

## INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

**The quality of this reproduction is dependent upon the quality of the copy submitted.** Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

**UMI<sup>®</sup>**

Bell & Howell Information and Learning  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
800-521-0600



**The Consequences Of Shift Work: Job Performance,  
Job Satisfaction, And Social Life**

**Gilda Assunta De Iaco**

**A Thesis**

**in**

**The Department**

**of**

**Sociology and Anthropology**

**Presented in Partial Fulfillment of the Requirements  
for the Degree of Master of Arts at  
Concordia University  
Montreal, Quebec, Canada**

**July 1997**

**© Gilda Assunta De Iaco, 1997**



National Library  
of Canada

Acquisitions and  
Bibliographic Services

395 Wellington Street  
Ottawa ON K1A 0N4  
Canada

Bibliothèque nationale  
du Canada

Acquisitions et  
services bibliographiques

395, rue Wellington  
Ottawa ON K1A 0N4  
Canada

*Your file Votre référence*

*Our file Notre référence*

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-40190-1

**ABSTRACT****The Consequences Of Shift Work: Job Performance,  
Job Satisfaction, And Social Life****Gilda Assunta De Iaco**

The adoption of rotating shifts and permanent night shifts gives rise to a large number of problems that have harmful effects on the physical, psychological, and social well-being of the worker. In this thesis I examine the impact of shift work on 23 hospital female switchboard operators and 23 male porters in two different hospitals. Each of the 46 respondents in the study were interviewed in depth and diaries were kept by 30 of them. In addition I observed the work routines of the respondents. Three theoretical models have been chosen to describe the negative consequences of shift work; the Circadian, Psychological, and Sociological models. Among the different models the Sociological model appeared to be the most informative in interpreting the job effects on individuals.

The findings revealed that the occupation of switchboard operating is much more stressful than the occupation of portering. The effects of shiftwork added to the job demands of switchboard operators increases their already stressful occupational demands. Some reasons for this are that family responsibilities weigh heavily on most female switchboard operators, and these responsibilities increase during certain stages of the life cycle.

Male porters do not face the same degree of stress in their jobs, nor are they as likely to deal with conflicting demands of the family to the same degree as female switchboard operators. Indeed many of the porters preferred shift work despite stressful levels that may occur. Quite surprising in the research findings was the discovery of the ability of those respondents experiencing stress to cope with these conditions.

## ACKNOWLEDGMENTS

Writing a thesis can be quite a challenge, the road to its completion is not always an easy one. In order for the process to go successfully, help is often required and prayed for. This is but a small mention of the heartfelt thanks I feel.

Without Dr. Joseph Smucker's invaluable suggestions, support and patience, I could not have successfully completed this thesis. I sincerely thank-you.

I also extend my profound thank-you to Anthony Synnott and Kiran Mirchandani, members of my committee, for their wonderful comments and support.

I offer sincere gratitude to all my respondents for their honesty and good nature. Thanks for making this experience interesting and fun.

Finally, a warm thank-you to my family, Maria, Enrico, Sue, Alberto, and Bobby, without whom I could not have come this far. Thank-you for your love, patience, and unending support. Your encouragement and interest in all my endeavors have always meant a lot.

It is with sincerity and heart-felt thanks that I dedicate this work to them.

## **TABLE OF CONTENTS**

Chapter 1	
Introduction .....	1
Chapter 2	
Literature Review .....	6
Chapter 3	
Problem Statement .....	48
Chapter 4	
The Findings .....	59
Chapter 5	
Shifts .....	88
Chapter 6	
Shift Work-Absence & Error Rates .....	98
Chapter 7	
Effects Of Non-Work Demands .....	108
Chapter 8	
Gender And Family Effects .....	113
Chapter 9	
Shift Work And Leisure .....	128
Chapter 10	
Age Effects .....	135
Chapter 11	
Conclusion .....	143
Bibliography .....	150
Appendix A .....	155
Appendix B .....	158
Appendix C .....	161
Appendix D .....	164
Appendix E .....	172
Appendix F .....	196

## **CHAPTER 1**

### **INTRODUCTION**

#### **The Research Problem**

The objective of this thesis is to examine the consequences of shift work as perceived by workers themselves. The implementation of shift work has created a number of problems that dictate a pattern of living that directly affects the behavior of workers both at work and in their family and social life. Most workers in fact regard this method of working as a constraint. Moreover, rotating shifts may not only be detrimental to family and social life but may also have harmful effects on personal health. The study of workers' perceptions will contribute to a better understanding of the effects of shift work on workers.

The definition of shiftwork and its different time schedules as established by Presser (1988) and Walker (1978) refers to any regular work that is taken outside the normal day work time frame, (i.e., 9 to 5). Shift work usually involves evening and very early morning work as well as rotating, fixed, split, discontinuous, double, permanent morning and evening shifts. There are basically two major types of shift patterns, rotating or non-rotating shifts. In the rotating shifts, the workers alternate between the morning, afternoon, and evening shifts. On this system the plant is operated round the clock seven days a week, without a break at week-ends. Four groups of men and women generally operate the system and changeover of shifts usually takes place weekly or more frequently. On the other hand, the non-rotating shifts refers to fixed morning, afternoon, or evening shifts. The employee permanently works the evening shift or the other two shifts. Non-rotating shifts are usually run by "the full-time schedule (35 hours or more per week) in which at least half of the hours worked fall between 8 a.m. and 4 p.m." (Presser, 1988:136). This continuous system



of working is adopted not only by industry and commerce but also by the service sector (Maurice, 1975). Basically, the difference between day work and shift work is the following: day work is based on a 5 day fixed schedule; whereas shift work may operate on a continuous basis for 7 days.

Research reveals that shiftwork is undoubtedly one of the major social problems of industrial society. For instance, it seems that the adoption of shift work gives rise to a large number of problems that have harmful effects on the physical, psychological, and social well-being of the worker (Mott, Mann, Mccloughlin & Warwick, 1965; Maurice, 1975; Walker, International Labour Organization, Carpentier & Cazamian 1978; Folkard & Monk 1985,1992; Jamal & Xie, 1988; Jamal & Baba;1990).

The purpose of this study is to derive a better understanding of the negative consequences of shift work. Throughout the paper other shift arrangements such as split-shifts, discontinuous shifts, three shift systems, double-day shifts will also be identified and defined in order to provide an overview of the different shifts that may be worked within various industry, commerce, and services. However, the research mainly focuses on the effects of rotating versus fixed shifts. The reason for this is because rotating as well as fixed shifts are the time arrangements most frequently adopted by various service sectors such as hospitals, which is my primary area of concern.

Rotating as well as permanent night shifts seem to have the greatest impact on the worker, as a result of working these shifts, many shift workers complain of stress, sleep disturbances and social hardships (Carpentier & Cazamian, 1978; Folkard & Monk 1985; Jamal & Baba;1990). This appears to be due largely to the fact that most workers are unable to properly adjust to their shift schedule (Folkard & Monk,1985:165-166). To understand these complaints fully, however, we have to

consider how working shifts leads to physical, and psychological disorders and the disruption of social life.

In addition to this, the following literature review explains the system of shift work from the point of view of the industrial firm. It looks at the historical as well as present trends of shift work. The historical perspective explains why shift work developed and the present trend reports note how widespread shift work is in modern society. The reasons provided by management as to why they have adopted a shift work system, will be discussed.

Various theoretical paradigms such as Sociological and Psychological models of shift work and Circadian models of shift work will be analyzed in order to better understand why workers have a difficult time adjusting to shift work, and how, because of this, workers may feel socially alienated and depressed. The research will analyze the different types of shift scheduling (rotating versus fixed shifts) and their impact on the worker's job performance and satisfaction, worker's general health, social life, leisure time, personal and marital relations, family relations, and child rearing practices. Gender comparisons in these areas will also be discussed. A comparison between the system's drawbacks and benefits will also be presented.

Finally, the research will explain how fixed shifts are more like regular day shifts than are the rotating schedules. It examines different workers (i.e., gender, age, marital status, employment status) with different life circumstances (students, individuals with financial and family obligations) who choose to work specific shifts for various reasons, and as a result, each worker is likely to encounter different consequences. This will be interpreted through the use of interviews and diaries, as well as participatory observation of hospital switchboard operators and porters.

## **THE NATURE OF SHIFT WORK/CONCEPTS AND DEFINITIONS**

The following section will examine the definition of shift work and its different time schedules as established by Maurice 1975; Harrington 1978; Walker 1978; IR Research Services (1983), and Presser (1988).

Shift systems vary widely in terms of hours worked, time of day and frequency of change. Other shift scheduling arrangements include *part-time* and *full-time shifts*, *split shifts*, *double-day shifts*, *discontinuous three shift systems*, *permanent night shift* and *weekend shifts*. The *full-time shift* schedule is worked for 35 hours or more per week. The status of shifts worked as *full-time* are the *rotating* as well as *fixed day* and *night shift* (Presser, 1988: 136). The *part-time shifts* may be worked as rotating shifts that consist of short morning, afternoon, and evening shifts. These shifts are usually worked for less than 35 hours per week. The *part-time* and *full-time* shifts have been widely adopted by the service sector such as hospitals, which provide health care services to the public, and therefore have to be opened 24 hours a day. *Split shifts* may be worked at any time and divide the hours of work into two or more spells during the day. Employees are released from work after a certain number of hours and are required to return to work later in the day to complete their shift. "This kind of schedule may be found in industries such as urban transportation and restaurants where there are peak periods of activity during the day with little activity in between" (IR Research Services, 1983:1).

The *Discontinuous three shift schedule* is a system where, generally, three groups of individuals work for a 24 hour period over five or six days and nights, e.g., "6:00 a.m. to 2:00 p.m.; 2:00 p.m. to 10:00 p.m.; 10:00 p.m. to 6:00 a.m." (Walker, 1978:4). Shift modifications may occur weekly or fortnightly or at shorter or longer intervals, similarly the starting and stopping times of the shifts may be varied. This system has been adopted for technical reasons where a production cycle lasts for 24

hours "as in the chemical industry, cement works, ceramics factories and certain sections of the iron and steel industry " (Maurice, 1975:29).

*Double day shifts* are considered a two shift working, usually of eight hours, the first shift is customarily worked from " 6:00 a.m. to 2:00 p.m.; or 7:00 a.m. to 3:00 p.m. The second shift is usually worked from 2:00 p.m. to 9:00 p.m. or 3:00 p.m. to 11:00 p.m." (Walker, 1978:3). This enables the plant to be manned for 80 hours a week without a night shift, although meal breaks, if they cannot be covered by spare staff, will lead to reduction of the total hours worked to 75 or less. The shifts usually alternate every one or two weeks, but other arrangements are practical, such as changing shifts in mid-week or back-to-back working when the shifts are changed daily; the same crew are on the afternoon shift of one day and the following morning. This type of shift arrangement is usually utilized in the manufacturing industry.

*Saturday and Sunday shifts* may be worked in the morning, afternoon, and evening. The hours worked for each shift are generally greater than 8 hours. Individuals whether they are full-timers or part-timers must, on a rotational basis, work the weekend shift. Individuals who work the weekend shifts tend to be in the transportation industry, hospitals, and restaurants. *Permanent night shifts* may be worked because of job demands as in the case of security guards but it is fairly common for fixed or permanent shifts to be a substitute for multiple ones. A fixed day and night shift may replace the alternating day and night shift.

In general, according to Maurice 1975; Walker & Harrington 1978; IR Research Services 1983; and Presser 1988; *rotating shifts* are continuous, whereas *non-rotating* shifts are fixed. *Part-time* and *split shifts* may be worked at any time and consist of short shifts. *Discontinuous three shift systems* may be worked at longer or shorter intervals. *The double-day shift system* is divided into two separate time intervals (morning and afternoon shifts). *Night shifts* are usually permanent and fixed.

## **CHAPTER 2**

### **LITERATURE REVIEW** **HISTORICAL ASPECT OF SHIFT WORK (HOW AND WHY SHIFT WORK DEVELOPED)**

Shift work and night work have always existed in various forms, even before the Industrial Revolution. Industries such as iron founding, glass making, lime burning and paper making, in which the nature of production makes continuity necessary, have always used a shift system (Folkard & Monk 1985,1992; Harrington 1978; Maurice 1975; Wilson & Rose,1978).

The legislation permitting continuous shift work was first adopted by Quebec Provincial Law. A decree presented on the 27 October 1936 states that,

whose operation must, by reason of the nature of the work itself, necessarily continue without interruption at any time of the day, night or week, and an order of the 22 June 1937 specified, in addition, that shift work might be adopted for workers in processes that, although not themselves necessarily continuous in character, are technically dependent on processes that are necessarily continuous (Maurice, 1975:10).

As a result, "no limitation was placed on the number of working hours for industries or works which were subjected to the competition of other countries or other provinces" (An Act Respecting The Limiting Of Working Hours, Ch.40:127). The reasoning behind the implementation of shift work is as follows: the more a firm is able to have employees work around-the-clock, the more efficiently it produces, the more profit they make and at the same time, this allows the industry to survive and compete with other industries (Coloquhoun & Rutenfranz ,1980; Morris, Maclean, & Bernau 1964). "It improves the efficiency of the organization of production so as to achieve maximum returns" (Maurice, 1975:10).

The legislation also reflects changes in the nature of the work itself and in technological requirements that, little by little, led to the extension of shift working to the most diverse branches of economic activity. Multiple-shift systems allowed machines to work longer, and has been widely practiced, because it reduces prime costs and saves capital, especially in the steel and chemical industry. For example, Maurice (1975) reports that technological requirements make continuous operation necessary in the iron and steel and chemical industries. A blast furnace or a distillation column cannot be shut down without giving rise to serious technical difficulties. According to Maurice, in these industries, certain operations could be stopped momentarily without any great damage, except that the stoppage would lead to a marked increase in production costs. This is why it becomes necessary for workers operating machines to work on a continuous basis because it saves money, and it also results in greater labor efficiencies.

In some industries the technology determines that the process shall be operated 24 hours a day. This applies to most furnaces as in iron and steel manufacture or oil refining where continuity of working is essential. In other continuous processes with gases, liquids or chemicals in which the materials flow in pipes and tubes, the technology demands continuous working. Even if the process can be temporarily closed or slowed down, the length of the starting and stopping times makes it impractical and almost impossible. "In these kinds of industries, for example chemical, oil refining, metal making, the cost of the plant is often very large in relation to the labour costs, so that shift working is an economic as well as technological necessity" (Maurice, 1978:23).

In sum, shift work was first adopted to allow the production process of industries and their advanced technology to work continuously. But shift work also has a long history in service industries where constant monitoring is required, such as patient care in hospitals.

## **THE PRESENT TRENDS OF SHIFT WORK**

Estimates of the prevalence of shift work vary. According to Statistics Canada 1993, over 3 million workers have shift schedules, most commonly an irregular one (1,064,000 workers), followed by rotating shifts (940,000). Over 260,000 report an on-call work arrangement. The highest proportion of shift schedules is reported in the following occupations: service sector (55%), transport equipment operating (46%), material handling and other crafts (44%), and sales (41%). In addition, over 25% of individuals have worked shifts for 5 years or more. Of this group, 46% are on a rotating shift schedule.

Shift work is slightly more common among male than female full-time employees (25% compared with 21%), but men are more likely to have pre-arranged schedules. Only 27% of male shift workers have irregular schedules, compared with 36% of women (Perspectives On Labour And Income, Statistics Canada, Spring 1993:17). The data suggests that women more than men, work part-time shifts, and this has also been shown in my own sample (16 out of 23 women work part-time shifts in comparison to 8 out of 23 men/total sample size = 46). The reason for this is because most women are not principal wage earners, because most of them work to add supplemental means in the household. All of this will be further discussed later on in the thesis.

Over half of the part-time shift work-force is under the age of 25. Three quarters of workers aged 15 to 24 have part-time shifts; most (84%) are students. About 70% of men with part-time jobs work shifts, they represent fewer than 1 in 10 part-time shift workers, mainly because so few work less than 30 hours a week. On the other hand, part-time work is common among women, who accounted for over one-third of all part-time shift workers, even though their shift rate is lower than men's or youths' (Perspectives On Labour And Income, Statistics Canada, Spring 1993: 19).

Monk and Folkard (1992) reveal that shift work represents in the US 22% of the total work force (16% of full-timers and 47% of part-timers in the work force), equivalent to about 20 million shift workers.

The American statistics reveal that there is an increase of shift work in the present day society. It seems that industry has come to rely upon shift work in both the manufacturing and the service sectors. It is economically and physically impossible not to be able to retain around-the-clock operations in many manufacturing districts. For instance, many electrical power plants cannot be shut down in early evening and be reopened in early morning, since they have to be 24-hour operations. Monk and Folkard (1992) stipulate that there is also economic pressure towards retaining shift work, and this pressure takes two forms:

the first through the extremely high cost of new machinery and automated process which may often dictate continuous usage if they are to yield a profit for the company involved. Secondly, there is the response of many employers to fluctuating market places and the high cost of recruiting and hiring personnel (Monk & Folkard, 1992:2).

Shift work is prevalent in occupations and industries that require continuous operation to be cost effective or that offer a product or service in demand late into the night or around the clock. People who work in mining or who manufacture and assemble cars, machine parts, computers, textiles, paper, chemicals, rubber, plastics, and primary metals are usually shift workers. These individuals all work in the manufacturing sector (Simon, 1990).

In the services sector, shift work has a strong tradition in the American and Canadian medical field, where nurses, doctors, hospital switchboard operators, clerks, porters and orderlies are very often expected either to be on call or actually performing their job on an around-the-clock basis. Firefighters, police and correctional officers, security guards, doormen and military personnel are often shift workers. The constant



need for police, fire protection and health care is reflected in the high shift rates for protective and health occupations. Among full-time workers, almost 70% of police officers, firefighters and security guards, and 50% of health workers, work shifts (Perspectives On Labour And Income, Statistics Canada, 1993: 5).

There are, however, strong trends, particularly in North America, towards quite dramatic increases in around-the-clock availability of various other services, such as fast food restaurants, coffee shops, and grocery industries which are now opened 24 hours a day, 7 days per week. Monk & Folkard (1992) stipulate that this kind of shift work trend has been dictated by the market place in order to allow for continuous production to occur. As noted previously, shift work is also available for non-economic reasons for example, as in the case of protective and health occupations.

### **ADVANTAGES FOR MANAGEMENT**

Some research (Bohlander & Hinman, 1977; International Labour Organization, 1978) indicate that managers prefer utilizing a system of shift working in their companies because in this way service may be increased to the public, continuous production rises and this improves business. Bohlander and Hinman (1977) also report that managers believe that adopting shift work is beneficial because a reduction in short term absences occur as employees handle many personal affairs before or after their selected work day. There occurs quicker starts as employees arrive at different times. At the same time, a quiet time is possible for thought and concentration as not all employees are present for the same hours. Many people have for years recognized this advantage by arriving early or staying late, reporting their best accomplishments occur during this time. For instance, research reveals that some individuals are considered "morning" types and "evening" types; in other words some individuals seem to be more productive in the mornings, while others are more alert and productive during the evenings (Folkard & Monk, 1985). As a result, workers

become job oriented rather than time oriented as time now becomes an element the worker can control. For instance, because of the earlier arrival and later departure times or vice versa, workers are able to organize their lifestyles according to their shift schedules (this is how they are time oriented). They are able to conduct personal business and chores before or after their assigned shifts. This allows the workers to be more job oriented and organized as they are more able to focus on work. "There is a presumed increase in productivity as there occurs an increase in quiet and uninterrupted work time, because the work place can be open longer to provide earlier arrival and later departure times" (Silverstein & SRB, 1979:39).

In addition, much cross training occurs within shift work and this seems to improve cooperation among employees as they share skills and know-how in order to "fill in" during another worker's absence. These reasons reported (by Bohlander & Hinman, 1977; International Labour Organization, 1978; Silverstein & Srb 1979); provide an explanation as to why it is beneficial for management to adopt shift work.

## **THEORETICAL PARADIGMS**

### **CIRCADIAN MODEL OF SHIFT WORK**

There are various theories that describe why some shift workers have an easier time coping with shift work while others have a difficult time adjusting to it.

The Circadian Theory claims that there exists an internal biological 'clock' in every individual designed to expect active wakefulness during daylight and restful sleep at night. The precise timing of these rhythms is shown to be dependent on environmental time cues or 'zeitgebers' (Minors & Waterhouse, 1981; Monk & Folkard, 1985; 1992).

Monk & Folkard (1992) reported that the Circadian system is kept on track by an entrainment mechanism that uses zeitgebers (German for 'time givers') coming from the environment (daylight/darkness) and the behaviour (social interaction, meal times, etc.) of the individual. The human Circadian system is influenced by, and goes in accordance with, a 24 hour solar cycle. For instance, human body temperature, heart rate, and blood pressure, vary according to the time of day. Rhythmicity is not only present at the biological level, it is also present in our environmental and social behaviour. Theorists suggest that Circadian rhythms result from the effects of the rhythmic environment on an individual's biological clock, which also influences the individual's social behaviour. For instance, the Circadian theory reports that during the daytime most individuals are supposedly awake, active, and taking meals. Whereas at night most individuals are asleep and fasting. This theory explains that an individual's blood pressure, heart rate and temperature will rise during the daytime and fall at night. Furthermore, the Circadian Theory implies that the normal social rhythm is one of daytime work, evening leisure and night sleep. It is with the problems associated with living differently from the norm, in particular working at night or on shifts, that the Circadian Theory of shift work concerns itself (Minors & Waterhouse, 1981).

Monk & Folkard report that there are two major strains placed on the individual by a misaligned Circadian system. "The first strain arises because of the problem of inappropriate phasing " (Monk & Folkard, 1992:27). This means that a major function of the Circadian system is to adjust the individual's body rhythms to accommodate sleep at some times of the day and wakefulness at others. According to Monk and Folkard, a misaligned Circadian system will result in a disruption of both sleep and daytime functioning. "Sleep is disrupted by alerting mechanisms such as the cortisol surge and temperature drops and melatonin surges" (Monk & Folkard, 1992:27).

Monk & Folkard also report that a misaligned Circadian system can cause performance decrements which may severely compromise both the productivity and safety of individuals. For example, some individuals may have a difficult time performing certain tasks such as driving, due to the fact that their circadian system is maladjusted.

The second major strain that is placed on the individual with a misaligned Circadian system, is due to the fact that the natural ebb and flow of the Circadian rhythm is disrupted by changes in time schedules. In other words, " both laboratory and field studies have documented decrements in sleep, daytime performance and mood in people who have been subjected to an abrupt shift in routine" (Folkard, 1992: 11). This kind of disharmony can itself result in feelings of feebleness and exhaustion, which may lead to physical ailments such as ulcers, constipation, and indigestion (Mott, Mann, McLoughlin & Warwick 1965; Akkinawo, Cunningham, Charlton & Hertz, 1989; Simon, 1990; Monk & Folkard, 1992).

According to Monk & Folkard (1992) different Circadian strain will therefore be associated with different shift schedules. For instance, permanent night workers are never quite socially or physically adjusted to this shift. The reason for this is because an individual's biological rhythms such as body temperature, heart rate, and blood

pressure falls during the evenings and as a result of this most individuals are less awake and active (Minors & Waterhouse, 1982; Monk & Folkard, 1992).

