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Abstract

This research discusses the effects of long-term shiftwork on the families of male shiftworkers at a multinational petrochemical company. The findings are based primarily on interviews with twenty-seven male shiftworkers and seventeen female partners and former partners. The findings suggest that long-term shiftwork makes greater demands on families than many other types of labour and has a profound effect on the temporal, social and emotional patterns of family life. Men and women gave divergent accounts of the problems created by shiftwork, reflecting their differing responsibilities within the family and illustrating the varied adjustments made by family members. Wives paid a high price for their partner’s employment, often sacrificing their own careers in order to take primary responsibility for organising family life around the shiftworkers’ schedule. The magnitude of the adjustments made by families appeared to be underestimated by the company which treated work and family as loosely coupled systems. This assumption is particularly problematic for the families of long-term shiftworkers and means that families shoulder the primary responsibility for resolving, and hiding, the tensions between work and family life.

Keywords: Shiftworkers, family life, petrochemical industry, case study.
Introduction

This article describes the effects of long-term shiftwork on the life experiences of petrochemical industry shiftworkers and their families. Recent studies of the petrochemical industry show that the production side of the industry remains heavily male-dominated (Collinson, 1998; Parkes et al., 2005). Whilst many companies within the industry are keen to portray themselves as family friendly employers with innovative work-life balance policies, such policies tend to be limited to benefit packages which apply primarily to female staff working standard hours within office environments (McKee et al., 2000). More complex structural reorganisations of working practices which might affect continuous production systems tend not to be implemented by companies. As a result, production workers and their families often experience few benefits from these initiatives and are still expected to shape family life around production requirements (Miller, 2004). The petrochemical industry is also characterised by rapidly changing global market conditions, diminishing raw materials, frequent restructuring and diminishing job security (Collinson, 1998). Under these circumstances, managers tend to focus primarily on meeting organisational requirements for increasing economic efficiency. In consequence, there may well be a considerable gap between the rhetoric and the reality of work-life balance programmes in many multi-national petrochemical companies (Parkes et al., 2005).

A comprehensive review of the literature on shiftwork and family life (Gadbois, 2004) pointed out that most research has utilised quantitative, self-report measures to identify relationships between different shift systems and the impairment of various components of the shiftworker’s home life. Gadbois suggests that this work needs to
be complemented by detailed, qualitative studies of family life in shiftwork families and identifies three main issues requiring further research. Firstly, analyses of the ways in which different shift systems affect the patterning of domestic tasks, family interactions and social activities within the family; secondly, analyses of the psychological effects of long term shiftwork on all family members; thirdly, detailed descriptions of the different coping strategies used by families.

The research reported in this article used a qualitative, case study approach to investigate the issues raised by Gadbois. As the research shows, long-term shiftwork has profound effects on the temporal, social and emotional patterns of family life. In consequence, a large proportion of the shiftworkers at the New Zealand petrochemical plant studied here had almost their entire working lives, and the lives of their families, shaped by their employment at the plant.

**Organisational Context, Respondents and Methodology**

The research took place at the New Zealand plant of a multinational petrochemical company. The company had a reputation as an ethical employer with a commitment to ‘family friendly’ policies. The research was instigated by local management in response to a Head Office directive to improve the work-life balance of shiftworkers. The research remit was to interview shiftworkers and their partners and produce a report for the company. The local company paid project expenses but did not pay consultancy fees or wages.
The New Zealand branch of the company employed approximately 200 people in total. The shift system was operated by 74 male shiftworkers. The majority of these workers were long-term employees in their mid-forties who were married and had school age or adult offspring. All shiftworkers were computer literate and highly trained. However, their skills were highly specialised and their ability to obtain equally well-paid employment outside the petrochemical industry was limited. This was a source of considerable anxiety for some workers as the run-down of the off-shore gas fields which provided the raw materials for processing meant that there was a real possibility that the plant would close within the next few years.

The plant operated a continuous production system involving a number of highly volatile chemical reactions which were computer controlled. The main task of shiftworkers was to monitor these processes by both computer and physical checks. For many employees work revolved around highly sedentary vigilance tasks which have been shown to be particularly problematic for nightshift workers (Rouche, et al., 2005). Generally speaking, workers took pride in having responsible jobs but found the work itself repetitive and somewhat boring.

Shiftworkers were divided into teams which were responsible for covering their own sick leave and holidays, workers were contractually obliged to work overtime if necessary. Teams worked four shifts of twelve hours each on an eight day fixed rotation, starting with two day shifts which were followed by two night shifts. Workers had around one full weekend in eight free.
The study used a variety of data collection methods. The information presented here is based primarily on in-depth individual interviews with twenty seven male shiftworkers interviewed onsite during their shifts and seventeen female partners and former partners who were interviewed in their own homes. The interview data is supplemented by data from informal discussions with management and shiftworkers, informal observations of plant functioning and workers’ home lives and statistical data from company records. All interviews were taped, transcribed and examined for key themes by the author. The report to the company was sent to respondents for comment before being seen by local management. No respondents requested changes and several commented that the report portrayed their experiences accurately.

