-life balance. When asked to comment on the working patterns of the organisation's senior management a typical response was that they were sure they worked 'ridiculously long hours.' This echoed a popular belief in the UK, as shown in the study by Worrall & Cooper (1999), that those at the top work very long hours. 'BP' mentioned, after the tape recorder had been switched off, the feeling of unease he had when clocking out at four o'clock. He felt managers raised their heads and noted when he walked past their offices to leave at four.

This subtle pressure to work long hours was not just applied from above but there was also felt to be a strong element of peer pressure. When working in a team of individuals who were 'pulling out the stops' to get something in on time, 'BS' did not want to be the one to 'let the side down' by not coming to work the weekend.

Despite working excessively those in the study felt that long hours and stress were ineluctably linked. The working of long hours was seen to increase tiredness and reduce the ability to fend off, and increase susceptibility to, other stresses. It was not possible to isolate long hours as a

sole cause because so often long hours were worked in as a result of other problems that were seen as stressors in their own right. As 'BS' expressed it:

I suppose it [stress] always seems to coincide with long hours, so you almost sort of package it into one thing. You say that was stressful because of the long hours I was working or whatever. But I suppose the reason you're working long hours is normally because things aren't going to plan as I've said before.

Long hours at work were cited by many as the cause of relationship problems at home that lead to an overall increase in stress. Some reported that it was difficult if they went home and left work outstanding then the atmosphere at home would be stressful. They couldn't stop their mind thinking about the work, and had no way of finishing it off at home, so instead of relaxing they were in a state of anxiety. The closure of a task was seen as an important part of job satisfaction. Those who found it difficult to talk to their partners experienced this the most, whereas those who could talk about their work problems, even though partners or friends may not be able to understand the technical complexities, felt a therapeutic approach in doing so.

The work demands that were causing particular relationship problems were two-fold. There was the chronic, cumulative effect of working late for many nights in a row, or not having a weekend off for a month. And there was also an acute lack of respect, from both worker and management, for friends or family commitments when a weekend or evening was cancelled at short notice because of an unexpected late piece of work. Many of the deadlines were often self-imposed because there was some degree of flexibility afforded for planning and scheduling individual workloads. The pressure applied from on high, to provide a cheaper service with a continual focus on driving down costs to become more competitive, invariably led to work estimates that were under rather than over-estimated.

All saw their jobs as stressful at times, but had managed this into peaks and troughs. At the times of long hours working typical stress symptoms reported were: headaches, nervous twitches, difficulty sleeping, increased susceptibility to colds and infection, poor concentration, and a general lack of motivation. This was acknowledged by all, but seen as 'going with the territory.' A certain amount of discomfort was expected and as long as it wasn't over too long a period of time then it could be handled. Each individual had personal limits and felt that too much stress was definitely bad for their health, but that a certain amount was a necessary stimulus to 'get things done.' What determined the level at which stress became a problem was what many termed 'something within.' It was felt that this ability to cope, or not to cope, was something you were born with. It was seen as innate rather than a skill that could be learnt.

There was a sense of camaraderie described when experiences of long hours were replayed. The sense was one of exhilaration rather than stress. This line was a fine one, and some teams appeared to carry their members along on a tide of heroic work efforts. This spirit carried on outside of work with many teams socialising together following a 'work hard, play hard' mindset. Support from management and the feeling that management 'on their side' was emphasised over and over again. Without the backing of managers the team felt stress increased. In general immediate line management was seen as approachable and supportive. They understood the situation and work demands because of they too had 'been there' and knew what it was like.

Interestingly support from family at home was mentioned almost as a last resort in many cases. It was evident that working long hours was a source of tension for those with partners. Those with understanding partners, or no partner, explained how much easier it was for them

to get on and do the work knowing that they wouldn't get a hard time when they returned. For those with less supportive partners the monetary rewards associated with overtime and on-call disturbance allowances were used as justification. Those who lived alone missed the support when they returned home. The biggest improvement to one's working life was seen as the opening of a 24-hour Tesco allowing him to buy food when he finished work late at night.