In rotating schedules, on the other hand, many individuals may find themselves in a perpetual state of flux with continuous Circadian dysrhythmia. This means the Circadian system is not functioning well, which causes severely impaired sleep and performance decrements in daytime functioning (Monk & Folkard, 1992: 28). The reason for such problems is due to the fact that individuals are influenced by and are entrained to a 24 hour 'zeitgeber' (time givers). Their inability to obtain sufficient sleep during the daytime because of night work, or rotating work may result in an asynchrony between behavioral rhythms and the internal clock. Thus the shiftworkers' rhythms may fail to shift their phase to a value completely appropriate to their nightly or rotating activity (Minors & Waterhouse, 1981).

Walker (1978); Minors and Waterhouse (1981); Monk and Folkard (1992) report that there are individual differences in Circadian rhythms. For instance, there are two classifications of human 'Circadian type.' Monk and Folkard (1992) stipulate that individuals fall into either one of two categories, "morning types" or "evening types." This classification of individuals seems to be a widely held belief, and many studies have been performed by scientists testing the Circadian rhythms and its effects on performance levels of individuals (Walker, 1978, Minors & Waterhouse, 1981; Monk & Folkard, 1992). The classification of "morning types" and "evening types" refer to the following: "morning types may be characterized as 'being early to bed and early to rise,' up and active at the crack of dawn, but getting very tired around mid-evening. In contrast, "evening types" seem to be more active, and are at their best during the evenings. However, "evening types" have much trouble waking up in the morning (Monk & Folkard, 1992: 46-47) .

Monk & Folkard (1992) report that individuals who have the most difficulty with shift work are those who fall in the "morning type" category. There appear to be

two reasons for this. " The first reason is a prosaic one that " morning types" find it hard to stay awake at night and to sleep in late during the morning hours, precisely the behaviour required of a night worker. Secondly, there is the fact that "evening types" may be that way because they are less susceptible than "morning types" to the surrounding physical and social time cues (zeitgebers), because night work usually requires a phase delay in behavior, it requires for example, a 9:00 am bedtime, rather than a midnight one. In other words, "evening" types are more able than "morning types" to stay up later.

Monk & Folkard (1992) also report that inter-individual Circadian differences derive from personality factors of individuals who fall in the categories of neuroticism and extraversion. Monk & Folkard (1992) examined Blake's (1967) use of the Heron Personality Inventory of inter-individual Circadian differences in personality. Blake's (1967) studies show that neurotic extraverts have later peaking Circadian temperature rhythms. It seems that "neurotic introverts are shown to be less able than neurotic extraverts to cope with shift work, jet lag, and daylight saving time" (Monk & Folkard, 1992: 48).

Monk & Folkard (1992) report that some individuals who have habitual sleep patterns may have difficulty adjusting to shift work. For example, individuals who habitually need 8 hours or more of sleep to feel refreshed always find shift work almost impossible to cope with, while those needing 5 hours or less invariably find it easy.

In general, the Circadian theory suggests that some people cope quite well with shift work, others rather badly. Those who cope badly with shift work are considered morning types, follow a rigid pattern, and fall in the category of sleeping longer (Walker, 1978; Minors & Waterhouse 1981; Monk & Folkard, 1992).

In sum, the Circadian theory reports that in every individual there exists an internal biological clock that is dependent on environmental time cues. The Circadian

system consistently adjusts the individual's body rhythms to accommodate sleep at night and wakefulness in the morning. The Circadian system can be misaligned, when a disruption in both sleep and daytime functioning occurs. This usually occurs in individuals who work different shift schedules, or particularly work the night shift. The reason for this is because shift work interrupts the natural ebb and flow of the body. This appears to be largely due to the fact that the workers bodily rhythms cannot properly adjust to their shift schedules. As a result of this, most workers experience disorientation, and a decline in performance and health which jeopardizes the worker's safety and well-being (Minors & Waterhouse, 1981; Monk & Folkard;1992).

The Circadian Theory also stresses that shift work is not for everyone. The theory classifies individuals according to personality and Circadian type, habitual sleep type, in order to determine who could be at added risk for shift work coping problems of one sort or another (Monk & Folkard, 1992).

### **PSYCHOLOGICAL MODEL OF SHIFT WORK**

Monk & Folkard (1992) examine a Psychological theory of shift work which they describe as a 'stress & strain' model of shift work, that describes how various detrimental effects of shift work might ensue. Within this model it is asserted that such effects do not arise from the actual stress of shift work itself, rather the strain develops within an individual who is attempting to cope (more or less successfully) with the unnatural pattern of activity and sleep that shift work may require. For instance, an individual may be working the graveyard shift (midnight to 7 am) one day, and the next day, this same individual may have to work the (4 p.m. to midnight shift). As a result of this, the worker's sleeping patterns become irregular, and the worker may have a difficult time coping because of the irregular sleeping patterns that are a result of working different shifts. Thus, according to Monk & Folkard (1992), shift workers experience stress as a result of the "phase shifting of working and sleeping hours" (Monk & Folkard, 1992: 26). Strain however, arises in the shift worker as a "function of three basic areas of stress: circadian system, sleep and social/domestic." (Monk & Folkard, 1992:26). Monk suggests that all three are interrelated, and strain arises in the individual when all three factors are not functioning well. For instance, Monk stipulates that strain from the Circadian system develops when the individual's biological clock factors are disrupted from lack of sleep or irregular sleeping patterns which results from working different shifts, and the worker is maladjusted to shift work. Strain from the Circadian system causes workers to develop severe emotional problems due to physical disharmony, resulting in feelings of malaise and fatigue, as well as certain gastro-intestinal symptoms (Mott, Mann, McLoughlin & Warwick 1965; Akkinawo, Cunningham, Charlton & Hertz, 1989; Simon, 1990; Monk & Regestein, 1991; Monk & Folkard, 1992).



Another factor of stress is sleep disruption. "About 60-70 % of shift workers complain of sleep disruption" (Monk & Folkard, 1992). According to Monk & Folkard (1992) a shift worker's sleep may be disrupted by both endogenous and exogenous factors. Endogenous factors stem from the imbalanced circadian system which may fail to prepare the body and mind for sleep and/or wakes the system up (e.g. if a worker works nights, the worker may have a hard time staying asleep during the afternoon in order to be awake for night work. The worker consistently wakes up to eat or go to the bathroom and is unable to obtain proper restful sleep).

Exogenous factors may, also cause severe problems. The shift worker's day sleep may be more disturbed by domestic commitments (shopping, child care, etc.) than is the night sleep of day workers. Households are noisier during the day than at night, and much strain can develop from the chronic partial sleep loss that it creates.

Finally, stress may also result from social and domestic strain, whereby social companions, parenting and sexual partner roles can all be compromised by shift work. For instance, shift working parents may have difficulty with child care because shift work schedules interferes with time spent with children.

In sum, The Psychological Model of shift work reveals that workers experience stress because of the phase-shifting of working and sleeping hours. As a result of such stress, workers are subjected to impaired health, lowered psychological well-being, and disturbed social and domestic relationships (Monk & Folkard, 1992:25-26).

## **SOCIOLOGICAL MODEL OF SHIFT WORK**

The Sociological Model of shift work (Mott, Mann, McLoughlin & Warwick 1965; Maurice 1975; Carpentier & Cazamian, Walker 1978; Charlton & Hertz, Cunningham 1989; Simon, 1990) suggests that shift work has repercussions on the worker's social life, that can also lead to social isolation. These repercussions differ for different shift schedules and are at times influenced by the worker's age, job seniority, marital, and family status.

While most workers do not appear to be fundamentally alienated from work, the great majority are alienated from the way in which work is regulated in relation to time (Bernstein, 1976: 130).

Research indicates that the worker experiences social isolation. Simon (1990) reports that social isolation can be a major, ongoing problem for morning, afternoon, and evening rotating shift workers. For instance, "those individuals working rotating shifts have little or no control over their ability to attend meetings or events planned long in advance. Workers on afternoon shifts miss most evening gatherings. Access to community services such as medical and dental offices and stores may also be troublesome if one's work shift collides with the standard hours of such services " (Simon, 1990: 344). Thus, according to Simon (1990), shift workers may find it more difficult to set aside time to spend with family and friends, than do people who perform daytime work. Single and married shift workers often have trouble participating regularly in recreational, cultural, social, or political groups in their neighborhood and community. Consequently, many shift workers may be lonely and feel isolated because they seem to be living on the "margins of society." Shift workers seem to experience difficulties in balancing their lives and activities with the rest of the members of society. The great majority are alienated from the way shift work is regulated in relation to time. In other words, they sleep when others are awake and

working, and are awake when others are asleep. This may also explain why shiftworkers are described as working "unusual" and "abnormal" hours.

Mott, Mann, McLoughlin & Warwick (1965); Maurice (1975); Carpentier & Cazamian, Walker (1978); Charlton & Hertz, Cunningham (1989); Simon (1990); described shift workers as experiencing role conflict and feelings of frustration and despair because the workers may feel that they cannot carry out all of their roles. For example, the workers may feel that they cannot continue to work and also fulfill their roles of good spouses and parents, the reason for this may be due to the fact that work may prevent them from spending more time with their families. For instance, "Shift workers are frustrated by their inability to protect the family and provide companionship to their spouses" (Hertz & Charlton, 1989: 491). However, if the individuals do not work, they may feel frustrated and perhaps even guilty over the fact that they are not living up to their full potentials as good providers and spouses. Shift workers may have a difficult time balancing their multiple roles e.g., as husband/wife; father/mother; friend; shift worker etc. Workers may experience role strain because they are unable to live up to their role expectations which may have been imposed upon them by society's norms. Mott, Mann, McLoughlin & Warwick 1965; Maurice, 1975; Carpentier & Cazamian, Walker, 1978; Charlton & Hertz, Cunningham, 1989; Simon, 1990, also explain some of the distress of shift work as being due to social factors, e.g., frequent absences from the family, insufficient recreation and disruption of family organization.

The Sociological Model of shift work suggests that most workers are socially alienated because they seem to experience difficulties in balancing their lives and social activities with the rest of the members of society. In addition, shift workers also experience various role conflicts because shift work keeps preventing workers from fully engaging in their various roles. For example, if they are at work they are unable to provide proper child care (Mott, Mann, McLoughlin & Warwick 1965; Maurice,

1975; Carpentier & Cazamian, Walker, 1978; Charlton & Hertz, Cunningham, 1989; Simon, 1990).

In sum, the Circadian Theory reports that shift work may cause workers' bodily rhythms to be maladjusted, and as a result of this, workers may develop physical complications such as lack of sleep and gastrointestinal disorders (Mott, Mann, Mcloughlin & Warwick, 1965; Akkinawo, Cunningham, Charlton & Hertz, 1989; Simon, 1990; Monk & Folkard, 1992; Minors & Waterhouse, 1981; Walker, 1978).

The Psychological Model reveals that most shift workers experience stress because they are unable to cope with various shift schedulings. These disruptions place much strain on the social and domestic life of the worker (Monk & Folkard, 1992).

The Sociological Model tells us that much demand is placed on the workers, for example, to be able to work various shifts, provide companionship to their spouses, and/or be attentive to their children etc. Workers may experience role conflicts because they may have difficulty fully living up to their various role expectations as a result of shift work (Mott, Mann, Mcloughlin and Warwick, 1965; Maurice, 1975; Carpentier & Cazamian; Walker, 1978; Charlton & Hertz; Cunningham, 1989; Simon, 1990).

## **CRITIQUE OF THE THEORETICAL PARADIGMS**

In examining the Circadian model of shift work there seems to be general agreement that permanent as well as rotating shifts affect markedly and directly the workers' basic physiological rhythms of sleeping, eating, and gastrointestinal make up. This theory as presented by Rutenfranz & Colquhoun (1978); Minors & Waterhouse (1981); Monk & Folkard (1985;1992) addresses the human costs intrinsic to working shift work.

The Circadian Theory categorizes individuals into two groups "morning types" and "evening types" and assumes that *all* individuals regardless of gender, age, experience, or social structure within which they live, fall in either one of the two categories. Such categorization of individuals is questionable because it does not explain how some individuals such as doctors, nurses, porters, orderlies, and hospital switchboard operators work rotating shifts (alternating consistently between morning, afternoon, and evening shifts) for many years, and are fully adjusted to it. In other words, this theory does not explain how some people (i.e., doctors, nurses, orderlies, telephone switchboard operators) are able to adapt to working various shifts, and because of this, do not seem to fall into the categories of "morning types" and "evening types." The reason why these individuals would not seem to fit into the two criterias of "morning types" and "evening types" is because they are able to work any shift, which suggests that they are able to be productive during any time of the day.

Froberg (1977) further illustrates how individuals are able to work different schedules and who do not fall in neither category of "morning or evening type." He studied 15 young, healthy volunteers who were subjected to a 72-hour vigil. During the vigil, subjects were sedentary, had no knowledge of clock time and no windows or other time cues to tell them the time of day. They were kept continuously awake and various performance and physiological tests were made. Froberg's study revealed that

Circadian variation continued to be present in both subjective alertness and body temperature even though there was no cycling in daylight and darkness or sleep and wakefulness for these 15 subjects, i.e., the Circadian system continued to oscillate even when the exogenous (external) factors were completely constant. Thus, the outputs of the Circadian system are not reactions to changes in posture or environment but come from within the individual. In contrast, other measures such as heart rate and noradrenaline release (an alerting hormone) showed no persistent Circadian rhythmicity under these special conditions, indicating that the rhythms normally found in these measures stem from the cycling of sleep and activity.

What all this means is that since the Circadian system of individuals is indeed endogenous and self sustaining, the Circadian system of individuals can be re-aligned, and be appropriated to a new routine (Moline, et al, 1991). To further illustrate this point Loban (1960) lived with small groups of subjects in an isolated community in the arctic summer, and subjected them to abnormal time routines. The subjects' ordinary wrist watches were withdrawn and they were provided with watches which were adjusted so that they recorded 12 hours in 10.5 or 13.5 real hours, thus establishing life on a 21 or 27 hour 'day.' Observations of certain bodily functions showed that the subjects' temperature rhythm synchronized on the new time scheduling after a short time and rapidly showed complete adaptation.

The studies reported by Loban (1960) and Froberg (1977) reveal that there are wide individual differences in the ease with which Circadian rhythms of different people adjust to new routines. Their studies reveal that not *all* individuals fall under the categories of "morning types or evening types."

In retrospect, the Circadian theory should be analyzed as follows: some individuals are able to cope well with shift work while others cope quite badly. This depends on how individuals adapt their Circadian rhythms (habits of sleep/wakeful cycle) in accordance to working shift work (permanent night & rotating shifts).

The Psychological Model that examines a 'stress & strain' model of shift work is similar to the Circadian Model of shift work. Carpentier & Cazamian (1978) report that the harder it is for workers to reconcile the demands of their working life with their responsibilities in private life (i.e., social companion role, parenting role, and sexual partner roles can all be compromised by shift work); the more their psychological state suffers; their anxieties increase, and they come into growing conflict with themselves while their self-respect declines.

The Psychological model claims that the shift worker may experience stress in three areas: circadian, sleep and social/domestic systems. In closely examining these criterias for stress it seems that the Psychological approach does not separate the "social" from the "biological" and/or "psychological factors." In other words, you never know when the stress of shift workers begin. It is questionable whether the stress arises solely because the biological clock of individuals is maladjusted to shift work, or whether because workers experience sleep disruption, or whether stress arises due to various domestic commitments. The Psychological model does not clearly indicate whether stress in shift workers results out of all these things (i.e., biological clock maladjusted to shift work, sleep disruption, or strain from domestic commitments) simultaneously working against the workers causing much psychological distress. It is unclear whether shift workers experience psychological distress because all these factors work intermittently against shift workers or whether only one of these factors (i.e., sleep disorders) affects the workers' psychological equilibrium.

Another problem inherent in this theory, is the fact that it is called a Psychological model, when it seems to be dealing more with biological and social matters. This model should have been called the Socio-Psychological Circadian model of shift work. The reason why the model should be renamed, is because it seems to imply that the "biological" and "social" are intrinsic to the psychological aspect of shift

work. The psychological aspect of shift work is not separated from its biological and social factors. This theory presents itself in a way that suggests that psychological, social, and biological factors of shift work are all intertwined. In other words, the psychological model claims that the stress that shift workers endure occurs because workers' biological clocks are maladjusted to shift work, as a result of sleep deprivation. This disrupts workers' social and domestic commitments (because they are disoriented and are unable to cope at home and at work) which causes them to be psychologically distressed.

The Sociological Model of Shiftwork (Mott, Mann, McLoughlin & Warwick 1965; Maurice 1975; Carpentier & Cazamian, Walker 1978; Charlton & Hertz, Cunningham 1989; Simon, 1990) reveals that individuals who work the rotating shifts as well as permanent night shifts experience social isolation. The Sociological model of shift work reveals that shift workers may be recognized as 'marginal persons,' that is to say that individuals are functioning in their work and in their social lives on the margins of their community so that they may not be accepted by or interact effectively with other members of it (Walker, 1978). To make this analogy clear, the Sociological model of shift work reports that "shift work can prevent the carrying out of role function, in that shift workers may be deprived of participating in activities which take place when they are working or resting, but when most members of the community are enjoying their leisure, e.g., by watching or taking part in sport" (Walker, 1978:88).

The Sociological theory also explains why rotating shifts negatively affect the care giver role and domestic routine of men and women. Simon (1990) reports that a common problem among shift workers is lack of time with spouses or partners. A husband, wife, or partner who works during the day may be awake at the precise times an afternoon or night worker is asleep. To spend time with each other, at least one member of the pair must alter significantly his or her patterns of sleeping, eating, and recreation.



The shift worker may also be excluded from participating in social events with family and relatives. "Late afternoon and evening gatherings, and socializing are inaccessible for people who work a 3-11 p.m. shift" (Simon, 1990:345). Finn (1981) reports that spouses find it difficult to plan familial, social, and community life to include the shift worker as well as to keep track of the worker's availability for mealtimes, school events, social commitments, and special occasions. The shift worker's partner may experience resentment and frustration as a result of having to juggle multiple family responsibilities and his or her own job to accommodate the shift worker's rotating, afternoon, or night shift schedule.

The Sociological theory also explains why the night shift affects the sexual partner roles of individuals. For instance, married couples may experience problems with their sexual relations, especially for those individuals working the night shifts. For instance, when the worker comes home after a late evening shift, the spouse is already in bed sleeping. This is an example of how the sexual partner roles of individuals may be affected by shift work.

In general, the Sociological model explains how shift work prevents individuals from fully engaging in the aforementioned roles. This is due to the irregularity consistent in working rotating shifts and the 'unsociable' hours of night shifts. As a result of all this, the individual experiences severe conflict role pressures because they are consistently attempting to balance work, family, social and leisure activities to fit into their weekly schedules.

The Sociological perspective focuses on how shift work brings about an inversion of important "normal" social rhythms of family life, social life, and free-time activities (Mott, Mann, McLoughlin & Warwick, 1965). The social rhythms of free-time may be defined as time off the job, and leisure time as time off the job that individuals can use to pursue their own interests (Mott, Mann, McLoughlin & Warwick, 1965). Further, Mott, Mann, McLoughlin & Warwick (1965) report that

many sections of the society look toward the social patterns of job hours in planning their own activities. "Voluntary associations rest heavily upon the non-work hours for their activities. Organized recreation typically occurs after work. Movie theaters catering to adult audiences take account of patterns of time off the job, and television broadcasters annually spend hundreds of thousands of dollars to determine the times after work when their shows reach the most people" (Mott, Mann, McLoughlin & Warwick, 1965: 65). In short, all our human activities seem to be arranged in accordance to work. For instance, according to Mott, Mann, McLoughlin & Warwick (1965) the evening is typically (and traditionally) the time of the day in which the family members share each other's company, even though it may be in front of the television set. Later in the evening, the husband and wife are alone and often use the time to discuss the events of the day. The span of time from the children's bedtime until the couple retires seems to be a crucial one in maintaining the solidarity of the marriage relationship.

The Sociological model (as well as the Psychological model) seems to focus only on the negative repercussions of shift work. It does not address the fact that some individuals may prefer working the night shifts, for example, because they would be able to pursue hobbies, outside sports, and other free-time interests such as hunting and fishing during the early mornings and afternoons. Other individuals may choose to work night shifts because they are able to relax more and do their jobs better because there is less supervision (Hood, 1988). Some individuals may even prefer working rotating shifts because they would rather not follow a set routine.

In sum, the Sociological model has limitations because it assumes workers must follow a set routine in order to live a "normal" and "comfortable" life. This is a biased approach to shift work, because there exists a population of individuals who have chosen to work various shifts, and still seem to maintain a "normal" and

"comfortable" life. The only difference being, unlike the majority of day workers, shift workers do not follow a routine.

In conclusion, the Sociological model does not apply to all shift workers, it only seems to zero in on a certain population of individuals who are unable to balance their family lives, social lives, and free time pursuits in accordance to their shift schedules. Thus, coping with shift work may be problematic for these individuals.

The Circadian Theory, Psychological Theory, and Sociological Theory, report that, according to their circadian rhythms, psychological well-being, social and domestic demands, individuals will be able or unable to cope with permanent night and rotating shift work.

## **THE IMPACT OF SHIFT WORK ON JOB PERFORMANCE AND SATISFACTION**

### **RATE OF ABSENCES**

Maurice (1975) has studied the relationship between shift work and absentee rates among workers in the glass industry. His findings suggest that rates of absenteeism are higher among shift workers than among workers on normal work schedules.

Jamal & Baba (1990), compared the absentee rates of nurses working the fixed shift and nurses working the rotating shifts. Their findings conclude that "relative to nurses on permanent shifts, rotating shift nurses took more sick days for serious illness" (Jamal & Baba, 1990: 15).

According to Maurice (1975) absenteeism is lower for the rotating night shift than for the day shift. However, during a four-week cycle of rotation the frequencies of absences tend to increase for the night shift and to decrease for the day shift. It may be that the fatigue accumulated during the night shift might have an effect on the first

few weeks of work on the day shift. Other explanations can be put forward, namely, the tendency of the shift worker to take additional work ("double jobbing") when the worker is on day work, or the fact that wages are higher on the night shift.

In the case of rotating shifts, versus fixed shifts, the rate of absenteeism has been found to be higher on rotating shifts. The reason why more absences occur on rotating shifts is because of the changes in schedules where workers may have to work the evening shift one day (i.e., 4 p.m. to midnight), and on the next day would have to work the early morning shift (i.e., 7 am to 3 p.m.). There exists a constant fluctuation in the shift schedules. For instance, "individuals on rotating work hours thus experience a low degree of routine in everyday life and remain in a constant changing and adapting mode. By the time they have adapted to one work schedule, they are expected to move to the next one" (Jamal & Xie, 1988:3).

### **RATE OF ACCIDENTS.**

Maurice (1975); Carpentier and Cazamian, Walker (1978); Monk and Folkard (1992); have studied accidents in relation to rotating shift work. For male workers in industries such as gas works, mining, steel work, and truck driving. While Simon (1990) examined men and women who were health care workers, including lab technicians, orderlies, maintenance workers, physicians, nurses, and emergency medical specialists. The results of their findings seem to conclude that accident rates for men and women shift workers are higher in the evening shifts. The reason for this is usually because of the lack of personnel available at night, and the worker on the shift has more responsibility which may cause more stress, anxiety, and tiredness, for the worker.

Furthermore, more accidents may occur during the night shift because many workers may be maladjusted to the shift. According to Monk and Folkard (1992) the workers can become agents of risk through simple performance decrements. The

maladjusted employee working the night shift may be experiencing "sleep loss and circadian disfunction" (Monk & Folkard, 1992: 38). As a result, this may lead to on-the-job accidents.