Findings

Most respondents saw themselves as being in reasonably successful long-term relationships. However, all respondents highlighted the additional efforts necessary to maintain good family relationships under shiftwork conditions. Nearly all respondents described shiftwork as a ‘lifestyle’ rather than a job and drew attention to the adaptations the entire family unit needed to make to enable employees to succeed in their jobs. Men and women gave quite different accounts of family life, which reflected their differing roles within the family and illustrated the disparate adjustments which all family members make in order to accommodate shiftwork regimes within family life. The findings are organised around three key themes emerging from the interview data. Firstly, economic trade offs; secondly, maintaining family routines and thirdly, maintaining emotional relationships.
Economic trade offs

Whilst many organisations pay lip service to the ideals of work-life balance the range of options available to employees is often limited (Pocock, 2005). Within this research it quickly became apparent that the company’s work life balance policies were not designed with shiftworkers in mind. In consequence, families made decisions concerning work-life balance within a highly traditional context where shiftworkers were well compensated financially for working inflexible and anti-social hours. This enabled most families to ameliorate the stresses of shiftwork by adopting coping strategies involving a fairly traditional division of labour in which the male had primary responsibility for supporting the family financially whilst his partner dealt with domestic and childcare issues. Whilst the decision to adopt this division of labour was generally made jointly men and women often had differing views regarding this solution, with many shiftworkers taking pride in their earning ability whilst women voiced concern about the subordination of their careers to their husband’s work. The differing views of many husbands and wives are clearly illustrated by the quotations below. The husband explained that:

‘We made a conscious decision that it was better if she was at home with the kids. The way we look at it – it’s not just my job, it’s her job as well.’ (husband aged early forties. three school aged children)

In contrast his wife commented:

‘I’ve said to him quite frequently ‘I really need to do something. If you dropped dead tomorrow I’d be in the poo. What would I do for an income?’ That’s what really worries me....’ (wife also early forties)
Traditionally, the economic compact by which male blue-collar shiftworkers were paid relatively high wages in return for anti-social hours was underpinned by the concept of long-term job security. The job security of many workers has been eroded in recent years and multinational companies are increasingly making staffing decisions based on maximising their global economic interests. Both workers and management were aware that key decisions would be made by international managers for whom the New Zealand installation was a relatively small part of a global business enterprise. Under these circumstances, coping strategies involving single earner economic arrangements created considerable anxiety for many families.

**Family Routines**

Family routines fulfil various practical, social and emotional functions for family members. At a practical level, routines enable maintenance tasks such as cleaning, shopping and meal preparation to be carried out in an efficient and predictable manner. Socially and emotionally, participation in family rituals such as mealtimes, leisure activities, birthdays and statutory festivities helps to bond family members together and to define the family as a social group (Jacobs and Gerson, 2004). Family routines are strongly influenced by external institutions. Work, school and other external schedules structure both the timing of family life and the types of interaction which can take place between family members. For shiftwork families, the effects of work on family routines are intensified by the poor synchronisation between the workplace and other social institutions. The maintenance of family life therefore necessitates the continual juggling of competing temporal patterns. Whilst fathers in this study clearly cared about their families emotionally, their ability to care for them
practically was often constrained by work requirements. In consequence, the maintenance of family routines was a primarily female task.

Shiftworkers’ dominant concerns were coping with their own tiredness and ensuring that they were physically able to work. Male interview responses to questions concerning family routines concentrated almost entirely on their own schedules, with several respondents having little knowledge of family routines. In contrast, their partners generally took primary responsibility for co-ordinating family routines and ensuring that family patterns harmonised with the shiftworker’s schedules. This meant that routine tasks such as washing children’s school clothes required considerably more planning to ensure that such activities did not disturb the shiftworker’s sleep. Mealtimes also required more thought and preparation. Whilst families differed considerably in the extent to which they altered children’s mealtimes to fit with shiftwork schedules most women altered their own eating patterns to enable them to eat with their partners as much as possible.

Women also tried to adjust their children’s routines to harmonise with their partner’s work schedule. The effort women expended maintaining family harmony was often underestimated by their husbands as the following quotations from the parents of four teenage boys illustrates. The father explained:-

*The boys aren’t a huge problem. Most of the time they seem to be out. I think they realise the old man’s trying to sleep and keep it down*

In contrast his wife commented:-
I try so hard not to say to them 'be quiet'. … I try to plan activities that are outside the house for those mornings. You make it easier on everybody by having those sort of adaptations.

**Emotional adjustments**

A large body of evidence documents the negative physiological consequences of shiftwork (e.g. Rouch et al., 2005). Fewer studies have analysed the emotional consequences of shiftwork for workers and their families. Within this research both workers and their partners highlighted the links between the physiological and cognitive effects of shiftwork and the emotional aftermath, with many respondents identifying the emotional repercussions of shiftwork as a key factor in marital breakdowns. Boss (2002) uses the term ‘ambiguous loss’ to describe situations where there is some form of incongruence between a person’s physical and psychological presence within the family. For the families studied here, discontinuities between shiftwork cycles and the normal rhythms of family life created repeated patterns of ambiguous loss. Women needed to accept and accommodate their partner’s mood swings and protect their children from the effects of their partner’s ill-humour in order to maintain family cohesion. This adjustment was often achieved by interpreting mood swings as shiftwork induced aberrations rather than a genuine character trait.