Another interviewee, 'BP', had an effective way of coping with job stresses and a good way of fending off long hours. His strategy was to rigidly come into work at 8.00 every morning and go home at 16.00 regardless of the pressure that was put upon him to stay and work. His demeanour was standoffish, as if everything requested of him was too much trouble, and this acted as a strong defence mechanism. As far as 'BP' was concerned, managers knew 'they would not get an easy ride' if they asked him to do the work and he definitely would not volunteer his efforts. This was particularly effective as the managers were always in the awkward situation of applying more pressure for him to work. 'BP' exploited this position and some hard bargaining invariably resulted in him only agreeing to extra work under his own terms.

However his strong personal boundaries were the exception and they had a negative impact on the rest of the team. Those others who were more willing to do extra work found themselves picking up the leftover work when 'BP' had gone home. It was reported that managers saw the more willing staff as easier 'prey'. Although recognising their weaker position nobody said they felt particularly pressurised into doing the work. What all the stronger team players did feel was some disappointment that 'BP' was letting the side down in not working the same long hours.

Conclusions

This organisation has shown itself to be publicly committed to promoting a sensible balance between work and home. HR have carried out a number of initiatives based on changing the long hours culture (Kodz et al., 1998), but the implementation of the WTR has made several false starts within the organisation and they are still far from being embraced. Seemingly on both sides of the fence, the IT professionals and management have shown little interest in adopting the principles behind the regulations. The employees don't see their work as extreme and, although they associate long hours with stress and ill health, many do not see it as a sufficient enough problem. They are hampered by their current view of the world that is one shaped by an organisational, professional, and social culture that defines reasonable working hours as over and above the WTR normative model. Although the employer has championed initiatives to reduce working hours, with an aim of increasing overall organisational efficiency as well as a concern for worker welfare at heart, this has been lost amongst a myriad of other conflicting messages.

Many of these messages are explicit: we must be more cost-effective; client satisfaction is our priority; we must be flexible in our approach; time must be seen to be chargeable; the threat of outsourcing is ever-present; we must comply with the WTR; while others are much more subtle. Some managers encourage a strong team spirit both inside and outside of work that acts as a strong buffer against stress, but this also leads to a battlefield mentality where everyone wants to be in fighting together at the frontline. The open-plan office was observed as being not conducive to a large part of the IT professional's work such as software development, project planning and report writing and documentation. The practice of mixing both live support and development work that generate and require two diametrically opposed levels of noise and concentration meant that working between nine to five is generally seen as

unproductive. Although communication does make up a large part of the nature of their work (Sullivan, 1988), the lack of control over unwanted communication encourages staff to stretch the day longer in both directions in the search for quiet time.

Whilst some staff are rewarded for working long hours, others are penalised for doing the same. This sends out a most confusing message. The performance management system values those who work on high-profile projects and this is subsequently often a key factor in gaining promotion. But work on these high-profile projects invariably requires sustained long hours working amid difficult circumstances. When attempts are made by the organisation to adopt the principles of the WTR then IT professionals are faced with another stress-laden dichotomy. This dichotomy is made explicit in their performance plans: comply with the 48-hour limit of the WTR *and* take a major part in high-profile projects. In the organisation's current paradigm of working hours the two are mutually exclusive.

The current pattern of long hours working is a well-ingrained way of life for many in the organisation. If a technical specialist follows the usual career path and becomes a manager then they hand the long hours legacy back down. In spite of HR initiatives to the contrary, they find it difficult to change old values. These values are based on rewarding hard work; getting stuck in until a problem is solved; seeing projects to the finish by cancelling holidays; and showing commitment by putting work before family.

The general feeling amongst the IT professionals in the study was that long hours are not seen as a problem they need to give serious consideration. This is not surprising given the culture that prevails in the IT industry (Stokes, 1996) and the UK in general (Kodz et al., 1998; Worrall & Cooper, 1999). Within this current working paradigm it is very difficult for the employees to envisage another way of being. For this reason they see the WTR as an additional stressor in the short-term that threatens the IT professional with a loss of job control and the generator of additional interpersonal conflicts.

If the introduction of the WTR is to succeed in providing a normative example of what is expected as reasonable work then its requirements need to be built into all stages of the software project life cycle. Resources must be allocated accordingly and milestones planned and made achievable within the constraints of the WTR model. Failure to take this holistic approach has seen the conflicting messages regarding working time have little impact on the prevailing long hours culture and has, in some cases, had the unanticipated consequence of acting as an additional stressor for those employees without strong personal work-life boundaries.

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