Maurice (1975) and Simon (1990) have examined the relationship between accident rates and fixed shifts. They state that there is a marked difference with respect to the frequency of accidents between the permanent night shift and the other fixed shifts (i.e., morning, afternoon). "The results confirm that during the day, accidents are more frequent but less serious, while at night they are less frequent but more serious (Maurice, 1975: 40). According to Maurice (1975) accidents are more frequent during a fixed day shift because there is a higher level of nervous activity, as the work environment is busier during the day than at night. Accidents are less frequent but more serious during the night because workers seem to be more weary during the graveyard or (night) shift, as a result of this, the worker may commit more on-the-job accidents and misjudgments (Simon, 1990; Monk & Folkard; 1992).

In general, the authors seem to be putting forward the following thesis: severe on-the-job mistakes and accidents take place on the rotating and permanent night shift. This is due to the fact that workers may be maladjusted to the shift which may cause more pressure, distress and weariness for the worker.

### **PRODUCTIVITY AND SATISFACTION**

Regestein & Monk (1991) have discovered that oil refinery workers on the night shift "indulged in heavier use of caffeine, as well as significantly greater use of alcohol (16% of men on variable shifts had more than four drinks daily)" (Regestein & Monk, 1991: 1489). Along the same lines, Monk & Folkard (1992) report that a survey on several thousand American shift workers reveal that there is an increased incidence of tranquilizer use and nervousness in rotating shift workers. As a result of

all this, most of these workers seem to experience more job stress, severe emotional problems and physical ailments. The ramification of such disorders suggests that shift work and the problems of individuals just described exemplify the problems associated with rotating shift specifically the night shift which affects the individual's performance on the job (Regestein & Monk, 1991; Monk & Folkard, 1992).

Maurice (1975); Carpentier & Cazamian (1978); report that the output of rotating shifts is generally thought to be lower at night than by day, specifically in the teleprinting and glass industry. The reason for this is because "physiological rhythms should reduce working capacity at night " (Maurice, 1975: 37). In other words, a worker's energy level is slower in the evening than in the daytime. Other reasons why output of the rotating night shift is smaller than that of the day shift is because "there is a smaller number of supervisory personnel, there is lack of overall coordination and production, and there also exists an inadequacy of the technical assistance available at night " (Maurice, 1975: 37).

Mott, Mann, Mcloughlin, and Warwick, (1965); Maurice, (1975); Carpentier and Cazamian, (1978); Monk and Folkard, (1992); reveal that the highest output of shift workers is obtained in the afternoon shift and the lowest in the morning and night shift because of a decrement in mental performance and this occurs regardless of the frequency of rotation "weekly, fortnightly, or monthly" (Maurice, 1975: 38). These same authors also found that a reduction in output also occurs on permanent night shifts for the same aforementioned reasons.

In conclusion, Regestein and Monk (1991); Monk and Folkard (1992); found that a higher level of substance abuse occurs among rotating shift workers and this negatively affects job performance. (Mott, Mann, Mcloughlin, and Warwick 1965; Maurice 1975; Carpentier and Cazamian 1978; Walker 1978; Monk and Folkard 1992), reveal that less work production occurs in the rotating night shift and permanent night shift. It is important to note that all these studies are on male

workers. And that no studies have been found on female shift workers with addictions.

In analyzing these findings one is able to deduce that workers are less satisfied when working the rotating shift and more satisfied when working a fixed shift, and the only fixed shift that workers dislike working is the permanent night shift because workers are less alert during the evenings (Mott, Mann, McLoughlin, & Warwick, 1965; Maurice, 1975; Carpentier & Cazamian, 1978; Walker, 1978; Monk & Folkard, 1992).

### **SHIFT WORK AND HEALTH**

Walker, 1978; Cunningham; Simon 1990; Regestein & Monk 1991; agree that the most widespread problem noted by shift workers is lack of quality and quantity of sleep. Walker (1978) reports that "in a study conducted by Aanonsen (1964) on factory workers found that 89 per cent of former shift workers who transferred to day work for medical reasons had experienced difficulties in sleeping but following the transfer to day work only 16 per cent complained of sleeping badly" (Walker, 1978: 77). In other words, shift workers seem to experience problems with sleeping, more so than day workers (Betancourt & Clague, 1981). For instance, Betancourt & Clague, 1981; Czleisler, Moore, and Coleman, 1982; Dumont et al. 1988; Jamal and Baba, 1990; have found a higher incidence of sleep problems among night shift workers in industries such as chemical, iron, steel works, nursing, and air crew attending. The problems are more serious for those who rotate, however, even permanent night workers tend to have more frequent difficulties involving the duration and quality of sleep. For example, the reason why permanent night workers have difficulty with sleeping is because "the later the worker goes to bed the shorter the duration of sleep" (Carpentier & Cazamian, 1978: 23). During the afternoons where most night workers attempt to sleep, they may be subject to various disturbances such

as light, noise of children, traffic noise, that may cause most workers to be awakened (Carpentier & Cazamian, 1978:23). This is true of male and female shift workers.

The reason why sleeping problems tend to be serious for those working the rotating shifts is because "the rotation of shifts produces a marked disruption in bodily rhythms for several days in most people" (Betancourt & Clague, 1981:221). Walker (1971, p.80) stated that "the body temperature rhythms usually change relatively easily but other rhythms such as the secretion of potassium in the urine are resistant to change...The time required for the body temperature to adjust is in the order of four days to a week." Individual variations in the time required for adjustment, however, are quite large. There is a presumption that those who cannot make more rapid adjustments in their Circadian rhythms find permanent shift work and the rotation of shifts to be more burdensome (Betancourt & Clague, 1981: 222).

In conclusion, the authors seem to bring forth the hypothesis that sleep disturbances seem to be more prevalent in shift workers than day workers. Individuals working the rotating shifts experience greater sleep deficits in comparison to individuals working fixed shifts. The authors suggest that some people never manage to adjust their sleeping habits because their circadian rhythms are never quite synchronized with the ever-changing shift schedules, that consistently cause a "phase shifting of activities" (Knauth & Rutenfranz, 1974:118). As a result of this, workers have difficulty adjusting their sleep/wake cycles.

Permanent night shifts to a lesser extent may also cause workers to be deprived of sleep. The reason may be due to the fact that the general noise level is usually higher during the daytime than at night. This causes both a shortening of the duration, and deterioration of the quality of sleep during the day sleep of nightworkers.

Simon (1990); Regestein & Monk (1991); Walker (1978); Maurice (1975); Carpentier & Cazamian (1978), report that shift work severely affects the worker's general health in comparison to day work. For example, a Scandinavian study



comparing factory shift workers and day workers showed that "there were more stomach disorders among shift workers than day workers and particularly there was a greater incidence of peptic ulcers" (Walker, 1978: 75).

More specifically when comparing fixed shifts versus rotating shifts, it seems that various gastric and intestinal disorders arise in individuals working the permanent night shift. The reason for this is due to the fact that "regular night work disrupts the Circadian rhythm of nutrition..." (Carpentier & Cazamian, 1978: 27). In other words, working the night shift involves eating a meal during the evening. This may disrupt the individual's digestive system because during the evening the digestive system is in a process of de-activation. This means that the digestive system is preparing itself for a period of fasting, in order to obtain sound, comfortable sleep (it is regulating itself for the next day's meal). However, because most night workers eat late at night, they may be overworking their digestive systems and this may not only lead to gastrointestinal disorders such as 'constipation,' it may also cause obesity in some workers. For instance, "obesity was found in a study of female nurses on night duty in the case of 20 per cent of them (Carpentier & Cazamian, 1978:28).

Carpentier & Cazamian (1978); Simon (1990); Regestein & Monk (1991); report that rotating shifts also cause gastric and intestinal disorders due to the "unrhythmic nutrition which causes pronounced digestive disorders " (Carpentier & Cazamian, 1978:28). In other words, workers on rotating shifts frequently report a lack of interest in eating a main meal. They may supplement meals with snacks, which, over time, can result in weight loss, weight gain, eating disorders and nutritional deficiency. Different shift scheduling causes the workers to be out of synchrony with their own body schedules (Simon, 1990). Rotating morning, afternoon, and night shifts also cause various nervous disorders. For example, irregular or rotating shifts cause an increase in nervous morbidity. It has been found, for example, that there are two-and-a half times (64 per cent) more nervous disorders among workers on rotating

shifts than among day workers (25 per cent) and that, as was indicated above, 32 per cent of the workers formerly on rotating shifts who were moved to day shifts suffered from nervous disorders as against only 13 per cent of the workers who had always been employed on normal schedules (Carpentier & Cazamian, 1978: 29).

A number of studies were conducted in a wide range of enterprises which consisted of iron, steel, textiles, service, and health care industries. Workers in these sectors of commerce who worked rotating shifts complained of headaches, stomach pains, indigestion, dyspepia, constipation, loss of appetite, 'nerves,' psychological depression, anxiety, irascibility (Simon, 1990, Regestein & Monk, 1991; Walker, 1978). These various physiological and psychological problems experienced by rotating shift workers result from disturbances to their 'time orientated body functions' in other words, the workers have never mentally or physically adjusted to working rotating shifts (Walker, 1978:84).

In general, the ramification of such disorders suggests that shift work and the problems of individuals just described exemplify the wide variation among shift workers with respect to sleep problems, health problems, and emotional problems, which affects the individual's overall physical and psychological well-being (Carpentier & Cazamian, Walker, 1978; Simon, 1990; Regestein & Monk, 1991).

### **SHIFT WORK AND ITS EFFECTS ON MARITAL RELATIONS & CHILD REARING PRACTICES**

Maurice (1975) reported that quite often shift work is contrasted with day work, and those (i.e., steel workers, glass makers, factory workers, air force security guards) who work under a shift work system, generally consider that they are not leading a normal existence, that their life is "different," etc. This is clearly one of the main accusations made against this method of working.

In this section a distinction will be drawn between two aspects of family life, namely its domestic organization and the relations among the various members of the family. The aim is to show and to explain why, and to what extent, the shift worker does not participate fully in family life, and then to define the effects of this on the other members of the family.

Hertz & Charlton (1989); Presser (1986, 1988); Colquhoun & Rutenfranz (1980); revealed that the marital roles of shift workers are affected when working rotating shifts. For instance, according to Monk & Folkard (1992) the care giver role impinges mainly on the female shift worker who is often faced with societal and family expectations that she should give the same level of 'service' with regard to cooking, clothes mending, cleaning and housework as she would in an exclusively housewife role. Monk & Folkard (1992) further suggested that studies of gender differences in shift work coping have suggested that this societal norm creates many more problems for the female shift worker. In order to further prove the point that the role of female shiftworker is different and burdensome than that of the male shiftworker, Bunnage (1981) quotes results from a Danish Welfare survey which showed that although men spend some time on household tasks daily, and male shiftworkers spend more time working with their wives in the home than day workers, the division of labour still results in the bulk of the home tasks being done by the wife. The women shiftworkers may have an even heavier domestic workload than women on day work, and this creates a double burden for women shiftworkers.

Monk and Folkard (1992) stipulate that although attention usually focuses on the care giving role of female shift workers, and the unreasonable expectations regarding this role, there are also care giver roles for the male shiftworker that cannot be neglected. Monk & Folkard (1992) report that male shift workers often fail to cope satisfactorily in the home maintenance, care maintenance and other 'masculine' care giving roles that may be expected to be fulfilled. Alternatively, these roles may

preoccupy the shiftworker to the detriment of high quality time with his spouse or family, resulting in possibly more family tension than would have arisen had the work been neglected.

Rotating shifts also affects the domestic routine of both male and female shift workers (Dunham, 1977; Finn, 1991; & Simon, 1990). For instance, women shiftworkers mention that they have difficulties with their household routines. Women shift workers find difficulty in "preparing meals, have problems with washing clothes, and household planning" (Coloquhoun & Rutenfranz, 1980: 75). All these problems seem to be related to the fact that rotating shifts affect the day to day organization of domestic life (Carpentier & Cazamian, 1978).

In contrast, a male shiftworker is unable to provide adequate companionship or protection of the wife, due to the fact that rotating scheduling prevents him from spending adequate time with spouse. A male shiftworker may feel unable to protect spouse, when he has been rotated to work the night shift. As a result of this, the male shiftworker may worry about leaving his wife alone during the evenings and he may fear for her protection and well-being (Mott, Mann, McLoughlin, & Warwick, 1965; Monk & Folkard, 1985).

Simon (1990); Monk & Folkard (1992); compare the effects of day work versus fixed shifts on couples' sexual relations. They studied the health care, computer, and transport industries. In all these industries it was found that fixed night shifts create problems in sexual partner roles. For instance, according to Monk & Folkard (1992), the day worker comes home from work has a relaxing evening of recreation and then retires to bed with his or her sexual partner. For the night worker the order in which recreation and sleep are taken is usually reversed. He or she typically goes to bed straight after work and usually has recreation in the evening before coming on shift. Thus, the times when the shiftworker is in bed and sexually most available are often the times at which lovemaking is either impossible because the

spouse is at his or her day working job, or difficult because of the presence of children or other daytime disturbances. As a result, sexual relations are interrupted and at times practically non-existent.

In general, the authors seem to contend that rotating shifts create problems for both male and female domestic roles; whereas permanent night shifts creates problems in the sexual partner roles of shiftworkers.

### **THE PROBLEM OF CHILD CARE**

In a study on air force security guards, it was found that shift work interferes with individuals' role as a parent, more so than day work (Hertz & Charlton, 1989). However, when comparing fixed shifts with rotating shifts it seems that rotating shifts cause shift working parents to be dissatisfied with their child rearing roles (Hertz & Charlton, 1989). Most male shift workers on rotating shifts claim that they have a difficult time providing "companionship for the children, to teach skills or control and discipline, and to maintain close family relationships" (Folkard & Monk, 1985:215). This may be due to the fact that most rotating shiftworkers may find that they spend a whole week without ever interacting with their children. "The children are asleep by the time the shiftworker comes home from work and are up and off at school by the time the shiftworker wakes up in the late morning" (Monk & Folkard, 1992:22).

By contrast, rotating working women's parental roles are affected differently from those of the male counterparts. Hertz & Charlton (1989) report that wives, even when employed, are responsible for coordinating the individual schedules of family members to match that of the shift working husband, as well as her own. Traditional gender roles have not been altered in that working wives still retain primary responsibility for children. Gadbois (1981) takes the examples of married women nightworkers with children who seem to sleep 1 hour 20 minutes less than

unmarried women. This is associated with getting the children off to school and doing housework before the mother goes to bed. Married women shift workers are also more likely to interrupt their sleep in the middle of the day than the single women. Gadbois writes that, 'for women night workers with family responsibilities accomplishment of off-the-job tasks takes priority over daytime sleep.' Women shiftworkers seem to experience constant tiredness because they face the double burden of juggling both shift work and child care. Gadbois (1981); Hertz and Charlton (1989); bring forth the idea that women's shiftworking takes place without any fundamental transformation of the sexual division of labour and at considerable cost to the women themselves. This has implications for child care. Women have to organize the family scheduling in accordance with their irregular shift scheduling as well as that of their husbands'. Carpentier & Cazamian (1978) report that overall rotating schedules creates disturbances of family life. These disturbances are usually caused by:

- desynchronisation of activities with the rhythms of life;
- shift rotation, which involves constant changes (45).

Rotating shifts seem to cause inconveniences for workers and their families. Carpentier & Cazamian (1978) report that rotating shifts have the effect of diminishing the number of hours spent together at home by all the members of the family and of making constant changes in the timing of those hours. For instance, according to Carpentier and Cazamian (1978) it is especially at mealtimes that the members of a family form a unit; but, depending on its timing, shift work can reduce the number of meals which the worker can take with his/her family. Rotating shifts also interfere with the upbringing of children; marital happiness; and integration of family activities (Carpentier & Cazamian, 1978; Monk & Folkard, 1992). For example, some studies show that the "children of shift workers have been found to do less well at school, than those of day workers, especially if both parents are shift workers" (Monk & Folkard,

1992: 22). This is due to the fact that very often parents who work rotating shifts are not there for a child's swimming team meeting, or soccer game, this can be a major handicap for the child involved (Monk & Folkard, 1992). Rotating shift parents lead an irregular rhythm of life which may prevent them from spending sufficient time with family (Carpentier & Cazamian, 1978).

Monk & Folkard (1985) have examined the effects of shift work on marital happiness and family integration, and the evidence of strain and friction in the family. They conclude that rotating shift work has a 'two-step' effect upon family.

First of all, the conflict between the hours of work and the times usually given over to certain role behavior seems to result in reports of difficulty and interference with valued activities. Secondly, there seems to be a cumulative effect of these various interferences with role performance leading to some reduction in marital happiness and an even greater reduction in the ability to co-ordinate family activities and to minimize strain and friction among family members (Monk & Folkard, 1985:215).

It seems that within the family, there are a number of roles that can be adversely affected when working rotating shifts: namely, the care giver role, social companion role and sexual partner role. As a result of this, marital unhappiness and family friction and conflict occur (Carpentier & Cazamian, 1978; Monk & Folkard, 1985).

### **SHIFT WORK AND ITS IMPACT ON SOCIAL RELATIONS**

Shift work in comparison to day work causes adverse affects on the worker's personal relationships and family roles, especially for maintenance workers, physicians, nurses, and emergency medical specialists (Dunham, 1977; Finn, 1991; & Simon, 1990).

In comparing fixed shifts versus rotating shifts, Simon (1990) reveals that for shift workers who are single, dating or having a relationship with someone may be

problematic, especially if they are assigned rotating shifts. The reason for this is because their shift schedules may conflict with the other individual's schedule.

In addition, rotating shift workers also have difficulty in keeping contacts with secondary groups (the extended family, friends, and neighbours). The reasons for these difficulties are two-fold. Firstly, the irregularity of the distribution of free time, which is the result of the irregularity of the work schedules, makes the continuity of such informal contacts more difficult (Maurice, 1975:53). Secondly, for the rotating shift workers, there is an added dimension of difficulty whereby their friends, neighbours, etc., have trouble keeping track of their shift changes (Mott, Mann, Mcloughlin & Warwick, 1965:307). As a result of this, rotating shift worker's informal social relations are adversely affected (Simon, 1990; Dunham, 1977; Finn, 1991).

### **SHIFT WORK AND ITS EFFECTS ON SOCIAL & LEISURE ACTIVITIES**

Shift work in comparison to day work negatively affects the social and leisure activities of workers, especially for fire fighters, police, correctional officers, security guards and health care workers (Simon, 1990; Finn, 1981; Dunham, 1977).

In comparing rotating shifts versus fixed shifts, it seems that single and married shift workers often have difficulty participating regularly in social, cultural, or political groups in their neighborhood and community (Simon, 1990). The reason for this is because shift workers are considered to work 'unsociable' hours (rotating from morning, afternoon, and night shift). Their whereabouts are unpredictable to other people so that their friends and relations do not include them when they plan their recreation and they become isolated. Finally, although shift work does not modulate the amount of time that shift workers have available, it may alter qualitatively the way they fill their roles, for instance, shift workers may belong to various societies and



clubs, but are unable to become office holders because of their irregular attendance (Walker, 1978).

Carpentier & Cazamian (1978) report that individuals working the permanent night shifts experience the same problems as rotating workers, in terms of participating in sports, hobbies, trade unions, political, and cultural pursuits. The night workers are very often excluded from them because most of these activities occur during the evenings, while they are working.

Rotating shifts may interrupt the leisure activities of shift workers. For example, rotating shift workers may have difficulty pursuing solitary activities such as reading or watching television. Especially if the worker is married and has children. Finn (1981) reports that many shift workers overextend themselves out of guilt and a desire to compensate for their lack of availability. In other words, the little time they spend with their children, takes them away from indulging in leisure activities.

This does not seem to be the case for permanent night workers. Carpentier & Cazamian (1978) reported that workers who work the night shift consolidated their free time so as to give themselves a morning or afternoon of leisure. Carpentier and Cazamian (1978) report that this advantage is generally welcomed by the workers and constitutes an important factor of adaptation to night work. For instance, many workers during the mornings and afternoons do "odd jobs at home; others are interested mainly in gardening. A smaller proportion attach much importance to outdoor activities: sports, going for a walk and, in fewer cases, social and cultural pursuits" (Carpentier & Cazamian, 1978: 55). How all this helps the individual to adapt to shift work is the fact that the worker had time during the morning/afternoon to pursue personal business and to attend to personal chores. During the evenings the individual is prepared to concentrate solely on the job at hand. During work the individual does not worry about going home to finish personal chores and business (Carpentier & Cazamian, 1978).

In general, it seems that rotating shifts as well as night shifts prevent married and single individuals from participating in social activities. Leisure activities are interrupted for those individuals who are married and have children, while the research does not indicate any problems for single shift workers. Night workers seem to be at an advantage over rotating workers, because they usually indulge in leisure activities during the mornings and afternoons before their shifts (Simon, 1990; Finn, 1991; Dunham, 1977; Walker, 1978; Carpentier & Cazamian, 1978). These studies suggest that this is the case for both male and female shift workers.

### **ADVANTAGES OF SHIFT WORK**

The US Department of Labor 1986, reported that at the 28% of workers who said that they had selected shift work, most did so to attend school while working, to be able to keep a second job, to create improved child-care arrangements in their families, or to earn better pay. These four reasons are considered positive benefits of working non-standard hours.

There are other reasons why individuals choose to work shifts, specifically night shifts. Jane C. Hood (1988) conducted a longitudinal case study of 63 public building custodians. Her findings reveal that most of the public building custodians prefer working at night. The reason for this is because they are unobserved by higher status daytime clientele. Furthermore, shift custodians have both more freedom from supervision and more control over their work pace and work methods. Night custodial work in day-occupied buildings generally involves a great deal of local job autonomy for the individual custodian and a minimal degree of supervision. Simon (1990) stipulates that night workers report that smaller crews make it easier to form cohesive teams of workers. They also noted the benefits of a quieter workplace in that

it is easier to concentrate and the rules of dress and comportment are frequently flexible.

Bohlander and Hinman (1977) presented more reasons as to why individuals prefer working non-standard hours. Employees are able to adjust their work hours according to their own rhythms. Individuals have a choice to work either night shifts or morning shifts, whichever one they feel more comfortable with. As a result, "night people" and "morning people" work with greater enthusiasm, concentration and enjoyment. Working shifts reduces "rush hour rage" as workers utilize the highways, buses, subways and trains at other than peak load periods. Travel time and travel costs are thereby reduced. In addition, recreation can be utilized during less crowded hours and shopping can be done when stores are less crowded.

### **CRITIQUE OF LITERATURE**

In view of the benefits and drawbacks related to working shifts, one undeniable fact remains true, there are more negative consequences to working non-standard hours than there are benefits. More problems occur for those individuals working rotating shifts and permanent night shifts.

Research evidence suggests that shift work causes a number of problems for workers. Whether the cause is due to disruptions in circadian bodily rhythms causing individuals to have psychological distress and neurosis, or to role conflicts and alienation, remains somewhat unclear. What is clear, however, is that the negative effects occur for most shift workers.

The literature does not deny the fact that permanent night and rotating shifts do have benefits for workers. Workers who prefer to work rotating shifts do so because they do not wish to follow a monotonous routine, and are never bored because of it. For instance, most workers on rotating shifts have the advantage of

working with different people, which makes their working environment more interesting. Others prefer working different hours because it provides variety, and every shift is different (Harrington, 1978).