Shiftwork schedules also created problems for families’ social lives. Many studies have shown that shiftwork schedules have a detrimental impact on the leisure activities and friendship networks of shiftworkers (e.g. Baker et al., 2003). The effects on partners have received less attention, although shiftwork created social isolation
may well be a worse problem for unemployed wives of shiftworkers who cannot meet their social needs through work (Regehr et al., 2005). Social isolation was particularly problematic for mothers of pre-school children. Many women spoke of the difficulties of suppressing their own desires for adult conversation in order to allow their partners to adjust from the work to the home environment. One respondent described these years by explaining:

*I'd tell him I was coping okay – but inside I'd be screaming 'help me I'm dying of loneliness here'.*

The ambiguous loss of their partner on social occasions was another problem raised by many women. Family oriented occasions such as parent-teacher evenings, school plays and sports events were complicated by women’s concerns about being stigmatised as single parents. Adult social events such as parties or restaurant meals could also be an uncomfortable experience, with many women feeling neither single nor partnered on such occasions. Women whose children were teenage or adult often resumed their careers and an independent social life at around the same time. Whilst most husbands were supportive of their wives independence it often created new adjustment problems within families, with several older shiftworkers commenting that, after years of longing for the peace of an empty house whilst their children were small, they now felt socially isolated themselves during much of their leisure time.

In summary, the empirical data presented here has illustrated the far-reaching effects of long-term shiftwork on family life. The primary burden of organising family routines and adjusting emotional life fell to women, many of whom relinquished their own careers in order to maintain family functioning. Whilst there was an element of
personal choice in family decisions to prioritise the male shiftworker’s career the structural constraints of a rigid shiftwork system meant that many families saw traditional gender roles as their only realistic option for maintaining a reasonable work-life balance within the family.

**Discussion and Conclusion**

Recent critiques of the work-life balance literature have noted that empirical research has focussed primarily on the problems faced by professional women with children (Ransome, 2007). In consequence, the work-life balance problems of other groups have been relatively under-researched. The issues facing male blue collar workers and their families have received little attention recently, despite clear evidence that work-life balance initiatives seldom occur in organisations with a primarily male, blue-collar workforce (Healy, 2004). Such organisations tend to maintain traditional work patterns involving long hours and rigid attendance at the workplace but have often combined these patterns with diminished job security and employer friendly flexible working conditions (Hyman and Summers, 2004). Whilst these practises may not affect that many women directly, as members of the workforce, they clearly impact on many women through their relationships with men. It is therefore essential, for both men and women, that the focus of empirical research within the work-life balance literature does not neglect traditional male employment.

One way of broadening the gaze of empirical research would be to shift from the traditional strategy of targeting specific groups of workers towards the study of work-life balance issues within family units. Within this research, the decision to study shiftworkers and their spouses quickly revealed that the issues created by shiftwork
were very different for workers and their partners and that accommodation was achieved at the level of the family unit rather than at the individual level. Mauthner et al. (2000) point out that there is a schism between research on the workplace and research into family life. The former has tended to decontextualise the worker from the family whilst the latter has tended to decontextualise the family from the wider organisational, social and structural context within which family life is inevitably embedded. Greater cross-fertilisation between the two areas might enable the perspectives of different family members to become better understood.

The perspectives and needs of different stakeholder groups within organisations also need further empirical investigation. A clearer grasp of the ways in which different organisational groups interact, and they pressures which they face, would increase our understanding of the reasons why work-life balance initiatives in organisations succeed or fail. The relationship between middle management and other organisational groups is a particularly important arena to investigate. McBride (2003) has suggested that middle managers in many organisations currently experience competing pressures to contain labour costs and increase organisational efficiency whilst simultaneously developing organisational practises which improve employees’ work-life balance. In consequence, work-life balance directives are often subverted by managers in order to meet fiscal and efficiency targets for their units (Reiter, 2007).

Finally, the findings of this study illustrate the importance of locating empirical research within specific organisations within a broader socioeconomic framework. The company studied here was, by conventional standards, a principled and responsible employer with a genuine commitment to providing good employment
conditions for its staff. Nevertheless, there was a clear imbalance between the commitment which the company made to its workers and the commitment which workers and their families had made to the company over the course of their employment. The company’s commitment to its workforce was, in the final analysis, economic. Essentially, the company was only committed to remaining within New Zealand whilst gas supplies remained viable and production profitable. However, the commitment which workers and their families made to the company went far beyond simply selling their labour in an economic transaction. Many workers had given the most productive part of their working lives to the plant. Long-term shiftwork makes far greater demands on workers than many other types of labour and has far greater flow on effects on workers’ family and social lives. Within volatile, global, sectors such as the petrochemical industry it is essential to recognise the asymmetries of power between the individual worker and the organisation and to locate analyses of the effects of work on family life against the backdrop of wider structural conditions within economies.
References