The literature also addresses the fact that some workers choose to work night shifts out of convenience. For instance, it has been shown that the night workers who prefer the evening shifts do so because they are able to relax more, and the work place is less noisier and busier. Workers take advantage of this time by being able to concentrate more on their work, the workers are also less stressed because there is a minimal amount of supervision, and in some cases no supervision at all. As a result of this, workers take longer breaks, socialize with the other workers, smoke or eat during working hours, because there is no one there to tell them what to do (Hood, 1988).

Nevertheless, there are several major criticisms that can be leveled at the shift work research community. The first is that on issues such as rate of on-the-job accidents, absences, work production, and health; the research is not clear on whether it is female or male shiftworkers, that encounter more of these problems. It automatically assumes that it is the same for both gender. Furthermore, most of the information deals with male shift workers in industries, such as gas works, mining, chemical, iron, steel work, textile, truck driving, etc. And, very limited information exists on female shift workers. In fact, the literature mainly focuses on female health care workers, who are in the nursing industry. It also concentrates on female workers in the service sector such as air crew flight attendants, or computer analysts. Therefore, a skewed view of shift work is being presented. Especially, given the fact, that men and women have different life experiences. For instance, female shift workers are usually in charge of household and child-care responsibilities (Coloquhoun and Rutenfranz, 1980; Presser, 1986, 1988; Monk and Folkard, 1992), and this creates a double burden for most of them. Not only do they have to adjust themselves to

working rotating and permanent night shift, they also have to adjust household and family obligations in accordance with the shifts they are working. Thus, as a result, shift work, coupled with personal responsibilities, may increase the stress experienced by female shift workers. Females may encounter a higher degree of health problems, more on-the-job accidents, frequent absenteeism, and lower productivity, in comparison to male shift workers. However, such a probability, has not been proven or refuted. The reason for this is because female shift workers are under-represented in the literature.

Furthermore, the research does not thoroughly explain the differential effects of shift work (i.e., fixed morning and afternoon shift). It mainly focuses on the effects of night and rotating shifts. The research states that these are the industries (iron, steel, textile, health services, etc.) where individuals are more likely to experience physical, psychological, and social problems. It does not explain whether it is the nature of work itself that causes the stress (some jobs regardless of what you do, causes problems) or whether it is the fact that shift work in conjunction with job demands causes such problems. In other words, the research does not separate job demands from shift work demands.

The research also does not indicate whether it is actually shift work itself that causes the worker to have so many problems; or whether it may be the case where these individuals are initially predisposed to these problems and shift work just serves to accelerate them. There seems to be a fine line between work demands versus shift work demands, and shift work demands versus various human predispositions (i.e., health history).

Finally, the research does not take into sufficient account the variations in effects of shift work by age, gender, social obligations and responsibilities. It almost assumes that all individuals regardless of age gender, social obligations and responsibilities, all experience difficulty with shift work, to some degree or other. This

presents a biased view of shift work (i.e. younger workers might find it easier to cope with shift work). The only way to know how shift work affects different people in varying degrees is to compare the age, gender, etc., of the individuals, in order to be able to discern who are likely candidates for shift work and who are not.

### **CHAPTER 3**

#### **PROBLEM STATEMENT**

My study will focus on hospital personnel. The reason why I chose to examine this particular sample of individuals is because most people who work in hospitals (doctors, nurses, orderlies, clerks, porters, and switchboard operators) have no choice but to work shifts; their job demands this of them. We as a society depend upon the hospital's staff and its facilities to keep us alive and well. Hospitals adopted a shift-system because of the necessity to provide individuals with 24 hours of health services. Some workers have difficulty working the required shift schedules and this is a problem not only for the individuals working these shifts but it is also for those of us who require the services of the hospital.

The purpose of my study is to contribute to our knowledge of shift work. My study will attempt to examine whether shift work, specifically rotating shifts, have adverse consequences for the individual at the physiological, psychological, and societal level. My study aims to investigate if working shifts, constrains and limits the individual from living a healthy and normal life. I am interested in workers own perceptions of shift work. This I believe is very important to know, especially when studying institutions like hospitals. I believe it is very important to understand the various societal, psychological and physiological problems generated by shift work; because once its drawbacks have been identified and understood; we may be able to find solutions to the problem.

## **METHODOLOGY**

Switchboard operators and porters were observed and interviewed in two Montreal Urban Hospitals. The intent of this study is to compare these occupations. It examines the nature of each occupation; the different tasks, duties, and responsibilities switchboard operators and porters have. Although, the nature of the occupations are quite different, they are similar with respect to their roles in responding to the demands of others; such as those of patients and hospital staff members. I will examine how stressful each job is in terms of physical and psychological health. While the occupation of portering is predominantly male and switchboard operating is female oriented; I intend to sort out whether or not there are differences in the way in which the two genders handle stress in relation to occupational demands.

The description of shift worker in this study, will refer to a person working unusual hours outside those that are considered standard (i.e., 9 am to 5 p.m.) in the morning and the afternoon, while a shift will refer to any period of continuous process of work and will usually be named, i.e. morning, afternoon, or night shift.

I will compare the categories of workers on fixed shifts (permanent morning, afternoon, and evening shift) versus the categories of workers on rotating shifts (alternating between morning, afternoon, and night shift). These two categories of shift work are defined as the independent variable. The dependent variables include general health; social life; leisure time; personal and marital relationships; family relationships; and child rearing practices. Other independent variables I have controlled for are gender; age; marital status; socio-economic status; job seniority; I have also controlled for the number of hours worked (i.e. 4 hours, 8 hours, and 12 hours); and whether the worker is a part-timer or full-timer. The reason why I have controlled for all these variables is to be able to examine the different categories of



individuals, and this has provided me with a detailed comparison of who are the individuals that are able or unable to cope with shift work.

I have conducted a qualitative study of shift work, through structured interviews and diaries. The reason why I have decided to conduct structured interviews is because interviews generally offer a more complete context of interpretation. Further, the interviews have allowed me to probe for answers, in order to obtain more complete responses to my questions. Finally, if the respondent clearly misunderstands the intent of a question or indicates that he or she does not understand, as an interviewer I have been able to clarify matters, thereby obtaining relevant responses.

I used diaries in order to allow the respondents to take note on a daily basis (for a week, Monday to Sunday how they organize their time according to the particular shift or shifts being worked. This method of data collection has provided me with a more detailed, thorough, and concise idea of how each respondent manages his or her time in accordance with work.

The purpose of my analysis was to derive an understanding of the effects of job related attitudes on social behavior, and more specifically how shift work affects the worker's general health such as sleep, levels of stress, and tiredness. I have investigated how non-standard hours affects the worker's job satisfaction and performance, such as level of absenteeism and on-the-job errors, and how it affects worker's relationships; sexual life; family time and satisfaction; child-rearing patterns; his/her social and leisure time.

Thus, the main focus of this analysis is to explore the effects of shift work (as a way of organizing the use of time) as perceived by hospital workers. It analyses whether shift work has adverse consequences for the individual at the physiological, and psychological, and societal level. Whether these effects vary according to occupation; socio-economic status; work status- part-time/full-time; gender; marital

status; and workers' age. The reason why these variables are important is because they will help to determine the characteristic of individuals who are more likely, or least likely, to be satisfied with shift work. For instance, this study will analyze whether individuals who are sole and principal wage earners choose to work shifts, or, are constrained to work various hours, to provide for their families. Secondly, it will examine whether part-timers or full-timers find shift work accommodates other responsibilities such as school, other jobs, and family responsibilities, whether shift work provides them with monetary security. Thirdly, it investigates whether male and female attitudes toward shift work differ. Specifically, if they perceive it as having an impact on their marital relations, family, and child care responsibilities. Finally, it analyses the difference between younger workers and older workers, and their perceptions of shift work; and whether older workers consider this method of working as unsatisfying.

I have also attempted to discover whether it is actually shift work itself that causes the worker to have so many problems (i.e., physical, social, psychological difficulties) or whether these individuals are initially predisposed to these problems, and shift work just serves to accelerate them. I have also investigated whether it is the nature of the job demands themselves (being a switchboard operator or porter) that causes stress; and whether shift work itself, serves to increase the strain on the worker.

### **DATA COLLECTION**

I conducted participatory observation of both switchboard operators and porters on Monday & Tuesday May 13/14, 1996. I went during the week, in the early afternoons, between 11:00 am to 1:00 p.m., at the busiest hours of the day. I did this, to observe first-hand the dynamics of each job, and compare which occupation was more stressful for the worker, in regard to work responsibilities, and tasks. In general,

I have attempted to separate job demands from shift work demands, in order to be able to discern their relative importance and their cumulative importance in accounting for stress levels.

During my observations, I took note of the different work environments of the two hospitals. In the larger hospital, the switchboard operator department was situated in the basement, with no windows, and only booths separating the switchboard operators from one another. During the interview, many of the workers complained of their present work environment. For example, one stated, "...when I come to work, I am always tired...I think it is because there are no windows..." Other comments were, "...I feel so isolated working down here, I never know whether or not there is daylight outside..." "...I find, all the workers are in close proximity to one another, and the booths don't mute out the noise level, so, when a lot of calls come in at the same time, everyone is shouting at the same time, and it can be very distracting!"

At the same hospital, the department of portering is situated also in the basement. But, the difference is, in this department there is a large lounge area with sofas and chairs. Workers usually hang around this area, waiting to be notified of any patient; supplies; or specimen pick-up. One porter comments "...our working environment is pretty good now that we moved to a bigger area. There seems to be less confusion because before we were situated in a small room, it was cramped. Now, we are more relaxed in a bigger room..." Another porter states, "...I love my working environment, in the job I feel good, I feel like I am at home..."

In the smaller hospital, the switchboard operator department is in the main lobby. Workers are in the vicinity of everyone. While answering their calls, they must also give out information to patients being admitted at the hospital, and individuals asking for directions or information about a patient's room number. Furthermore, switchboard operators are also constantly being distracted by security guards, because their post, and telephones, are situated in the same area as that of the hospital

operators, and at times, the operators take the calls of the security guards, in addition to taking their own designated calls. One operator complained, "...I can't concentrate on my work, I am constantly being interrupted by outside visitors, who are inquiring about a patient's whereabouts!..." Another complained, "...I hate being situated in the lobby, the sunlight that comes in from the big windows across from here can blind you to the point where you can't see an emergency code that may appear on the computer terminal..." While, another complained, "...there's too much traffic going on, people going in and out of the hospital, security guards running back and forth from their booths, the noise level can be so high that at times I can't hear the other person on the line..."

The department of porters in the same hospital is different from that of switchboard operating. Workers, waiting to be called upon, hang around in the lobby where there are chairs and tables. The atmosphere is very relaxing, and workers are usually laughing and making jokes amongst each other. One porter states, "...whenever I come to work, I usually have a good time..." Another one comments, "...if one of the other workers are having an off day, we usually cover for each other, to make sure no one gets in trouble... The secret is... in the hospital, there is a big closet where we have pillows and blankets, and whenever one of us is really tired, we'll go in the closet and sleep a while..."

I found the work environment of the two hospitals, especially in the department of the operators, quite diverse from one another. One appeared to be secluded, while the other was situated in open space. This seemed to affect the workers moods negatively and their work production and efficiencies, were constantly being compromised because of it. For some, the set-up of their environment was a great source of stress.

When observing the work set up of the porters' department, in each hospital, I found no difference. Both gave out a comfortable, relaxing atmosphere, so, unlike that of the switchboard departments.

A sample of 46 staff workers (23 male porters and 23 female switchboard operators) at the two Montreal Urban Hospitals were interviewed. The following tables display the distribution of the sample:\*

Table 1: Sample Distribution By Shift

	Female Switchboard Operators (23)	Male Porters (23)
Full-time Fixed Shifts/ Principal Wage Earners	7	15
Part-time Rotating Shifts/ Not Principal Wage Earners	16	6
Part-time Sole Wage Earner With Dependents	0	2

Table 2: Sample Distribution By Household Status

	Female Switchboard Operators (23)	Male Porters (23)
Single	8	9
Married/Cohabiting	3	4
Married/Cohabiting With Children	11+1 single mother	10

\*A detailed distribution of my sample may be found in Appendix A.\*

Table 3: Sample Distribution By Work History

	Female Switchboard Operators (23)	Male Porters (23)
Double-Jobbing	0	13
Age 20-30/Working Between 1 to 5 Years	10	9
Age 40-50/Working Between 10 to 25 Years	13	14

In order to obtain access to the interviews, I contacted Human Resources of the two hospitals. I explained to Human Resources the purpose of my study. I then proceeded by asking them if they could direct me to the individuals in charge of switchboard operators and porters. Once I made contact with the supervisors of switchboard operators and porters, I explained to them the objective of my study. I also provided all four supervisors, with a letter written by my thesis supervisor, as well as myself, explaining briefly what the study was about, how long it would take, and the reasons why I wished to study hospital workers. The letters requesting permission to conduct the interviews may be found in Appendix B. The hospital supervisors told each employee about my study and asked if any of them were interested in participating. I then received the names of individuals from the supervisors and contacted them for interviews.

As I met with the employees, I explained to them the objective of my study and how long the interviews would take (i.e., between 30 to 45 minutes). I also stressed to them that their participation was purely voluntary and confidential. I informed each respondent that at any time during the course of the interview, they had the freedom to discontinue, if they felt uncomfortable in any way during the line of questioning. Once

they agreed to the interview, I provided them with a consent form that explained what the interview entailed, which also gave me the permission to do the interview. A sample of the consent form may be found in Appendix C.

The interviews usually took place at the hospitals, either in the employees lounges, or in the cafeteria. I usually did the interviews before the employees shift began, or during their lunch breaks, or after their shift was finished. I also asked the permission of each employee to tape record the interviews. All respondents agreed to be tape recorded, and all my interviews have been transcribed from tapes. During the interviews I notified each individual of the possibility that I might have to contact them at least one more time after the initial interview. I did this as a precaution, in case I needed more elaboration on a question or statement they made. A sample of the interview schedule may be found in Appendix D.

In addition, I also asked them if they would be able to keep a diary for a week, providing me with information on how they order their lives around the shift schedules they worked. The diary and the interviews have provided me with an understanding of the workers general attitudes towards shift work. I also stressed to my respondents the importance of not including their names in the diaries. In this way, their anonymity would be respected and would also erase any doubts and apprehensions they may have about keeping a diary. I also explained to them that for any reason they did not wish to provide me with a diary, it was their right to do so. Once they agreed to provide me with a diary, I instructed each of them what I expected from the diaries (the kind of information I was interested in), and I immediately set up another appointment to meet with them in person, to collect the diaries. This was designed to ensure that the respondents would complete the diaries, and I would for sure receive them.

However, collecting the diaries was not an easy task. I gave out two different forms. The first one was a short version which consisted of one page. This form was

set up in such a way that respondents could provide details in narrative form, on how they organize their lifestyles in accordance with the shifts they work. I also gave the respondents a long version of the form, where every question was broken down into categories. For instance, I asked the respondents how much time they spent with their loved ones or family members; and this question would be broken down into two categories such as **activities**, and **hours**. Under the heading of **activities**, the respondent would have to provide an example of what they did with their family, for example, eat a meal together. Under the heading of **hours**, the respondent would enter the exact time she or he had a meal with family members. I believed that setting up the diary in this way, I would be able to obtain organized and concise responses of how each worker manages his or her time around the shift schedule she/he works. The interviewee's had a choice between the two diaries, and the highest response rate was from those individuals who chose to fill out the short narrative version of the diary. Twenty of these diaries were returned. As for the longer version of the diary, I only got back ten. The other sixteen individuals did not return either of the two forms. When I asked them why they were unable to return them, fourteen said they had no time, one individual took a leave of absence from work due to sickness, and another individual retired.

I discovered that the diaries were consistent with the information received from the interviews. The only difference was that in the diaries, the respondents were more exact in mentioning the amount of time they spent with loved ones, friends, alone. They were also more accurate about the amount of times they were absent from work, and when they committed on-the-job errors. A sample of the diaries may be found in Appendix E.

It is important to note, that throughout the thesis, I conducted a numerical count of the respondents, and in order to provide more diversity within the thesis, a numerical code is assigned to each respondent, to make sure that an equitable



distribution of responses is represented throughout the study. The objective of the study is to present the individuals' subjective experiences of work. That is, how individual workers actually experience their jobs, from the arrangement of hours they work, to the ways in which work is organized, and how both these things affect the individuals at the physiological, psychological, and societal level.

## **CHAPTER 4**

### **THE FINDINGS: NATURE OF WORK /SWITCHBOARD OPERATORS VERSUS PORTERS**

This chapter examines and compares the type of work involved in hospital switchboard operating and hospital portering. It analyses the various tasks, duties, and responsibilities, required by the two different occupations. The goal is to discover the relationship between the nature of work and shifts in contributing to the likelihood of various physical and psychological problems; or whether it is primarily shift work alone that causes workers to have various health problems, as was mentioned in the literature by Carpentier and Cazamian, Walker, 1978; Simon, 1990; Regestein and Monk, 1991.

#### **FUNCTIONS OF SWITCHBOARD OPERATORS**

Switchboard operators' tasks involve taking in-coming and out-coming calls from the hospital. Their duties revolve around two main switchboards which are called the 'Big Consoles' and 'Locating.' Some workers are placed on the Consoles; whereas others are situated on Locating. Usually between intervals, workers are switched from the Consoles to Locating, or vice versa. The reason for this is because every employee gets a chance to work on the two different switchboards during the course of their shifts.

The difference between the Big Consoles and Locating switchboard, are the following: In the Big Consoles, the operators receive calls from outside the hospital. These callers are usually asking for a clinic, or to be connected to a patient's room. On this switchboard, operators also receive calls from inside the hospital, such as calls coming from a patient's room asking to be connected to a residence. If a patient wants to make a long distance call, the operator connects the patient to the Bell operator.

Other employees of the hospital also call the Big Consoles, when they cannot find information in the directory. They call to be transferred to a specific department within the hospital. The Locating switchboard is more specific. Operators use this system to page doctors, and it is also used to inform and alert the hospital's emergency ward of any incoming trauma like a cardiac arrest.

In addition to this, it is also the responsibility of switchboard operators to take care of all the alarm systems within the hospital, such as fire alarms, bomb threats, chemical and radioactive spills, and power failure. In general, the Big Consoles switchboard, connects all outside calls, and any incoming calls made by patients or other employees of the hospital. Whereas, the Locating switchboard is utilized to call doctors and inform the hospital of any emergencies.

### FUNCTIONS OF PORTERS

The porters tasks involve a lot of physical work. For instance, it is the responsibility of the porters to transport patients within the hospital from room to room. The patients are usually transported on stretchers or wheel chairs to their destinations. It is also the function of a porter to bring specimens to be examined by doctors. In order for porters to be able to carry out their duties properly and efficiently, there exists a dispatcher, an individual who directs porters to their tasks, which include moving patients and delivering supplies and specimens.

PERCEPTIONS OF RESPONDENTS OF THEIR WORK

In the following section, the workers perceptions of the type of work they do, will be presented through excerpts from interviews. The following will be examined:

1. Switchboard operators and porters overall attitudes toward their working environment, specifically, if workers feel they work in favorable or unfavorable conditions.
2. The advantages and disadvantages of the type of work they do. For instance, why some switchboard operators and porters perceive their jobs to be a source of satisfaction or dissatisfaction.
3. Workers overall attitudes of the status of their jobs, and finally;
4. How stressful each job is in terms of physical and psychological health.

The question I asked each respondent was "...describe what it means to be a switchboard operator/porter?..."

A 33 year old female switchboard operator described her work responsibilities and the feelings she had toward them in the following way:

The first thing I understood, the first few months, especially when I started the night shift, I realized that the hospital, the whole system was on my shoulders, and that is a big responsibility. When you realize it, you tend to become more meticulous about what you are doing. If you are not careful, you can freak out and lose your marbles on this job. That's why a person working here must learn to relax and try to answer each call the best way they can. If you are the type of person that will be afraid of every call that is going to come in, then there is something wrong. If you suffer from anxiety and are fearful and paranoid of every emergency that gets called in, like cardiac arrests, alarms, etc...it is better not to work here (1).

Another 22 year old female operator describes how stressful the job can be at times:

The job of operator is very stressful. We are dealing with situations where life is concerned. I remember during my training on the locating position and it was during the rush hour, it was about three or four o'clock in the afternoon. They needed the cardiology department in the emergency and the staff doctor called back and he said, "...Girls, I hope you are happy, because of your unprofessional conduct, a patient died in emergency!..." I was so upset about this, that I began to cry. Whatever happens that is negative within the hospital, everyone always blames it on the switchboard operators. Because there is a lot of pressure going on and I mean, I understand that the doctors have to save lives and everything, and if something goes wrong, they just won't accept to take the blame. So, they blame it on someone else. So, who better than the switchboard operators! We get into so much, it is very stressful, and you have to do your job one hundred and ten percent. You have to do it the most perfect way, the most fastest way, and you can't say anything about it. You are always under pressure, and you are always at the edge of your seat, and everyone is watching for you to make a mistake. If it's the doctors, or other people in your department; it is like you have a lot on your shoulders. The end of the day, you are glad to go home! (3)

In examining these two interviews, it appears that switchboard operators recognize that the type of work they do is filled with much tension and responsibilities. This is due to the fact that workers are placed under enormous pressure to perform their work tasks as quickly and efficiently as possible. This is especially so when dealing with life and death situations.

The porters perceptions' of their job are quite different from the switchboard operators. For example, one 33 year old male porter comments:

All I do is pick up patients and bring them to their destinations, it is not really a complicated job. Most of the time, we are sitting around waiting for the dispatcher to tell us when our next pick up is. That's the best part

of the job, sometimes we are about six to ten porters waiting around for a call to happen. And during this time, we all hang out in the lounge, laughing, talking amongst each other...Until before you know it, you are being called for your next patient pick-up. This helps the day to go by really quickly...This job is so easy, anyone can do it, including my two year old son! (he said jokingly). (4)

Another 57 year old male porter claims his job is a great source of happiness, he states:

I like my job as a porter. The management is very nice with us; the work itself deals with working with the public; you get to meet a lot of people; and it is a very interesting job. (6)

A 26 year old porter claims that his job is not very demanding, he says:

When you think of it, working as a porter is not like working at a mill, after eight hours of this job, you are not really tired, it is not that hard of a job. For instance, when I worked at a dealership, at a garage, I couldn't wait to get home, after a days work. The job itself wore me out. Being a porter, compared to my other job is a piece of cake. In this job, I have never broke out in a sweat. You have a choice, you either do it at your own speed, you can push the stretcher slower or faster.

This particular porter also discusses how minimal supervision from management is required, and workers are not constantly under surveillance, he claims:

I haven't seen my supervisor for two weeks now, he's not there monitoring our every move. But, then again, there's no need for him, there's no complaints, the patients are getting down on time. He's here in case there are problems with us, but we don't really need him. They had that once, someone checking on us, like for example, how long it would take each porter to go to and from a specific destination. The workers went right down. They would hide, take their time for each call, it didn't work. So, they gave up on the idea. However, I do believe that it is no good when you have someone looking over your shoulders all of the time. When you are given a little bit of independence, I think the worker will do a better job. However, a little bit of authority is

good, because you know if you don't get a patient in on time, you are the one who is going to get in trouble (5).

According to these interviews, it seems that porters perceive their work as simple and straightforward, their main goals are to transport patients and specimens to their proper destinations. Although, there is much physical work involved in such an occupation, this does not appear to be a problem. In fact, the porters enjoy their jobs, because the workers frequently gather together in the lounges to talk to one another, and enjoy the pause they have before their next pick-up. Furthermore, it appears that porters are not under strict supervision, as are switchboard operators. The porters are able to do their jobs at their own pace.

When comparing switchboard operators and porters views about their jobs, there is a strong indication that switchboard operators feel that they are constantly under surveillance. Not only do they have to do their jobs quickly and efficiently, in order to please their supervisor. They also have to please the doctors, and other staff members of other departments, such as those who work in clinics, the operating rooms, and emergency. If an operator does not process a call quickly enough, the operator may jeopardize a patient's life. Thus, switchboard operators act as the central communication mediators between department to department; doctor to patient; and patient to emergency.

For porters, it is the complete opposite, they have more autonomy within their jobs, and minimal supervision is required. They also have the liberty to decide the time they will take to bring the patients and the specimens to their destinations. They have more freedom to come and go as they please. Furthermore, there is also a sense of solidarity among them. For instance, they seem to enjoy each other's company as they congregate in the lounges and converse with one another, while awaiting for their next call. When management attempted to survey all of the porters, and the amount of time they took for each call, all workers gathered forces and rebelled against

management by hiding, and making it difficult as well as impossible for management to control and monitor their on-the-job performance.

One is able to deduce that switchboard operators feel they work in unfavorable conditions due to the stress level of their job. Whereas porters feel they work in favorable conditions due to low level of stress involved in their employment.

What do switchboard operators and porters feel is most dissatisfying about the type of work they do? A 30 year old female describes her dissatisfaction about being a switchboard operator:

What dissatisfies me most about being an operator is not getting to see the people. We only speak to them and you recognize their voices, but you don't know who they are really. (8)

A 43 year old female switchboard operator complains about conflicts and jealousy among workers:

At times it could be very stressful with the co-workers...There are 27 people working here, and there are a lot of personality conflicts that occur. There's a lot of jealousy, there's a lot of conflicts...Not so much with the supervisor, as there is with the individual employees. (9)

The next respondent a 43 year old female switchboard operator explains why there exists disagreements among workers:

Not all switchboard operators have the same character, we all do the same job, but there is always someone saying...she should be doing a better job...Sometimes, criticisms occur among co-workers, and this makes me nervous. (7)

Another 29 year old female operator explains that because there are a lot of operators working very closely knit, and under stressful conditions, this is what may cause problems among workers:



It is a small area, with a lot of staff, working very closely knit. So, people have different personalities, people have different moods, people have different feelings towards their work. So, it can be a stressful environment during the day time. Because during the day time you have more personnel present, on the premises, varying personalities, and everyone handles the situation differently. If I get a call for a fire, and another operator gets a call for a fire. You have procedures to follow, but you also have part of your own nature into it. If you're calm, if you're nervous, if you're anxious, and these are things that rub off on other employees. (16)

Another respondent, a 37 year old female operator complains about employees who don't follow departmental rules:

With my work personally, I feel satisfied. With my co-workers, I would say I am dissatisfied. Well, let's just say that the department has certain departmental rules. And we are made aware of these rules on a daily basis. Now, there are some employees that ignore the rules, they do as they see fit. Or they do as it suits them. Meanwhile, you are trying to keep with departmental rules. You are trying to keep a professional profile with everybody and then the others who don't want to follow the departmental rules, will do it their way. So, when someone goes against departmental rules, this is what can happen: if a doctor is calling in and says he wants to be transferred to the OR. And as the departmental rules states we are not supposed to transfer. So, when he calls back, and he will get on the line, and I'll say no, all hell will break loose. Because the doctor will say "...how come everyone else does it and you are not doing it; you just don't like doing your job the way the others do it..." It is like you are degrading, you are putting down qualifications of an individual who really knows her work, who's trying to do it one hundred percent accurately. And then you have another one who just goes around by cutting corners and easing her way out, just to get rid of the calls. Some people just don't like the work and they don't care. Some people do their work with their heart, and they do it because they like to be perfectionists. Or they like to be professional in their

work. But, a large number of people they do it because they have to. Let's just say...that's the sad part to it. (2)

Switchboard operators seem to be most dissatisfied about the fact that they remain anonymous to their callers. They don't always get to know who is on the other end of the line. In addition to this, workers are constantly competing with one another due to personality conflicts, and this is a source of distress for some workers. Furthermore, the fact that operators are working very closely knit and under very stressful circumstances, may cause workers to feel discontented. And finally, workers who do not follow departmental rules cause problems for those workers who do. As a result, some workers feel exploited for doing a good job.

The porters have also expressed why they feel the type of work they do is not always pleasing. A 33 year old male porter explains:

I think there is a lot of superior and inferior relations within the hospital even though it is not direct you just feel it. That is one thing that bothers me. Sometimes, we get some boloney from the patients. And at times we are treated like children by management. (4)

This same porter goes on to explain the kinds of complaints which patients make:

Patients sometimes can be downright rude...They sometimes complain that we either push the stretchers too fast, or too slow, and this can be really frustrating, sometimes there's no pleasing them.

Another complaint that this particular porter makes is about the superior and inferior relations that exist between workers and management:

If I were management, I would leave the porters alone. If the worker would come in ten minutes late, I would not harass them, because I know they are good workers. This is my attitude...this is your job, if you do it well, than I am happy!

He goes on to explain how relations between worker and management can be improved:

In this job, I have to encourage myself, because if I wait for other people to do it, it will never happen. If I was a manager, I would make sure my staff was happy and I would tell them that they were doing a good job, and I would treat them like adults.

Other porters have complained of other superior and subordinate conflicts that exist within their department. A 26 year old male porter describes the conflicts between nurses and porters, he states:

Nurses just see us as porters who don't do anything. In fact, they don't really see us as porters, instead, they see us as an orderly who has only one goal, to assist the nurses. So, when we go up to their department, the nurses think they can treat us like the orderlies, and they try to tell us what to do. But, we don't like to take it. They'll say do this, move that, but, we don't need that. Because it is not just that same nurse, we have to take that from all of the nurses, if we started doing that... (5).

The relations between the porters and the patients are not always satisfactory, because patients at times can be very demanding. Secondly, the relations between management and porters is also strained, due to the fact that workers feel that management does not always acknowledge their good work. Instead, workers feel that management is always picking on their weaknesses instead of their strengths. Porters also experience conflict with the nurses. Porters believe that nurses think they have authority over them because of their higher work status.

In comparing the level of work dissatisfaction between switchboard operators and porters, several things are highlighted. For example, unlike porters, there is no sense of solidarity among co-workers of switchboard operators. This is mostly due to various employee conflicts and rivalry that occurs within the department. And this is a major source of dissatisfaction for most switchboard operators. Another complaint of switchboard operators is remaining anonymous to their callers. This makes most operators feel invisible because they never get to see whom they are helping, and this can be frustrating for some employees.

Porters on the other hand, experience external conflict. They get complaints from patients, nurses, and management. Porters are usually reprimanded by patients for not doing a good enough job. Management, rarely acknowledges the good work that they do; and nurses attempt to order them around, even though it is not their place to do so. Porters may feel their actions are constantly being evaluated and at times controlled.

However, switchboard operators do experience higher levels of work dissatisfaction in comparison to porters. The conflicts which switchboard operators encounter are much more consistent, because operators are always working under stressful conditions. In conjunction with the close proximity of workers, everyone working in the same place at the same time (even with the switch over of shifts, workers eventually get to see one another), with different temperaments; may cause disharmony among operators.

With porters, departmental conflicts are less severe and consistent. For instance, management is rarely around. Antagonisms that may occur between management and porters only happens when there is direct contact between the two groups. According to some respondents, because porters rarely see management around their department, such hostility may occur on the infrequent occasion. As for porters disagreements with nurses; porters and nurses do not always work in the same departments. Therefore, friction between the two groups is less likely to occur on a regular basis (with switchboard operators, this would be more of a problem, because they are more likely to see their co-workers every time they come into work, and because of this, disagreements among workers may be more likely to occur on a daily basis).

Finally, the problems between porters and patients may occur at times. However, because of the fact that porters pick up different patients, complaints may

come from some patients but not all of them. To place further emphasis on this point, a 26 year old porter states:

Some days you'll have a whole bunch of people that will say thank-you very much and they'll say something like, how do you do this all day! (5)

It is important to note, that not all switchboard operators as well as porters feel dissatisfied with the type of work they do. In fact, some workers within both occupations do perceive their jobs as being a source of satisfaction.

The following is a summary of the reasons provided by switchboard operators and porters as to why they feel that their work is gratifying to them.

A 30 year old female switchboard operator explains:

Working as a hospital operator is different. You get alarms, I like that. That is the excitement part of the job. That is the best part of the job, once you get all the alarms and stuff...And you have to react quickly...And to a certain extent, we're here, whenever there is a crisis in the hospital. Their first reaction is to call Locating, and it is up to us to solve the problem. Whatever it might be, getting someone, or getting a fast team somewhere. I always like being part of that action (8).

A 33 year old female switchboard operator explains that the more calls she processes on Locating (emergency-line) the happier she feels. She states;

I love working on Locating because at times, you are processing several calls at once. For example, sometimes you have to call a coordinator on one floor, a blood taker on another floor. At the same time you have doctors and the Or calling, the dialyses department or whatever...And the more calls you take on Locating, the more satisfied you feel, it gives you a feeling that you are a good operator, because you are taking lots of calls, and what is more satisfying is that you comprehend more and more the way a hospital's working, the system, the whole system...(1)

In examining the interviews it becomes apparent that for some switchboard operators taking care of emergencies, is the best part of the job. They find their job to be action oriented and exciting. For some switchboard operators this provides them with a great source of contentment.

A 51 year old male porter explains why he feels that the type of work he does makes him feel like he is doing something worthwhile:

I like this job very much because I believe I am here to help people and this gives me personal satisfaction. I sometimes talk to the patients, to make them feel better.  
(10)

This same respondent also describes how being a porter has changed his life for the better:

Working here, I have seen many people who are sick. Because of this, I have learned to appreciate my life more, and this has made me stronger.

A 35 year old male porter claims he is appreciated for his services as a porter, by the families of the patients:

When I bring up the patient and there is the family of the patient, I like when the family of the patient say thank-you very much, they seem to appreciate what I am doing. (11)

Both of these respondents claim that they like their job as porters because it provides them with personal satisfaction, and they feel valued for their services. On a more personal level, because porters encounter many individuals that are ill, this has made them stronger, and they have learned to appreciate life more.

Switchboard operators and porters differ in their views as to why they feel satisfied within their occupations. For instance, switchboard operators like their occupation because it is fast paced and some of the calls they receive deal with life and death situations. And the more calls they process, the more they feel they are helping a lot of individuals. Porters believe that because they work with patients, they are

there to assist them. Both switchboard operators and porters believe that they are contributing to the welfare of the patients, and derive a sense of satisfaction from this.

Each respondent was asked the question: "...do you feel you get the value you deserve for the kind of work that you; do why or why not?..." This specific question deals with switchboard operators and porters overall attitudes toward the status of their jobs. Switchboard operators believe that they are not always given the recognition they deserve for the kind of work they do. For example, a 37 year old female explains how switchboard operators are treated unfairly by callers and other staff members of the hospital:

The thing that really frustrates me the most is that the callers and other staff members of the hospital, have no respect for us. They refer to us quote-unquote, "just another operator." They don't really know what's behind that phone, they don't know the qualifications that person has. And the commitment that person has, towards her job. I get very upset when you kind of have a type of attitude where she is just another operator. Or she is one of these dodos, with no education, she's immature, she's got no background. It can be very frustrating! Some of us that are there we definitely have a lot of background, we pick up very fast. And some of us take the initiative to try and run the office the way it should be run. Even if we are not the supervisor, but sometimes we have no choice, if she's not there to take the initiative and do it. And we say to ourselves what do these people know? All of these people we work with doctors, nurses, etc., and even those we don't work with like some callers, really treat us badly sometimes, and it isn't fair. (2)

A 33 year old female operator provides examples of how callers can mistreat hospital operators:

One morning when I was working on the Console switchboard, the first call that I received that morning was from an elderly man looking for his wife. He was yelling at me, insulted me and everything, for no good reason. (1)

This same switchboard operator goes on to explain how the calls she receives at the hospital do upset her, for instance she states:

I don't say that I always lose my temper when a caller is nasty to me, but I do admit sometimes they can really get to me and I lose my temper. And, I am not afraid to say it. It is good to show people that just because you are a switchboard operator they still have to respect you!

She also gives examples of how some hospital staff members can disrespect switchboard operators:

I had a situation once, that I had to deal with, it was with a doctor, a chief resident, who thought he was God. He pissed me off so much. Because he was always rude and very arrogant, and made me feel like I was incapable of doing a good job. So, one day, I just about had it with this doctor, and so I called his boss. Sometimes, doctors think they are better than us, and they feel that because of this, they have the power to step all over us. I refuse to let anyone treat me that way. I don't deserve it! The pay is not big enough, and even if I would be paid more, it is still not worth it. If the switchboard operators weren't here, what would they do? (1)

In analyzing both interviews, it becomes apparent that switchboard operators believe that the general public as well as staff members of the hospital devalue their professions. Switchboard operators also believe that they are not given the worth they deserve for the hard work that they do. The reason for this is because some people take for granted the fact that the hospital would not function efficiently without the assistance of operators. They are the central communicative link that interconnects all hospital employees and departments to one another.

As for the occupation of porters, many workers themselves devalue their profession. For instance, a 33 year old male porter explains:



I am not satisfied with being just a porter. All you do all day is walk around. I think I am too smart for this job, and I can do better for myself. I am thinking of going back to school, in order to better myself. (4)

Other porters believe that the hospital's staff overall attitude toward their profession is negative. A 26 year old male porter states:

Sometimes there's no reaction, there's no real recognition for the type of work we do. People tend to think that we have a real easy job. And that maybe we are not worth as much as we are paid. And that we don't do anything...(5)

A 33 year old male describes how other staff members of the hospital, have no respect for the porters:

What dissatisfies me most is not getting the respect you deserve. Especially in the porters, it is a department in the hospital that is viewed as, if we are behind, it is because of porters. If the patients get delayed some, and it is never because of the doctors, nor is it because of the nurse who was disorganized, and she didn't call the department of the floors on time. They always place the blame on the porter who did not show up on time. (8)

These interviews suggest that workers depreciate the status of their occupations. Such devaluation is further compounded by the hospital's staff stereotype of porters. For instance, most of the staff members of the hospital believe that porters do not work, and are lazy, and they believe that every time there is a patient who is delayed, it is the porters fault.

Switchboard operators and porters overall attitudes towards the status of their occupations may be explained in the following way: porters themselves feel that the status of their occupation is of low value, which is bolstered by the hospital's staff prejudice attitude towards porters. Whereas, switchboard operators, believe that the type of work they do, deserves respect, and recognition, from the general public, and other members of the hospital.

Switchboard operators and porters may not always receive the value they deserve for the kind of work they do. In order to compensate for this, any encouragement or credit they may attain is from themselves, regardless of what other people may think about the status of their occupations.

As a 51 year old male porter puts it:

As far as I am concerned, I make my own value. I try to do my best and I always think I am doing a good job, because if I wasn't, management would let me know (10).

Similarly, a 22 year old female switchboard operator explains:

Still to this day, no one in this job, ever tells you that you are doing anything right. Then, one day, I started thinking about the type of work that I do and all the responsibilities that it entails, and how much I like my job. I finally told myself, hey, you are doing a great job! You have a lot to handle here, and it is a big responsibility and I think you are doing great! So, I said the hell with them! (3)

In sum, switchboard operators (17/23) feel they work in unfavorable conditions for several reasons: firstly, most operators feel they work under stressful conditions, and are constantly under surveillance. Secondly, most operators do not like remaining invisible to their callers because they never get to know who they are helping. There is also no sense of solidarity among co-workers, because of various employee conflicts which exist within the department. Nevertheless, as stressful as the occupation may be, most operators (19/23) enjoy their job. However, the question remains why they not only enjoyed their jobs but also viewed their job as being important and having high status. After all their complaints were much more numerous than those of the porters. After examining the nature of their responses it appeared that the complaints themselves were in large part a means of expressing the importance of their role. This in turn provided a large measure of satisfaction. This

satisfaction was often reinforced by the few occasions of expressions of appreciation from doctors and callers. For example, a 37 year old female operator explains:

There was one occasion where a doctor sent all of us a Christmas card wishing us well and telling us-"What would the hospital do without switchboard operators. You guys are the best !" (2)

A 33 year old female operator states:

One night I was working the midnight to six thirty in the morning shift. So, if anything happens, during this time, the whole responsibility is on you. It probably depends on the way you are taking things. If you know your procedures, you know what to do, and sometimes of course, you have to take initiative. You have to use your own judgment to make decisions, and, decision-making is part of the operator job. Most of the time the way you are being trained has nothing to do with your judgment. It is more a matter of your own instinct for survival. I can give you an example, one night the emergency called me asking me for a Russian interpreter. Where can you find a Russian interpreter at 2:00 am in the morning? So, I ended up calling the Russian Consulate. The man who answered the phone, couldn't speak a word of English or French. It was not the Consulate, it was probably the concierge, the employee, he couldn't say a word in French or English. So, I don't know how I got to communicate with the man. I kept yelling to him, hospital, hospital, and he finally understood. He called the Consulate. He came over to the phone, and then I explained to the Consulate why I was calling. Finally, I connected him with the emergency. Maybe he wasn't too happy about being awoken at 2:00 am in the morning. I feel if I was an immigrant or just a visitor from another country, I would appreciate somebody to call for me, if I were in the same situation. I found out later on, how the Russian patient from emergency was so grateful, that he requested to meet me in person and to thank me (1).

Porters (20/23), feel they work in favorable conditions because the nature of their occupation is not demanding. Furthermore, workers share a strong sense of

community, and unlike switchboard operators, are not constantly surveyed by management. This provides workers with much autonomy as they are able to perform their duties at their own convenience. Some porters (10/23) consider their occupation to be of lower status. This is reinforced by the attitudes of other members of the hospital. However it may well be the case that the perception of lower status paradoxically reinforces a sense of community and freedom since the obligations of their status are few. Nevertheless, many of the porters (20/23) took great pride in their role in comforting patients.

Switchboard operators (21/23) do not think that their occupation is of lower ranking, but instead, speculate that it is callers and other staff members of the hospital who judge them as inferior and of lower standing.

### **STRESS AND PHYSICAL HEALTH**

Each respondent was asked the following question: "...relative to the nature of your work, have you experienced changes in your eating habits?..." Most switchboard operators responded to this question by stating how each of them have experienced fluctuation in their weight. This occurs because their occupation requires them to be constantly under pressure. For example, a 21 year old switchboard operator explains how she loses weight, as soon as the job becomes more stressful:

I have experienced weight loss. It has everything to do with the fact that I am usually working under stressful work conditions. And when I get nervous, I don't eat.  
(12)

Another 33 year old female explains how working as an operator has caused her to gain weight:

I have experienced weight gain ever since I have been working as an operator, because you are always sitting down. (1)

Similarly, a 30 year old female switchboard operator complains about gaining weight due to the stress level of the job:

I have gained weight in certain periods. When I am stressed out, or because I try to do too many things at the same time. Like processing several calls and hospital emergencies all at once. (25)

Unlike the switchboard operators, porters do not seem to experience any significant changes in their eating habits. For example, a 40 year old male claims how working as a porter has not affected his appetite:

I have been working as a porter for four years and my eating habits have not changed (13)

Another 29 year old male porter explains how his eating habits have remained the same:

I still have my three, four, meals a day, portering has not changed this. (14)

Others like a 33 year old male porter explains how he has lost weight, but it was not due to the effects of the occupation:

I lost 30 pounds, but, it has nothing to do with the job.  
(6)

According to these interviews, switchboard operators have experienced significant changes in their eating habits. Some have either gained weight, or lost weight, depending on how each of them react to the demands of the occupation. In contrast, porters eating habits have remained the same. There is some reason to believe that this is because their occupation is less demanding. For porters, any fluctuation in their weight occurs through personal choice, it is not caused by the pressures of the job.

Next, each respondent was asked the question, "...have you become addicted to smoking, drinking, caffeine, or any other kind of chemical intake?..." The reason why this question was asked, was to determine whether the nature of the occupation,

causes some workers to develop addictive habits, in order to cope with on-the-job stress. A 22 year old female explains how she has always had certain addictions, and working as an operator has served to increase these habits:

I have always been addicted to smoking and caffeine. But, when I come into work, I tend to smoke more, or drink more coffee, in order to keep me awake and alert for the job. (3)

Another 33 year old female operator claims how her smoking habit increases as she works:

When I don't work, I usually smoke about half a pack of cigarettes. But, whenever I am working I tend to smoke the whole pack of cigarettes. Every break I get, I have to smoke a cigarette, in order to help me to relax before my next round of calls! (1)

Similar to switchboard operators, porters have developed certain addictive habits of smoking and caffeine. However, most porters explain how these addictions are not work related. A 26 year old male porter states:

Maybe I tend to drink more coffee on shift work. Nicotine, well, I smoked before I started this job. I don't smoke much at work, because I am never stressed at work. It's really rare! Porters is the most lowest stress job in the world. There's nothing to get nervous about. (5)

Others, like a 51 year old male porter states:

I have always been addicted to smoking and caffeine, it has nothing to do with work. (10)

For some individuals, like a 40 year old male porter, there has been a decrease in their addictive habits, because they are rarely stressed at work:

There has been a decrease in smoking, due to the fact that this is a very relaxing job, so why should I smoke more. (13)

These interviews suggest that some switchboard operators are predisposed to certain addictive habits, like smoking and caffeine. Due to the stressful contents of their occupation, such habits are increased. Porters, similar to switchboard operators, have developed addictions to smoking and caffeine. However, the difference for porters is that the nature of their occupation, does not serve to augment their addiction. This is partly due to the fact that portering, is less demanding than switchboard operating. In fact, for some porters, there has occurred a slight decrease in such addictive habits of smoking.

Next, every respondent, was asked the following question: "...have you developed any gastrointestinal disorders such as ulcers, constipation, stomach cramps, etc. ?..." The reason why this question was asked was to determine whether workers are prone to these ailments, and whether the type of occupation may increase these problems, or whether it is the nature of work, which causes these problems to occur. Switchboard operators explain how the pressures of their occupation, increases their gastrointestinal problems. For example, a 37 year old female switchboard operator explains how every time she experiences pressure on-the-job, she tends to develop stomach problems:

I developed a little hernia in the esophagus. It is also stress related. This usually occurs because I am over-stressed, especially when I am under pressure. And switchboard operating, is a very demanding job. And because of this, I sometimes develop an acid burn up in my stomach, which is very painful. Whenever I get these stomach cramps, all I want to do is go home and sleep. Just to get over the stress! (2)

Another individual, a 30 year old male switchboard operator, who also moonlights as a porter, explains how working as an operator sometimes causes his ulcers to act up:

I usually find when I am down here in switchboard, I tend to have more problems with my stomach ulcers than when I am in porters. I guess this occurs because the level of stress is higher in switchboard, than in porters. In switchboard operating, you know that you have to give out information, and the information you give out, has to be right. And sometimes the level of noise at switchboard is very high, and that increases the stress. As we are getting a lot of calls, the way I noticed it, is that everybody's voices will raise at the same time, and then the calls continue coming, and that increases the tension. (26) *{It is important to note that this respondent was classified under the category of porters because I interviewed him as a porter, but, during the interview he spoke about his experiences within both occupations}*

Some porters, similar to switchboard operators, experience stomach problems, but, the occupation of portering does not seem to increase these ailments. For instance, a 40 year old male porter explains:

I have always suffered from stomach problems, even before I began portering. I have problems with the esophagus, and I am creating too much stomach acids. Whether I am working or not, these problems are always the same. (13)

In general, there is no evidence that suggests that the occupation is what causes workers to develop certain stomach ailments. However, these interviews do suggest that working under pressure, as with switchboard operating, may increase workers gastrointestinal problems. Hence, some workers may be predisposed to certain illnesses, and demanding working conditions may serve to augment such ailments.

Each respondent was asked the question, "...has there been an increase in headaches and backaches?..." A 29 year old female operator explains:

I have to say, I have more headaches. In terms of backaches, if we do get backaches, it is because of our job requirements, which require us to sit so often, in a tense position, because you are always answering calls,



so the neck pain, the back pain will almost come with any shift. (16)

Porters, do not seem to experience any headaches nor backaches. For instance, a 33 year old male porter explains:

Even though this is a very physical job, it's rare that I get headaches, or backaches, when I come here. I get less headaches here, than when I am at home. When I am working, I don't have to hear my wife and kids screaming and nagging me all of the time ! (4)

Switchboard operators frequently experience headaches and backaches, due to the stressful nature of their work. Porters, do not seem to experience any of these problems. For some porters, work is like a refuge which helps them to forget about their personal responsibilities, which at times, can be more distressing than work (ten out of 23 porters are married or living with someone and they have children, out of these ten porters, 4 perceive work as a haven away from home). This does not appear to be the case for operators.

### **PSYCHOLOGICAL HEALTH**

All of the respondents were asked the question: "...relative to the nature of your work, how often do you feel tired on-the-job, and why? A 37 year old female switchboard operator explains she is tired when all the services in her department changes:

A real highly stressful day. That's what would really tire me out. This highly stressful day, occurs once every three months. It is because of the changing of the services in our department. All the doctors change beepers, they change the services they are covering. And that one day, which is the Monday, we don't have no names, we don't have no beeper numbers, we don't know what services they are on. By the time that day ends, we have finally accumulated some information. And the stressful part, when the floors call you looking for someone, you don't know what beeper they are on, and you don't know what services they are on. And you

have to waste your time looking for them. And you have to ring all kinds of beepers, and you have to call and ask them, where has this guy gone to, what service is he in, what beeper is he on. It is constantly stressful the whole day, trying to chase after people. Finding out what they are covering. The beeper, asking them how long they are going to be on that number. I am telling you for me, that's the most stressful and tiring day. (2)

Porters, may feel tired on-the-job for different reasons; a 57 year old porter explains how a death of a patient is what may drain him psychologically:

Maybe, I feel tired mentally sometimes, seeing a lot of patients dying, that is what may drain me out sometimes. Although, it is a very physical job, but that is not what causes the tiredness, it is more a question of morale, sometimes you get to know the patients, and when you find out they die, it is not always an easy thing to take. Sometimes you also become acquainted with a patient's family. You see them visiting the patient quite often, and you get to know them quite well. And, if for example, a death occurs, you might see the family of the deceased patient run in the room, crying, and this touches the emotions. It is not always an easy thing to witness. It doesn't happen all of the time, but when it happens, it is not easy to take...I don't think anyone can ever really get used to witnessing death. Regardless, whether you are a nurse, doctor, or porter. (6)

From these interviews, one is able to deduce that operators are frequently tired on-the-job, and porters also experience fatigue, but it is more rare. The reason for this is that in switchboard operating, changes constantly occur within the department, and operators regularly have to adapt to these transformations. As for porters, witnessing the death of a patient, may be a tiring and devastating experience, but it is not something that happens very often.

These interviews also highlight the fact that porters experience more of an emotional weariness, due to witnessing the death of patients. Whereas switchboard operators, experience physical exhaustion, especially while they are in the process of adapting to departmental changes. Switchboard operators also experience

psychological fatigue because they must make sure all calls are correctly processed quickly and effectively. If operators take too much time on a call, they may run the risk of placing a patient's life in danger.

Every respondent, was asked the question, "...how often do you feel nervous and agitated on-the-job?..." A 37 year old female explains that each operator is only allowed 3 minutes per call, and this frustrates her at times:

We have a time allotted for each call. When you're receiving calls and you are on the board, you are only allowed 3 minutes per call. If you extend those three minutes, you get shit. If you are being too helpful to the caller, you get shit. If you are trying to give directions, and it's over your three minutes, you get shit. Sometimes, the supervisor is on everyone's back. As for myself, if you are calling me, and you are calling the hospital to get some help; for me, the kind of person I am, I want to do my utmost for you, I want to help you and give you some direction. But, the way they have it set up, you don't have to. Because you are only allowed three minutes. My supervisor always tells us to transfer callers to the departments they are requesting, and to let the departments give the callers the information they seek. In other words, all we are supposed to be are robots. That's what has changed my whole attitude, and this motivation of not being there anymore. (2)

This same respondent goes on to explain how management does not follow the department's code of ethics. She also expresses anger towards other employees who are rude with the callers:

And, when your supervisor comes around and tells you don't do it, or don't spend that much time on a call; or you don't have to give them all this information. You are asking yourself, first of all, they told you all the departments in the hospital are run under the total management quality teams. Where is this total quality management? Where is it? I haven't seen it till this day! We have a booklet that has been passed on about a code of ethics, that piece of paper is useless. Nobody, ever follows those codes of ethics. Who is it written up for, I

have no idea. It is a waste of money, because nobody follows them. And sometimes, it is very frustrating. You are obliged to do a job, where you feel you can put your one hundred percent in. And yet, you are not given the chance to do it because you are being reprimanded for it. Because, you are too good, you are being too helpful. Then, you are listening to other co-workers and how they are responding to some callers, and they are very rude. And you, being polite, you are spending too much time with a call. It comes to a point, where it drains you, and you get to the stage where you don't care no more. (2)

A 22 year old female switchboard operator becomes irritable when a specific crisis occurs within the hospital:

Maybe, I'll feel a little nervous, and agitated, if a crisis is going to happen. Like, two days ago when Bell Mobilite' Satellite was hit and no pager worked. All the switchboard operators were going out of their minds. (3)

Switchboard operators may feel nervous because the type of work they do is fast-paced and routinized. Because of this, workers may feel that the job is too mechanical and impersonal. Finally, workers may be high-strung, if crisis like power failures occur, and nothing works within the hospital.

Porters, similar to switchboard operators, explain that they feel nervous on-the-job when technical difficulties occur within the hospital and this delays their work. Furthermore, they also get upset when they work with moody colleagues, who cause their negative attitudes to influence other workers. This brings down the morale within the work place. For example, a 51 year old male porter explains how work is delayed when the hospital elevators malfunction:

I only feel agitated when there are certain delays beyond my control, and I can't do the job more quickly. An example of this, are the elevators not working. (10)

A 40 year old male porter discusses how he becomes agitated depending on the people he works with, and the type of attitudes they have:

It makes a heck of a difference if you are working with people you like and get along with. And it also depends on the attitudes of the people you are working with.  
(13)

Switchboard operators and porters feel nervous on-the-job, when they work with colleagues that have negative attitudes, which rub off on other employees. In addition to this, both switchboard operators and porters become upset when technical difficulties occur within the hospital, because this may delay their work. However, if technical malfunctions occur in the switchboard department, it is more of a problem. The reason for this is because any emergencies which may arise, will not be processed as quickly as they should. This can make the difference in saving someone's life. Whereas in portering, if delays occur, it makes no difference, because workers are able to transport patients at their own pace. If, they are a few minutes late with a patient, it rarely places the patient's life in danger.

Switchboard operators also feel that management treats them like machines. Management expects workers to perform their tasks fast. They also expect that no rapport should develop between the operator and caller. Management count on workers to transfer as many calls as they can within a certain time period. As a result, workers feel that their tasks are dehumanized and routinized. Consequently, switchboard operators feel angry and degraded (17/23).

In sum, switchboard operators (15/23) experience more changes in their eating habits in comparison to porters (0/23). Switchboard operators tend to increase their smoking and caffeine habits during work (14/23). Whereas for porters(23/23), there is no augmentation of smoking or caffeine intake; while at work. In addition to this, some switchboard operators (13/23) and porters (5/23) may be prone to certain gastrointestinal disorders, headaches, and backaches. However, for switchboard operators (13/23), these problems increase during work, due to the high stress level of their occupation. As a result, switchboard operators experience more mental distress

and fatigue, in comparison to porters. The reason for this is that the portering occupation is less demanding. Thus, switchboard operators, due to the nature of their occupation, encounter more physical and psychological health problems.

## **CHAPTER 5**

### **SHIFTS**

It has been established, that switchboard operating is a much more stressful occupation than portering. They experience more physical and psychological health problems than porters. This chapter examines how the effects of shift work increases the stress for workers. It will investigate why switchboard operators prefer working permanent shifts, and porters prefer to work the rotating shifts.

During the interviews, I discovered that all workers, regardless if they were permanent part-timers or full-timers; had the experience of working rotating shifts. It is a necessary criteria of both occupations. The reason why this is done, is so each worker is trained to work different hours. If the opportunity comes up to work a specific shift, all workers are flexible to do so. Furthermore, all full-timers work permanent shifts, and most part-timers work rotating shifts and/or fixed shifts. Rotating shifts may also be referred to as "availability;" "recall;" "floating;" and "on-call." This means that workers not only alternate from morning, evenings, and nights. But, that "hours vary considerably from one week to the next. Workers are asked to work as the need arises, rather than on a pre-arranged schedule" (Sunter, 1993:17).

I also discovered that the graveyard shift (midnight to 6:30 am.) was banned from the occupation of portering, three months prior to the interviews, and this shift has been given to the hospital orderlies because of budget cuts within the hospitals. As a result, the shifts of porters finish at midnight. Thus, in order to compensate for this, I proceeded to ask porters about their past experiences with working the graveyard shift. In this way, I would still be able to compare switchboard operators and porters views and experiences about working such a shift. The shift scheduling of switchboard operators and porters, may be found in Appendix F.

Each respondent was asked, "...given the choice, would you prefer to work fixed shifts or rotating shifts?..." According to the interviews, it seems that most

operators (21/23) prefer working permanent shifts, as opposed to rotating shifts. For instance, a 30 year old female switchboard operator explains that she likes working the fixed shift because she is able to organize her time more efficiently:

I would prefer to work a fixed shift. The reason for this is because I can organize myself for the rest of the time, for days I have to do shopping, the wash, cleaning of the house, etc. (24)

Another 43 year old female operator explains that working a permanent shift is more beneficial because her life-style is more organized:

If I had a choice, I would definitely choose to take a permanent full-time position. As opposed to working shift work. I have recently taken myself off availability (rotating shifts). So, if someone would call me to come in at 6:30 am, I only come in, unless there is a dire need for it. However now, the way it is, I am doing my 10:00 am's to 6:00 pm's during the week, and on weekends I am doing my 8:00 am to 4:00 pm's. This way you're structured. Because if you're not structured, your whole life is in the shambles. That's how I feel. I have to be structured, knowing I am going here, I am going there, I am doing this. For example, if I plan an appointment for eleven o'clock, and I'm called into work at 8:30 am in the morning...Hey wait! Who's running my life? The job? The money? No way! (9)

Others like a 29 year old switchboard operator explains that working permanent shifts, means having a steady income:

I am satisfied with the hours that I work. It gives you more consistency, more regularity for your hours, and it gives you more income which you can depend on with certainty. Through that, because of my seniority, I was able to get an 8:00 am to 4:00 p.m.. shift. So, I am happy now with my hours because it is a time block I wanted with my hours. I was able to finally get. (16)

According to the interviews, switchboard operators prefer following a set schedule.

The reason being, they are able to know from day to day, what type of routine they are



following. This provides most workers with a sense of security, because in this way, their work hours do not dictate their lives. Working a fixed schedule, means being able to know with certainty, when to do the household chores, and when appointments can be made. Workers are able to structure their life-styles in an orderly fashion. In addition to this, most operators prefer working permanent shifts, because the income is steady, and they are able to budget financial obligations with more assurance.

Porters claim they prefer working rotating shifts (16/23). For instance, a 33 year old male porter explains why he likes working such shifts because he is not constrained to follow a set routine, and he likes the excitement of working different shifts:

If I had the choice, I would prefer to work the rotating shifts. First of all, you don't get bored. You are constantly changing shifts, and if you make plans, sometimes you can pick the days you want to work, the evenings you want to work. I love changing shifts, because it is not always the same. It may be the same work. It is not the same routine everyday. Even though it would be probably better to follow the same routine; it's not, maybe that's the good thing about it. (4)

Another 26 year old male porter, likes the flexibility of his hours, and the fact that he is able to switch over shifts:

It's not too bad, it's not traumatic, or anything like that. It is difficult to schedule things if I want to do something. Normally, if I had to work at my other job, or have a scheduled appointment, and therefore, cannot go into work at the time they call me to go in; I arrange to get somebody to replace me. I change shifts with somebody, I have always managed to exchange my shifts. It hasn't been much of a problem. (17)

A 28 year old male porter prefers working shifts which fluctuate from day to day, because he does not have to work full-time hours. And with rotating shifts, he is able to work as many hours as he wants:

I like being on rotating shifts, a fixed position would be too many hours for me, I wouldn't want to work forty hours a week. I have my twenty hours that are guaranteed, and when I say that I am on-call, it is up to me when they page me to say whether or not I'll come in. I am not forced to come in when they page me, the pager goes off, if I am busy doing something else then I won't come in, and if I am not feeling well, or I am sick, then I won't come in. Because they have so many people on-call. I am available, yes, I can refuse to come in, if I decide to...I am just a recall employee, if I can't come in, they'll just call someone else, it is as simple as that. If for example, I am in my car, and my pager goes off, they give me five minutes to call them back to confirm that I am coming into work. If I can't get to a pay phone in that allotted five minutes, than it's just my tough luck. If you don't want to work, you just don't answer your pager. I got a pager, because of the fact that I am on availability. I am never in the same place, so when I want to work, all I have to do is answer my pager. (27)

Porters prefer working rotating shifts because they enjoy changing shifts, which makes their job less monotonous. Workers also feel that there is a certain amount of flexibility with working such shifts. For example, if workers get called in at the last minute to work certain shifts, and for whatever reason are unable to; they have the option to give their shifts to other co-workers. In addition, individuals who rotate, are able to work as many hours as they want. For instance, they have a choice to work once a week, or six days a week. Rotating shift workers are given the alternative to accept or refuse to work a shift.

Most operators have expressed reasons as to why they dislike working rotating shifts (21/23). A 21 year old female operator explains how she has never quite adjusted to working different shifts:

I don't think anyone could ever feel fully adjusted. Because eventually you are going to feel okay, you are going to feel that you are adjusting. But, eventually, there is going to come a day where you are doing an X number of shifts, and you are going to say Oh God, no I haven't. So, because we do get tired. The fact that I am on availability, I feel that I am always in the process of adjusting myself in accordance to the shifts I am working. (12)

Others like a 29 year old female operator explains the reason why individuals are not able to adjust working alternate shifts:

There are more disadvantages to shift work (rotating shifts). It is rough on your body because your internal time clock is constantly being forced to adjust, whether it is for sleeping, for eating, there is always the boundary for both. But, I think your body is forced to accommodate more, than if you are doing a regular full-time day work. I think it is harder for planning activities with your friends and your family. Especially when you are on availability, especially when you don't know when you are going to be called in. And your plans are subject to change, at a very short notice. And if you are on availability, normally it is because you do need to earn a living. I don't think anyone voluntarily wants to be on availability. I think if you are trying to make up hours on availability, or for people who are on availability, and don't have a permanent part-time position, you can never count on a certain income. Part of my shift is permanent, and I can count on X amount of money, though when you are on availability, you are willing to work any shift, to earn as much money as possible. So, you have to be willing to come in, at a moments notice sometimes. (16)

Others like a 22 year old female operator explains how she became sick because she was under a lot of pressure because of the job, and working various shifts increased the stress:

One time I had to tell my boss that I couldn't come in for the next few days because I had it. I was just burned out. There's a lot of pressure and tension being placed on you as an operator. And working various shifts

week in and week out, really gets to you after a while!  
(3)

Another 33 year old female operator explains how she dislikes the uncertainty of never knowing when she has to come into work. She also explains that she had to get a pager, to make sure she never missed being called into work:

When you work the rotating shifts, first of all, you are on-call. You can never organize anything. You never know when you are going to work. So, I even had a beeper on me, for a while, that's not to miss the hospital from calling me into work. Or else, you are always on the phone. You are always anxious not to miss anything. That is not a life! (1)

The same respondent goes on to explain that working different shifts had an impact on her eating and sleeping patterns:

Being on-call means that one day you are scheduled from nine to five; the next day ten to six. The day after an evening shift, two thirty to ten thirty. Four to midnight, whatever! Sometimes I was scheduled seven days in a row. The switches of the shifts, of course it has an impact on your health and an impact on your sleeping habits. On your eating habits, because you don't eat properly, you don't eat at regular times. When you have to organize yourself to eat at this time or that time. The next day it is all different. And of course, you have no life, you have nothing. Everything is all at the last minute. Sometimes you see your housework piling up, and sometimes you get more moody. And you get all those things at the same time.(1)

Switchboard operators dislike working rotating shifts because they are constantly adjusting themselves to working different hours. It disrupts their health, sleeping and eating habits. Workers are frequently anxious because they never know when they are going to be called into work. They are unable to plan activities with their friends and families. From week to week, the amount of hours they work is never the same, making it more difficult to budget finances.

Although porters' preferred working rotating shifts, none of the workers expressed any problems with working permanent shifts. For example, a 51 year old male expresses the overall attitude of porters:

You can give me any kind of shift, rotating or permanent, I am always going to be satisfied as long as I am working. I can't be without working! (10)

A 40 year old porter states:

What's good about rotating shifts is that you don't get into a rut, it is not repetitious, it is not the normal daily grind. You are working with different people on different shifts. You are constantly changing. You always have a day off during the week, it's fun. But, then again, working permanent shifts is not a bad thing either. Whether you work permanent or rotating shifts, it has to be done. Unfortunately, this place can't close. (13)

Basically, for porters, working the rotating shift would be the preferred choice. However, unlike switchboard operators, porters do not have any real strong dislike towards working any shift. Most porters (23/23) feel that as long as hours are available for them to work, that's all that really counts.

Research (Regestein and Monk, 1991; Monk and Folkard, 1992) claims that rotating shift workers experience more job stress, severe emotional problems and physical ailments in comparison to day workers. Furthermore, the most widespread problem noted by shift workers is lack of quality and quantity of sleep (Walker, Cunningham, 1978; Simon, 1990; Regestein and Monk, 1991). The reason why sleeping problems tend to be serious for those working the rotating shifts is because "the rotation of shifts produces a marked disruption in bodily rhythms for several days in most people" (Betancourt and Clague, 1981: 221). In fact, most switchboard operators, working the rotating shifts have complained of encountering such problems. The question is, if working rotating shifts causes adverse consequences to the worker's

health, why aren't porters experiencing the same repercussions as switchboard operators? What is discovered throughout the interviews, is that the nature of work, is more likely to affect the level of stress. In other words, the shift scheduling (i.e., rotating versus/ permanent shifts) in accordance with the type of occupation, determines whether the stress level of employees will increase or decrease. For example, as one 29 year old male porter puts it:

The benefits of shift work is that it is just not the routine. Even though the job is. But, when you are going in at different hours, or at different shifts from day to day, you really get a different feeling. It is almost like you are going to a different job, type of thing, because you see different people. So, that's really the difference.  
(14)

This explains the reason why porters are much happier when they are working alternate shifts. It provides them with a change of scenario, and it also makes their job less tedious. The reason why porters on a rotating shift schedule do not encounter any health or psychological problems, appears to be due to the fact that they can control how their work will be done and the speed by which it will be done. Furthermore, porters, who were male did not mention any conflicts with household responsibilities. For operators, the opposite is true, the occupation itself, is very demanding plus, many of them had household responsibilities (12 out of 23 females had dependents, and all of them were the primary care-givers). A 57 year old female switchboard operator explains:

As soon as you get used to one routine. Automatically, within weeks you are forced to learn a new routine. We have to remember new numbers, new codes, because there are always new doctors coming in for their internships. Since, this is a teaching hospital. We have to constantly adapt, as new personnel comes in! (18)

With switchboard operators, they constantly have to adjust themselves to new work routines, as well as working various shifts. This explains why operators encounter

difficulties every time they are on a rotating shift schedule. In other words, it is not the shift work per se that causes the problems. Rather, as the occupation becomes more stressful, working different shifts only adds to the tension. Whereas, if the job was not stressful, then, working different shifts becomes easier. It facilitates the process of adjusting to work various shifts.

Research by Betancourt and Clague (1981); Simon (1990); Regestein and Monk (1991); Monk and Folkard (1992) indicates that individuals working the rotating shifts, experience more problems in sleeping, eating, and in their health. Switchboard operators on a rotating schedule, appear to experience all of these problems. However, this does not seem to be the case for porters. This indicates that these effects are not caused by shift work per se. Rather, the effects of shift work depends on the nature of the job.

Colquhoun and Rutenfranz (1980); and Morris, Maclean and Bernau (1964) note that shift work, specifically, rotating work, was initially implemented because it allowed production to continue around-the-clock thus improving the efficiency of operations. Therefore, there was an economic motive behind this scheme, designed to increase productivity.

However, for some workers, such as switchboard operators, working under these conditions is not always economically beneficial. The reason is that on a rotating schedule, various individuals work different shifts. Within the hospitals, there was a long recall list of individuals waiting to be called into work. In order to be fair to all employees on this list, work hours have to be distributed equally among these employees. The end result is, individuals do not get to work the same number of hours every week. Thus they can never count on a steady paycheck because the amount of money they make per week is never the same. Most switchboard operators felt that these are major economic disadvantages of working a rotating shift-schedule.

Porters, like switchboard operators, do not always work consistent hours. This does not seem to bother most of them. During the interviews, I discovered why porters did not complain about the economic instability with working rotating shifts. Most of the porters (13/23) were moonlighting at other jobs. So, when they were not called into work as porters. They were able to rely on their other jobs. Thus, they had a better chance to make more money, because they were able to keep two jobs at the same time. The following are examples of porters who are double-jobbing because they are able to accumulate more money, and working on a rotating shift schedule allows them the opportunity.

A 33 year old male porter claims:

The thing I like about a rotating shift schedule is that I am able to work as a porter during the weekdays, and on weekends I am able to work as a waiter. Actually, I do enjoy working on weekends as a waiter because the money is good and I love the job ( 4).

A 57 year old male porter states:

The good thing about working the hours I do is that I am given the opportunity to play music during the days I am not working. This gives me the chance to make extra money on the side, doing something I really like, music is my passion (6).



## **CHAPTER 6**

### **SHIFT WORK-ABSENCE AND ERROR RATES**

This chapter will investigate the following:

1. Whether more absent rates occur in switchboard operating or portering.
2. On which shift, permanent or rotating schedule, are switchboard operators and porters more likely to call in sick.
3. On which shift, morning, afternoon, and night shifts, are switchboard operators and porters, more likely to be absent.

For this section, I will incorporate interviews and the respondents' diaries.

During the interviews and in the diaries, all switchboard operators and porters were asked the question: "...how many times were you absent from work, this month and last month?" When comparing switchboard operators and porters working the permanent and rotating shifts, it seems that regardless of occupation, both switchboard operators and porters, working alternate shifts, rarely call in sick. For example, a 21 year old female switchboard operator, who is working on-call, writes in her diary:

I don't call in sick, unless I really cannot work. Since, I am not always scheduled to work. Because I am on the on-call schedule, I can get called into work at any time. And I don't like to refuse the extra shifts, because I cannot afford it. I am living independently and I am putting myself through school. Therefore, I'll accept as many shifts as I can get. I don't like missing work due to financial difficulties (12).

A 35 year old male porter, who is on-call claims:

I am never absent, and I never take sick days. The fact that I have to be realistic about is the fact that I am on-call, and the most I can make, I have to take it at the time it comes. (15)

Those working rotating shifts, rarely call in sick because they are part-time and they do not have access to sick leave, and the more hours they accumulate, the more money they make. In my sample, 24 out of 46 respondents work rotating shifts, out of these 24 respondents 16 female operators and 8 male porters work alternate shifts; of this group, 2 females out of 16 and 1 male out of 8 regularly call in sick. In addition to this, 22 out of 46 respondents work permanent shifts, from this group 7 female operators and 15 male porters work these shifts; 5 out of 7 female operators and 13 out of 15 male porters who work permanent shifts are often absent from work. These findings do not correspond to what was cited in the literature which claims that the rate of absenteeism, has been found to be higher on rotating shifts (Jamal and Xie, 1988). This may be explained in the following way: the occupation of switchboard operating is much more strenuous than portering. As a result, workers may suffer more physical and psychological malaise and this may increase as operators are placed on a rotating shift schedule. Thus, it is more likely for workers on this shift, to call in sick, given its negative impact on the worker's health. However, the literature omitted to include that some individuals are sole wage earners, while others have family responsibilities (these variables will be further investigated later on in the thesis). All these things take precedence over the individual's health. For example, if workers are sick with a headache, or have the common cold, they will think twice before calling in absent, because that would mean less money on their paycheck, and most people cannot afford to take such a chance. Thus, switchboard operators like porters, are willing to sacrifice their health, for money, because it is a necessity which they cannot live without. As noted previously, full-time switchboard operators and porters receive fringe benefits and those who are part-time do not. During the interviews, I discovered that workers on permanent shifts are usually full-timers. And, fifteen days out of the year, they are entitled to sick days, which they are paid for. This also explains why most workers on permanent shifts are more likely to take sick days,

because it does not affect them financially. This may be due to the fact that they have a more permanent status, and people on permanent shifts feel that the relative job security allows them to call in sick. Whereas, the reason why individuals on rotating shift schedules do not frequently call in sick, is because they are part-timers and their sick days are not paid for. Those on rotating shifts are more likely to be single, who are students, and have no family responsibilities. All of this does not disclaim the fact that workers on rotating shifts are more likely to call in sick for serious illness (Jamal and Baba, 1990). However, what it does suggest, that regardless of whether workers are on a fluctuating or fixed schedule, their economic status will be a stronger determinant of whether they decide to take sick days or not.

The following are examples of switchboard operators and porters working the permanent shifts who are more likely to call in sick. For example, a 37 year old female operator, working the 9:30 a.m. to 1:30 p.m. shift explains:

Last month I was absent maybe two days. It was because I was sick, with a bad flu. I came down with such a bad flu that I was in bed for 4 days. Actually, I got sick while I was on my vacation. And then, I had to call in sick two other days. Because it dragged into the next week, because I was very sick. (2)

Another 33 year old female operator working the 11:00 a.m. to 7:00 p.m. shift, has also frequently called in sick:

I would say last month I was absent twice. This month the same thing. This month I was absent because I had sinusoids. Last month was because of a court date, I had to be in court for personal reasons. (1)

The same operator in her diary claims:

This week, I took a sick day, because I had to show up at an appointment that couldn't be postponed.

Others, like a 25 year old female operator working the 2:30 p.m. to 10:30 p.m. shift, take sick days when they are not up to working:

I would say I was absent from work at least four days. Two days I felt tired, and the other two days, I went to the dentist, and I had two of my wisdom teeth pulled out. Yes, I wanted to stay home, because I was stressed and I didn't want to see anybody. (27)

Operators working the early morning shift (9:30 a.m. to 1:30 p.m.) and the afternoon shifts (11:00 a.m. to 7:00 p.m. or 2:30 p.m. to 10:30 p.m.) are more likely to call in sick.

Porters like switchboard operators working the morning and afternoon fixed shifts are also more likely to be absent from work. For example, one 32 year old male porter who works between the hours of 7:00 a.m. to 3:30 p.m., explains in his diary why he called in sick:

"I was absent from work maybe three or four days, because I had the flu." (19)

Another 57 year old male porter working between the hours of 8:00 a.m. and 3:45 p.m. explains that he took a sick day from work, not because he was ill:

"This month, I took one day of absence, because I had problems with my car. "(6)

In general, according to the research (Maurice, 1975), absenteeism is lower for the night shift, than for the day shift, and this corresponds to what was found throughout the interviews. Switchboard operators and porters tend to call in sick during the morning and afternoon shifts. The reason for this is because, during the day the hospital is more busy. For example, clinics are open and more doctors are scheduled to work, etc, and therefore, because of their ill health, individuals would be less reluctant to come into work. They would have to be more alert during those times, and would have to force themselves to work harder.

The interviews revealed that the rate of absenteeism of switchboard operators and porters is affected by the work load of different shifts (daytime permanent shifts are more busy for operators and porters); workers status of employment, whether they are part-time or full-time; the type of fringe benefits they receive, whether they are entitled to sick leave or not; it also is affected by the different life circumstances of individuals (like students, and those who have family responsibilities). In examining the effects of shift work on absenteeism, it becomes apparent that all these variables need to be examined in order to understand that it is not so much the nature of the shifts (rotating versus fixed) that is important, but the working conditions that are attached to it. Further, given different life circumstances, the availability of rotating shifts may offer some benefits which permanent shifts do not, to people like students who wish, or are forced to work only part-time in jobs that allow some flexibility of scheduling one's life. Thus, working these shifts may also be a result of self-selection.

This chapter also investigates the following:

1. Whether more on-the-job errors occur in switchboard operating or portering.
2. On which shift, fixed or rotating schedule, are switchboard operators and porters more likely to commit on-the-job errors.
3. On which shift, morning, afternoon, or night shift, are switchboard operators and porters more likely to commit mistakes.

Switchboard operators are more likely to commit on-the-job errors (18/23), than porters (9/23). When each respondent was asked the question, "...did any errors or mistakes occur in your work environment this week?.." A 32 year old female operator writes in her diary:

Yes, I make mistakes. Especially when there are lots of people calling at the same time. I think it is stress related. When there's less calls, and there's less stress in the environment, you can take your time with the calls. And you can make sure you do a better job. Whereas,

when you are under pressure, you want to make the calls as quickly as you can. (26)

A 22 year old female operator writes:

Yes, I make mistakes. Sometimes I tend to press the disconnecting button, before I even answer the person. I don't do it on purpose, I swear to God! It's just that I will be tired and I'll be not even looking at the phone, and I'll disconnect people. And when I get really tired and stressed out, I have a habit of combining two lines together. Which may cause an error. As dialing the wrong number, beeping the wrong beeper or connecting callers to wrong locals. However, it's not often that I make an error. When I'm tired, I know to double-check. Besides, who doesn't make mistakes from time to time! (3)

In contrast, porters explain how on-the-job errors rarely occur. One 29 year old male porter writes in his diary:

I haven't made any errors this week. In fact, it is hard to make mistakes in this line of work. (29)

Another 35 year old male porter writes:

I know my job, and it is really rare I make mistakes. Besides, this job is fairly simple and straight forward. What mistakes are there to make? (30)

All of this, does not mean that porters never commit any errors on-the-job. It does happen, but, less frequently. The reason for this is because the occupation of portering is less demanding and less tiring. For example, a 26 year old male porter explains:

It is kind of hard to make mistakes. Minuscule mistakes do occur from time to time. We forget to check an arm band, the next person who brings the patient up, may be confused where to bring the patient because I didn't properly check the arm band.(5)

Another 57 year old male porter states:

I have seen some errors occurring, little ones, like forgetting to change the identification band on the

patient, it is marked on the paper that the patient should be moved in room 1121. Instead, because the porter forgot to put the new wrist band, the patient is placed in the wrong room, 1116. (6)

Any on-the-job errors committed by porters are not very serious ones. Whereas, in switchboard operating, any mistakes made, can have consequential effects. For example, not processing an emergency call on time.

The interviews also reveal that switchboard operators (16/23) and porters (8/23) working the fluctuating shifts may commit more on-the-job errors, when they are rotated to the night shift.

For example, a 21 year old female operator who is on a rotating schedule explains how more on-the-job errors occur during the night shifts:

Yes, I will usually make mistakes if I work the 4:00 p.m. to midnight shift. However, it all depends if I didn't have a rough day at school, it is more likely my evening will go smoothly, and I am less likely to make on-the-job errors. It is during those days that I have so much to do. Because I am on my own, and because I am in school. I am still on availability, I am still on that recall list. I also have a younger brother, 15 years of age, who is living with me. I pick him up, and I drive him sometimes. I have all these responsibilities and it can become hectic at times! (12)

A 22 year old male porter who's on-call states:

In observing my colleagues, I would say more errors occur during the night shift. When people don't sleep before their shift, a lot of times you tend to be slow at certain things, during the middle of the night. Whereas, during the day, you tend to be awake. (31)

It seems that the reason why most workers on a rotating shift schedule commit more errors during the night shift is because workers may be maladjusted to the shift, and as a result, workers experience "sleep loss and circadian disfunction" (Monk and Folkard, 1992). But, what has also been highlighted in the interviews, is that, if workers during the day, have experienced some kind of outside pressures, such as stress at

school, or are pre-occupied with personal responsibilities. These things may still bother and distract them, while they are working the night shifts. As a result, misjudgments may occur while working.

In the sample, there were 7 female operators and 15 male porters who worked the fixed shift., from this category, 3 out of 7 female operators and 7 out of 15 male porters working these shifts claim that during the day accidents are more frequent. For example, a 29 year old female operator working the permanent day shift, between the hours of 2:30 p.m. to 10:30 p.m. stipulates:

Errors, mostly occur, I'd say around the rush hour. Which is usually between 3:00 p.m. and 5:00 p.m. These are really busy hours. And I am still not sure if I am awake. And there is a bunch of people, and I am so busy. I get distracted so easily. That I am just not all there.(32)

A 28 year old male porter working the permanent shift, between the hours of 2:00 p.m. to 6:00 p.m. states:

The most mistakes, I would have to say the day shift because most places are open. Most times you can make a mistake, between for example, the dermatology and the eye clinic. Mixing up all the floors to go. (33)

Other switchboard operators (4/7) and porters (8/15) explain how more severe on-the-job errors might occur during the permanent night shifts. For instance, a 29 year old female operator who works between the hours of 8:00 a.m. to 4:00 p.m., and who has also worked all of the shifts, states:

In my experience, generally speaking, errors may be more frequent during the day time. The reason for this is because you have the OR that is going on. You have all kinds of blood testing going on. You have all kinds of clinics that are open. Doctors offices that have built clinics in private offices. It's totally a different ball game. There's more things to do, and it is easier to make mistakes. However, I would have to say less errors do occur during the night shifts. But, whenever



they do occur, they are much more consequential. During the evenings, the departments are closed, so you are working with information that has been provided for you, and that you can't verify. Also, if there is a problem with paging a doctor, or a scheduled change, management is not on the premises to deal with any immediate problems. Therefore, on the night shift, when you are by yourself, you have no one to back you up. (16)

A 29 year old male porter who works the fixed shift between the hours of 3:30 p.m. to midnight, explains:

Yes, there have been mistakes. Not with myself. However, I have observed my co-workers making some mistakes. It usually occurs during the evenings. Because we have nobody to control anything. During the day, the supervisor is here to make sure everything rolls properly. In the evening, on the other hand, we are our own judges and we are our own leaders. And we just do things the way we know how to do. So, if anything should really go wrong, it is usually in the evenings. (14)

The interviews and diaries correspond to what has been cited in the research by Maurice, 1975; Simon, 1990; Monk and Folkard, 1992; that during the day, accidents are more frequent but less serious, because there is a higher level of nervous activity, the work environment is busier during the day, than at night. The interviews and diaries highlight the fact that the reason why errors are less severe during the day is because, there is management staff on the premises, which are able to deal with any immediate problems. And the reason why errors that occur at night are more severe, is because there is no supervisory personnel available, and all major clinics and departments are closed.

In sum, more on-the-job errors occur in switchboard operating, because the occupation itself is very demanding. More pressure is placed on the workers, and more frequent mistakes occur as a result. However, although on-the-job errors are less common for porters, it does occur. The interviews have revealed that switchboard

operators and porters are more likely to commit serious errors during the rotating night shift, because the workers energy levels are slower in the evening than in the daytime (Maurice, 1975). It also happens because workers may encounter stressful situations during the day, which causes them to be agitated and distracted during the night work. The reason for this is workers are on their own, and because supervisory personnel is not available, problems take longer to resolve. Another factor which may contribute to this, is that, previously in the thesis, switchboard operators and porters mentioned how they disliked having management monitoring their every move. Given this fact, workers are more likely to slack off, when the boss is not around. As in the case of porters taking their time with each pick-up, workers tend to be more careless and distracted during the night shift.

As for the permanent shift, regardless of occupation, more on-the-job errors occur during the afternoon shift because of the on-going traffic that is going on in the hospital. Everything is open, there are more people on the premises, workers get distracted more easily, and mistakes occur. But, it is rare that serious mistakes occur during the day shift because there is supervisory personnel available to provide guidance and assistance to the employees, and problems are remedied quickly.

## **CHAPTER 7**

### **EFFECTS OF NON-WORK DEMANDS**

Throughout the interviews, porters have claimed that if given the choice, they would prefer to work the rotating shifts, while switchboard operators claim they would like to work the fixed shifts. The following several sections will examine what causes switchboard operators and porters to like one shift over another?

The findings reveal that 15 out of 23 male porters are principal wage earners, of this group 8 out of 15 men have dependents. It appears that only porters who are sole wage earners in their household, prefer working full-time fixed shifts. For example, one 49 year old male porter who is married, and is a father of 3 children, explains that because he is the principal wage earner, he has no choice, but to remain as a full-timer:

I have no choice but to be a full-timer. I am able to work 50 hours per week, and it also means, it is money I can count on. Because I am the only one working to feed the family. (20)

Another 36 year old male porter who is married with two children explains how he is satisfied with working a fixed shift because he is the principal wage earner in the household. He explains how he is able to hold a second job, because he works a permanent shift:

The advantage of working a permanent, full-time position, is the fact that I am able to work 12 hours on weekends, as a bartender. Because, working permanent shifts usually means I am able to have a second job. Plus, the money I get as a bartender is really good. (34)

He also goes on to explain why he has two jobs:

My wife went back to work after five years, so I am holding on to this job, in case one day she decides to

quit and devote her full attention at home. Basically, I am working for financial reasons.

Most porters who are sole and principal wage earners and are married, and have children, do admit that it is better to work full-time, permanent shifts. None of the porters, regardless of whether they were full-time or part-time, sole or principal wage earners, expressed a strong dislike in working rotating shifts.

For example, one porter who is a full-timer claims:

I think I have gotten used to working the fixed shift, and now with the responsibilities of the children, I think it is better for me to work the fixed shift. If I had the choice, I would prefer to work the rotating shifts, in the past, I loved it (4)

A 35 year old male porter who is a part-time, principal wage earner, is married, and has a two year old son, claims:

I believe it is better to work a fixed shift, because it is more of a stable paycheck. The economy is so bad. Money wise, it would be better for myself, I have a mortgage to pay. So, the more I work, the more money I bring in, and the better it is. To live comfortably, this is why I would prefer to work the fixed shift. However, I really don't mind working the rotating shifts. I can adjust my life-style any way. I am willing to work any shift, as long as there is work (21).

A 26 year old male porter, who is a permanent part-timer explains why he prefers working rotating shifts:

I live with my roommates, and therefore, I am not the sole wage earner. All three of us contribute our fair share. So, for me, working rotating shifts, there are more advantages. I find myself with a lot of free time. If you do forty hours on shift work, you find yourself with a lot more free time, on your hands, than if you do set work. (5)

Porters who are principal wage earners, who are married and have children, claim that they only prefer to work a fixed shift out of economic necessity, because working a

permanent shift means attaining full-time, steady hours, which obviously, provides them with more financial security. However, regardless if porters were single, married, part-time, full-time, or sole wage earners; one thing that has been made clear is the fact that all of them do not mind working rotating shifts.

It is important to note that in my sample it was found that most people who were sole and principal wage earners worked full-time and those who were not sole and principal wage earners worked part-time. However, not everyone falls in either one or the other category (as in the case of the 35 year old porter who works part-time and is the sole wage earner see page 109).

The findings reveal that 7 out of 23 female switchboard operators are principal wage earners, of this category, 7 out of 7 switchboard operators like porters who are principal wage earners, prefer working full-time permanent shifts. A 33 year old mother of two children explains:

It is more convenient to work a fixed, full-time, shift. Because I am a single mother, who is separated from the father of my two children. Working a fixed schedule, means working 40 hours a week. I am able to pay bills, and my kids are fed.

This same respondent explains why she dislikes working rotating shifts:

If I was working different shifts, it would be more of a problem. Because if I would be called into work the graveyard shift (midnight to seven a.m.), there is no one there to take care of the kids. So, at least, now that I work a permanent shift, 8:00 a.m. to 4:00 p.m. I drop off the kids to daycare before going to work. I usually get home at five o'clock, clean my house, and cook. At six o'clock, I go to the daycare, pick up my kids. Feed them when we get home. I read or watch television with them. Bathe, and put them to bed by nine o'clock. This gives me time to unwind, and be by myself. But, every so often, one of my kids will wake up during the night, to ask for a drink of water, or simply will crawl in my bed, because they had a terrible nightmare. If I was working the rotating shift, my whole routine would be

screwed up. And besides, where are you going to find someone to baby-sit the kids from midnight to seven in the morning! (1)

Even switchboard operators who are not sole wage earners, and are part-timers, still express a strong dislike towards working rotating shifts (16 out of 23 are not principal wage earners, from this group 14 out of 16 dislike working fluctuating shifts). For example a 43 year old female operator states:

I have two children. And my husband works full-time, as the owner of a restaurant, and it is open 24 hours a day. He usually works 80 hours a week, until 3 in the morning. And this is why I would never work the rotating shifts. Because at least with my permanent status (11:00 a.m. to 7:00 p.m.), in the morning, it gives me time to get my housework organized, and get my kids off to school. By eleven o'clock, I am at work...I am at home at seven thirty, my kids are fed, and their homework is finished by eight thirty. We unwind, they find out what happened in my life, I find out what happened in their lives. I prepare their baths, and get them ready for bed. (35)

This same individual explains how her spouse helps her occasionally with the children:

When my husband is at home, he will read to the kids, play sports and games with them. Apart from that, he's completely out of the picture, because he is mostly at work. Especially, during the week, he is very busy. My husband is very traditional, and believes the woman's place is in the home.

Another female switchboard operator is 43 years old, and has 2 children, ages, 12 and 16. She explains how working part-time rotating shifts interferes with her home life:

My husband is a shift worker, and he works 45 to 50 hours a week. Like me, he works all the shifts. He's really good, you know. For example, whenever it happens that I work days, and he's scheduled to work nights. He'll have supper ready for me when I get home. I mean, he tries to help out whenever he can. I can't expect him to do it all the time, because he is a full-

timer. However, problems do occur when we both work days. And I get home after a hard days work. I will see something that is misplaced, and I'll just blow up, and I'll start screaming at my husband, and kids, for stupidity. And, I know I am not being fair to my husband, nor my kids. I have realized that I usually act this way because I am not always at home for my family. That really makes me feel guilty. Especially, if my husband and I will both be working the evening shift, like 4:00 p.m. to midnight, for example. Because, when I am not there, he is not there either, sometimes. And it causes problems. Even though my children are growing up, they still need someone at home. (7)

A 29 year old female switchboard operator, who is a part-timer working the rotating shift, explains if she had a family of her own, working rotating shifts would not be ideal:

If I were a parent, I would never do shift work. I have done this as a single person, if the situation were different, I think I would not do shift work. I think it has a large impact on your family life. I am single and I feel the impact, if I were a parent, I would never do the shift work. (16)

It appears that switchboard operators who have family responsibilities, who are principal wage earners, for financial reasons do prefer to work fixed shifts. However, for switchboard operators who are not principal wage earners, and work part-time rotating shifts, the reason why they still prefer working permanent shifts is because it enables most of them to balance work and family responsibilities.

In examining the interviews, one may deduce that regardless of occupation, individuals who are principal wage earners, prefer to work full-time permanent shifts. Due to the monetary stability it provides. However, this does not explain why most switchboard operators dislike working rotating shifts while porters like working around a fluctuating schedule? Perhaps, the reason it has something to do with the issue of gender.

## **CHAPTER 8**

### **GENDER AND FAMILY EFFECTS**

The interviews reveal that female switchboard operators face a dilemma with paid and unpaid work (Wharton, 1994). In other words, the reason why female switchboard operators dislike working shift work, specifically, rotating shifts is because they perceive their paid work interferes with family obligations. Most male porters prefer shift work but for many, family obligations are likely to require them to work fixed shifts. Hence, shift work, is differently experienced by individual men and women. For instance, the women in this study express a conventional gender ideology about the household division of labor, in which "housework and childcare are women's responsibilities" (Wharton, 1994). This explains why the 29 year old female switchboard operator has stipulated that if she had a family of her own, working rotating shifts is not something she would voluntarily do (see page 112). Even in situations where couples are both on rotating shift schedules (as in the case of a 43 year old female switchboard operator, see page 111 ), where the men share the load at home, women feel more deeply torn between their work and family demands because they have the organizational and managerial responsibilities for deciding what needs to be done and when (Hochschild 1989; Smith 1987b).

Given this division of labor, women who balance family and work responsibilities are likely to be overburdened. This also corresponds with what has been found in the research by Monk and Folkard (1992). They found that the care giver role impinges mainly on the female shift worker who is often faced with societal and family expectations that she should give the same level of 'service' with regard to cooking, clothes mending, cleaning and housework, as she would in an exclusively housewife role. As a result, there exists gender differences with regard to coping with shift work. Not only do female shift workers have to adjust themselves to working



various shifts, they also have to be able to tend to household and family responsibilities. Thus, this creates a double burden for women shift workers (Bunnage, 1981).

This is not to suggest that most male porters are oblivious to household tasks, or family obligations. In fact, research (Bunnage, 1981) has revealed that male shift workers spend more time working with their wives in the home than day workers. For example, a 33 year old male porter who works full-time claims:

My wife works full-time at the office, 9:00 a.m. to 5:00 p.m. And I get home at night before my wife. Household tasks are divided equally between us. I cook, my wife then comes home after me, and she washes the dishes. We prepare a bath for our children, to get them ready for bed, read them bed time stories, and before you know it, both kids are sound asleep. (10)

Male shift workers are more likely to be involved in household work, if the wives high contributions to the economic support of their families give them more power to demand their husbands' participation in housekeeping and child-care chores.

A 35 year old male porter who is the sole wage earner states:

My girlfriend is mostly the primary care-giver at home. As for myself, I am the only one working. So, I support her and my two sons financially. I try to help her whenever I can. I also work the rotating shifts, so, I cannot help her on a consistent basis. Because, I never know when I am going to be called into work. Sometimes, I will pick up the kids from school, and whenever she is not available to cook, I will cook instead. It is not that I don't want to help her, but, because of my work schedule, sometimes, I will work a double shift! (15)

This explains how most male shift workers do participate in some of the household labor, but, not all of it. The reason for this is because, some male porters are the sole wage earners. This usually happens if their wives do not work, or work part-time.

Women's lower earnings have made them supplementary, not equal, providers. Thus,

this is why women are assuming more of the housewife role (Hunt and Hunt, 1982). Furthermore, this also explains why male shift workers, specifically those on rotating shifts, often fail to cope satisfactorily in the home maintenance (Monk and Folkard, 1992). The reason for this is because according to Monk and Folkard (1985), most male shift workers on rotating shifts claim that they have a difficult time providing "companionship for the children, to teach skills or control and discipline, and to maintain close family relationships." This may be due to the fact that rotating shift workers may find that they spend a whole week without ever interacting with their children. As in the case of the 35 year old male porter who at times works the double shifts (see page 114).

However, the same thing can be said about female shiftworkers on rotating schedules. So, the question becomes why do female switchboard operators on alternate shifts make more time for family and home responsibilities, than do male porters working the same shifts? The answer to this question has to do with the fact that most female operators (16/23) are not the sole wage earners. As a result of this, they are more likely to refuse to work a shift if family responsibilities conflict with their work schedules. Whereas their male counterparts are more likely to work as many shifts as they can because they are the principal wage earners (17/23) and this is why, for most men, work responsibilities are placed before family responsibilities because without this, their families wouldn't be able to survive.

In general, the interviews reveal that male shiftworkers are more likely to participate in household tasks and child care, if their wives' contribute to the economic support of their families. Secondly, male workers on permanent shifts contribute to housework and child care, more so, than those who work rotating shifts.

For the most part, the interviews as well as the findings of Bunnage (1981) have revealed that the division of labour still results in the bulk of the home tasks being done by female shift workers. For example, when husbands' housework increased it

was within a narrow range of tasks, some meal preparation, staying with the children, putting them to bed, and this usually occurred when the wives were working. The interviews also reveal that male shift workers whose wives did not work, helped occasionally with household responsibilities. However, regardless of whether their wives were working or not; "the men did not take on the major burdens of housecleaning, grocery, and/or clothes shopping, clothing maintenance, and the rest of what makes up the full load of household labor" (Wharton, 1994:199).

The interviews have highlighted the fact that female shift workers who work permanent and rotating shifts; reflect society's normative expectations about the gendered division of labor in families. Although, they are contributing to the economic support of their families; they retain primary responsibility for the household labor. They describe their husbands' contributions to housework and child care as "helping" them, and were grateful for that help. Some women also claimed that their husbands believed that housework and child care were women's work.

In sum, male shift workers are more likely to participate in family and household tasks, when they are on a fixed schedule. Male shift workers on rotating shift schedules, do help their wives with the home and child care responsibilities, but, to a lesser extent because shift schedulings interfere with their home life. In contrast, female shiftworkers regardless of whether they work permanent or rotating shifts, retain the primary responsibility of household labor and child care. The 'emotion work' carried out by women in managing domestic relationships is at the forefront of their concerns" (Wharton, 1994; Morris, 1996). For men, family life and work life are completely separate. This is how a traditional division of labor is sustained. Hence, regardless whether women are shift workers or day workers, the private sphere is mainly their concern; whereas for male shift workers, working permanent or rotating shifts, the public sphere of work, is mainly their responsibilities (shift work is slightly more common among male than female full-time employees-25 % versus 21% -

Statistics Canada, 1993). These gender differences reflect socially constructed ideologies that reinforces separate spheres' between men and women. In other words, women are associated with the "care-giver role," whereas men are usually affiliated with the "provider role" (Morris and Lyon: 1996).

The interviews also reveal that gender differences exist with regard to how the private sphere invades the public sphere. At the beginning of the thesis, it was revealed that most female switchboard operators suffered more psychological and physical health problems than male porters, and this is mainly due to the fact that the occupation of switchboard operating is much more stressful. However, in light of this, and what the interviews have revealed about women shiftworkers, as well as what has been cited in the research by Coloquhoun and Rutenfranz (1980); Hertz and Charlton (1989); Presser (1986), (1988); Monk and Folkard (1992), women are more likely than men to worry about making sure work hours do not conflict with family time. This in itself, is very stressful. Once they get to work in an occupation which is even more demanding, such as switchboard operating, all these factors can work against them, by creating more anxiety, and fatigue, because they are constantly trying to adjust themselves to work, family, and shift scheduling demands. As all these pressures keep adding up, also, health problems tend to increase. This may explain why more female switchboard operators dislike working shift work (specifically rotating shifts), because given the nature of their occupation and all the responsibilities they have to contend with, working shifts may only serve to create more stress.

This chapter will also examine the amount of time female switchboard operators and male porters spend in various family roles, the types and amount of perceived interference between shift work and family life and the level of satisfaction with family life. It will investigate which of the shifts, morning, afternoon, night shift, and/or weekend shift, causes the most, or least, problems. This section will focus

only on switchboard operators and porters who are married and/or living with someone and who have children.

### PERMANENT SHIFTS

Individuals who work the permanent shifts, regardless whether they are male or female, all feel that they spend enough time with their spouses and their children. For instance, all the respondents were asked, "...how many hours a week do you spend with your mate?.." A 37 year old female operator who works between the hours of 9:30 a.m. to 1:30 p.m., writes in her diary:

At home, it is a lot. My partner comes home at five thirty- six o'clock: we are together from that time, up until eight thirty the next morning. I spend about fifteen hours a day with my partner. I spend in all seventy five hours during the week, and on weekends it is 48 hours. Including the weekend, plus the weekday, we spend about ninety eight hours together. I spend so much time with my partner because I work a fixed shift. If I were working rotating shifts, time spent together, would be impossible. (22)

A 45 year old female operator who works the 4:00 p.m. to midnight shift writes:

I always see my husband and eleven year old son in the mornings. We all have breakfast together. My husband leaves to go to work. And, I usually drive my son to school. My husband and son, are usually home by three o'clock. I see them both for a half an hour, and then I go off to work. I feel that we spend a lot of quality time together as a family. Anyway, I don't think it is the amount of time, that is the real importance. It is how well you get along, and how well you understand each other, and what you each have to do, to get on with life. So, whether you are at home seven days a week, 24 hours a day together, and don't understand each other. Sometimes it's better if you see each other less, but you

understand, and you have every honesty and confidence in each other, I think things will work out. (28)

Along similar lines, a 40 year old male porter, who works between the hours of 8:00 a.m. and 4:00 p.m. writes:

During the week, I spend about thirty hours with my wife and kids. Plus on the weekend camping. There was no leisure time when I was working the rotating shift. Time spent with my family is now possible due to working a full-time, fixed shift. (13)

Another 49 year old male porter, who works the 9:00 a.m. to 4:45 p.m. shift, explains:

I spend weekends with my family. As well as when I come home at night, I see them for 5 to 6 hours. We have supper together, and most times we will all gather together to watch television. (20)

The respondents diaries and interviews reveal that shift workers who work permanent day shift, is similar to day work. Workers are able to spend sufficient time with their families, and most feel that they spend adequate time with their families because a specific routine is being followed. Even for workers on permanent night shifts, for example, the time spent with the family has been altered, instead of being gathered as a family unit during the evenings, it usually occurs during the mornings, where the family get together and have breakfast. Any time spent together or leisure activities that take place among family members, occurs during these times (i.e., during the mornings, or late evenings when everyone is at home). However, what stands out throughout the interviews and diaries, is the fact that for shiftworkers who are married, or living with someone, and do not have children, spending time as a couple is more frequent. For those couples who do have children, it appears that more time is spent together as a family unit, and less time is spent as a couple (Wharton, 1996). The reason for this is because workers are attempting to balance work and family responsibilities. Thus, this occurs regardless whether workers are on shift work or day work (Calasanti and

Bailey, 1991; Shelton, 1990). Furthermore, both male and female shift workers have claimed that they disliked working rotating shifts because it led to an irregular rhythm of life which prevented them from spending sufficient time with their families, and this is consistent to what has been cited in the literature by Carpentier and Cazamian, 1978; Monk and Folkard, 1985, 1992).

Female operators and male porters, prefer working the morning shift (e.g. 8:00 a.m. to 4:00 p.m.; 10:00 a.m. to 6:00 p.m.; or between 9:30 a.m. to 1:30 p.m.). They feel that it does not interfere with their marital and family relations. For example, a 37 year old operator, working the permanent 9:30 a.m. to 1:30 p.m. shift, writes in her diary:

When we wake up in the morning, we are in a routine. I usually get up a half an hour before my spouse, at six in the morning. I take a shower, get dressed, and prepare breakfast. And once my spouse is up, he always helps me prepare the lunches, and makes the bed. We make sure we get everything ready. And then, we are both off to work. (2)

Others explain that they prefer not to start too early, and not to leave work too late. A 43 year old female operator claims:

The shift I am most satisfied working is my shift, 10:00 a.m. to 6:00 p.m. I am happy with this shift. The reason for this is because I have enough time during the evenings to spend time with my family. Another reason is because I have my kids out in the morning when I come to work, and then I go home, and deal with the problems at home. Whereas, if you are rushing to work for 7 or 8 o'clock, you have to contend with the traffic, contend with the kids, contend with the job. And then, going back at 4 o'clock or 5 o'clock, you still have the traffic, the kids, and the job. So, it's a problem! (9)

A 49 year old male porter who works the 9:00 am and 4:45 p.m. shift states:

I like the shift that I am working now, I get to spend time with the family, and have mealtimes with them.  
(36)

A 35 year old male porter who is cohabiting with someone and has 2 sons ages seven and a half, and 10 and a half, writes in his diary:

If I had the choice, I would work from 8:00 a.m. to 3:30 p.m. day shift. Because during the day, my children are at school, and my hours correspond with their hours. And I know I have no obligation to be with them all of the time. I can work, and I have much more freedom during those hours. And when they are back from school, I should be with them. And, I think as a parent, to be with your children is important, first and foremost, it is a moral obligation. (37)

Other reasons why male and female shiftworkers prefer to work the morning and early afternoon shifts is because they have an earlier start during the day. Most household chores and errands are taken care of before or after their shifts. And when they get home at night, they are able to spend mealtimes with their families. As a result of this, they are able to follow the same routine as most day workers (Calasanti, 1990). The set schedule allows most shift workers to organize their family responsibilities in an orderly fashion. Furthermore, because the children are at school during these times, shift workers do not have to worry about their whereabouts and, they do not feel guilty about not spending time with their kids. In addition to this, working morning and early afternoon shifts reduces "rush hour rage" as workers utilize the highways, buses, subways, and trains, at other than peak load periods" (Bohlander and Hinman, 1977).



NIGHT AND WEEKEND SHIFTS

The interviews have also revealed that married or cohabiting female switchboard operators and male porters dislike working the night shift and weekend shifts because it interferes with marital and family roles.

A 35 year old male porter explains how the permanent night shift negatively affects his sexual relations with his wife:

Sometimes, when she is working the day shift, and I am working the evening shift, it is not compatible together. And when I reach home, she is sleeping and I can't disturb her. And, when I am sleeping she can't disturb me. There it is, a chaotic situation! (37)

A 49 year old female switchboard operator states that she dislikes working the night shift because it interferes with family time:

The night shifts. I don't get to spend time with the family. I come home, and everyone is in bed sleeping. I can't fall asleep when I get home. (39)

A 43 year old male porter explains that working the weekend shifts interferes with any social or leisure activity with the family:

I don't like when I am scheduled to work the weekend shift because I am not able to spend time with my family. My wife and I are never able to plan any family outings, such as spending a weekend in the country, horseback riding or fishing. Forget about going to the movies, or restaurants, or anything like that. By the time I get home, I am too bushed to do anything! (40)

A 33 year old female operator who is a single mother states:

I have two kids ages 2 and 4. And I dislike working the weekend shifts because I do not like to leave the kids at home, with my mother. The fact that on those weekends I cannot go out to shop, and do my stuff. Because, when I cannot do what I have to do, grocery shopping, my chores, and errands, on my days off, I try

to do them on weekends. And when I work the weekend, I am not able to do these things during the day. So, when I get home at night, that means there is more work waiting to get done. This, also means that less time is devoted to my kids. And, my days never seem to end! (1)

In sum, the interviews reveal that working the night shift is burdensome for both male and female shift workers, because it negatively affects their sexual relations, and this corresponds to what has been found in the research by Monk and Folkard (1992). Furthermore, the interviews reveal that male and female shift workers do not like working the night shift because by the time they get home, they are still wide awake, while everyone else is sleeping. They may feel alienated because of this. They have no one to talk to, or eat a meal with. Furthermore, the weekend shift and the night shift interferes with time spent with their families. Male and female shift workers prefer having the weekend off for recreational time with their families, because their spouses are usually not working and their children are off from school. Weekend shift work interferes with this leisure time, and this can be very frustrating for shift workers. Some shift workers may also feel guilty for working during the weekend, while their kids are at home, especially, for lone parent households. Most of them when they get home from a hard days work have to divide their time between domestic chores and child-care, which leaves them with no time for themselves. As a result, they may resent the fact that the weekend shift interferes with family time, and time for themselves.

### ROTATING SHIFTS

Female switchboard operators and male porters who work the rotating shifts, and have spouses whom are shift workers on a alternating schedule as well, are the least satisfied with their marital relations. For example, they complain about the fact that they do not spend enough time with their spouse.

A 43 year old female operator claims:

My husband and I do not spend very much time together. Because we both work odd hours. It's like one comes in, and the other goes out, or we see each other at 3 o'clock in the morning, or whenever we can (9).

A 42 year old male porter claims:

Since, we are both on shift work, sometimes we see each other on weekends and sometimes we don't see each other at all, it depends. It is hard, and we try to cope with it the best we can. (44)

Others have complained that alternating work schedules, interfere with their sexual relations. For example, a 45 year old female operator states:

I usually feel like I don't spend enough time with my spouse. However, it has to do with more his hours than my hours. Because he was always on night shift, before I got on night shift and he was working nights and I was working days. I don't even know how we had two kids. It was probably through immaculate conception! (43)

A 44 year old male porter and father of 2 children, claims:

She's not there, I am not there. I guess it does affect our sexual relations in a negative way! (45)

Female switchboard operators and male porters have revealed that they frequently argue with their spouses because their work schedules keep interfering with their time together. For example, a 38 year old female operator states:

We usually argue because, I am not home when he wants me to be home. Also, because I have to punch a clock, he doesn't have to punch a clock because he is self-employed and it's a problem! (46)

A 36 year old male porter explains the following:

We argue quite a bit. It has to do with the fact that we are both on shift work. Sometimes, when we have to go to a supper, it does get in the way. Sometimes, it would be nice to take a day off. But, it doesn't always work out that way. There are the occasions it does happen. My wife being on-call, sometimes she gets called in the

middle of the night to go to work. When she comes home the next day she is pretty tired. It does interfere!  
(42)

Finally, switchboard operators and porters find that it is difficult to cope at home because of the different work schedules they have with their spouses. For example, a 43 year old female switchboard operator claims:

Yeah, sometimes I am unable to cope. Well, because of the schedules. Like when I come home from work at night I want somebody to talk to, and he's not there, he's gone. I call him at the restaurant, he's busy, it's a problem! (9)

A 29 year old male porter claims that it is difficult to cope when both partners are on shift work, but, claims he has found a way to make it work:

I am sure it would have been easier if at least one of us had a fixed schedule. And we wouldn't have to be in a rush all of the time, worrying about whether the kids are taken care of. All the chores are done, who does what, and when. It can be a real pain! How we make it work, that's a good question! The best thing is to take it day by day, and that's exactly what we do. We don't plan ahead for really special things. We know our schedules day by day. We are a couple who likes organization in our lives.(14)

Regardless whether they were male or female, all respondents have revealed that their marital relations are negatively affected, especially if their spouses are shift workers, and work rotating shifts as well. They have claimed that shift work interferes with time spent with their spouses. It causes more arguments, and that their sexual relations are adversely affected. Most of them claim that it is difficult to cope at home because of the fluctuating schedules. Nothing is ever planned way ahead of time, due to the fact that their work schedules may conflict with planned recreational activities. So, for these workers, their home life and social life is usually on stand-by. In other words, things can only be planned at a moments notice. Most of them agree that they would be more satisfied in their marital relations if at least one individual from the

relationship was not on a rotating shift schedule. Nevertheless, most male porters do not mind working rotating shifts, even though at times it may interfere with their social and family life. The reason for this is because child care and household responsibilities are primarily their spouses' responsibilities, and therefore male porters perceive shift work differently from female switchboard operators.

In conclusion, female switchboard operators and male porters who are married, and have children; who have spouses who work a rotating schedule, claim that there are a number of roles that can be adversely affected when working rotating shifts; primarily, the care giver role, social companion role, and sexual partner role. As a result of this, marital unhappiness, and family friction and conflict occur. Thus, workers are less satisfied with their family life. This has been further emphasized by Carpentier and Cazamian, 1978; Monk and Folkard, 1985. Interviews also reveal that regardless of gender or occupation, most shift workers dislike working the weekend shift. The reason for this is because while they are working, everyone else is at home. It interferes with any type of recreational activity with the family. It also gets in the way of household chores, grocery shopping, and errands, which were not accomplished during the week. Furthermore, weekend shifts affect single mothers more because children are usually home from school or day care, and mothers may feel guilty for not spending the time with them, because they are always working during the weekdays, and on weekends. In addition to this, as soon as the mothers get home from work, household chores and child responsibilities, awaits them. Therefore, they have to divide their attention between the two tasks. As a result, single mothers who are shift workers feel they do not spend sufficient time with their children.

The interviews reveal that working the permanent night shifts does not interfere with the care-giving role and amount of time spent as a family unit. Because workers have adjusted their home routines accordingly. For instance, the night shift enables workers to consolidate their free time so as to give them a morning or

afternoon of leisure, to do "odd jobs around the house" (Carpentier and Cazamian, 1978). This advantage is generally welcomed by the workers and constitutes an important factor of adaptation to night work. Thus, it does not affect the domestic routine of workers. However, it may affect workers in another way. For instance, most workers after a day's work come home and are usually greeted by family members. The difference for the night workers, is by the time they get home, everyone is already in bed, sleeping. As a result of this, workers may feel alienated from other family members. Night work also affects the sexual relations of shift workers, especially if their spouses are on day work.

The shift most porters and switchboard operators with dependents, are satisfied with is the morning and early afternoon shift. The reason for this is because they obtain an early start and finish early in their day. All domestic chores are done before or after their shifts. Mealtimes, are spent together as a family. These shifts are very similar to day work. The only difference with permanent day shift work is that it reduces, "rush hour rage." Workers do not have to worry about traffic, because they get to work, or come home from work before or after peak load times. It reduces travel time and its costs. This has also been emphasized in the literature by Bohlander and Hinman, 1977, as one of the advantages of shift work.

## **CHAPTER 9**

### **SHIFT WORK AND LEISURE**

This chapter will examine the amount of time switchboard operators and porters spend in various social roles, particularly the types and amount of perceived interference between shift work and social life.

Each respondent was asked whether shift work interfered with being able to participate in various social activities. Most female switchboard operators and male porters who had dependents (22/46=total sample size) claimed that family responsibilities were what interfered more with these activities and relations. This does not correspond with what was found in the research by Mott, Mann, McLoughlin and Warwick, 1965; Dunham, 1977; and Simon, 1990) which reveal that shift work gets in the way of spending time with formal and informal relations and in participating in recreational activities. For instance, A 40 year old male porter explains how family life interferes more with recreational activities than does shift work:

I don't think it is shift work that causes you not to have a social life. Especially, when you have the children to take care of, when you get home. So, going out for a drink or a dance, is usually out of the question. There is no time. Apart from that, my wife and I, really don't socialize very much. But, that's based on personal choice. We basically stay to ourselves, we have our friends that we basically associate with, and that's about it. (13)

A female switchboard operator and male porter claim that they do not participate in any leisure or outside activities without their families being involved. For example, a 45 year old female operator explains:

I really don't do any of those things, clubs, sports, etc., I am more of a home-body. I like to rent movies, and watch it with the family. And we make a big event out

of this. My husband and I make the pop-corn. And, we all spend a relaxing evening together at home. (38)

A 33 year old male porter states:

Work doesn't really interfere with outside activities, because I am usually home by four thirty. I could be in a club if I wanted to, but I can't right now, because of the family, work has nothing to do with it. My family comes first! (4)

In terms of spending time with relatives and friends, male porters and female switchboard operators, do not feel shiftwork interferes with this. For instance, a 33 year old female operator reflects the overall attitudes of all the male and female workers with dependents. She writes in her diary:

If I choose to have an outing on a date I am working, well, of course, I have to check the time, and make sure I don't work too late, because I have to wake up the next day. And I have to have someone look after the kids. The kids aspect is much more alienating than anything else. The weight of family life is much more, than being with friends, relatives, or simply spending time alone (1).

Unlike the research by Mott, Mann, McLoughlin, and Warwick (1965); and Dunham, (1977) and Simon (1990) the interviews and diaries reveal that family life is what may prevent some shift workers from indulging in social activities, and shift scheduling is not its main cause. However, this is not to presume that married shift workers with dependents' never participate in any leisure activities. What it does assume is that many married shift workers who have children overextend themselves out of guilt and a desire to compensate for their lack of availability (this is consistent with the 1981 study conducted by Finn) and this is especially true when they work the rotating weekend and night shift. In other words, the little time they spend with their children, takes them away from indulging in leisure activities, outside the home, away from their



families. For instance, a 49 year old male porter, and a father of 3 children ages 5, 14, and 16 states:

My wife and I rarely go to dance clubs alone. Whenever we do go out, which is not often, we bring the whole family with us. We'll go to restaurants or movies on weekends, because that is the time my two older daughters are not in school. (20).

Social activities and leisure time is mostly spent with their families. Respondents did not complain about spending time with relatives and friends. This indicates that male and female shift workers, who have dependents, their families is what concerns them the most, and any free time that they have will be spent mainly with them.

For male porters and female switchboard operators that are single with no dependents (17/46), it seems shift work, specifically, rotating shifts and permanent night shifts interferes with their social activities. For instance, a 26 year old male porter explains how working rotating shifts prevents him from participating in any type of leisure activity:

Let's say you pay one hundred and seventy dollars to join a gym, to take tennis lessons. For three months they ask you to work days, but, your tennis lessons are during the day. Because you thought you would be working nights, and now, because you are called in to work days, you can't go for your tennis lessons. You are stuck, you can't really plan ahead for the next week. I can't plan trips, I can't plan to go away for the weekend, it is impossible, because I am on-call every weekend. I was in a sport, and it was every Wednesday evening, so I had to quit the sport. Shift work interferes very much. (5)

A 25 year old female operator who works the night shift explains:

It can be difficult. I like to go swimming. And swimming isn't normally in the evening. And if I am working from 4:00 p.m. to midnight, like today, I can't go swimming. I would go with a friend, to go swimming together, and today he had to go by himself.

Or, I can get him up at six thirty in the morning, to go swimming, but, I don't think he will get up. If I am working four to midnight, it is difficult for me to do that anyways. If I really want to do something, I will plan it, in advance. Like, I have tickets to go see a play at the end of February, and I told my boss, I am not available to work on this night. (41)

These findings are consistent with what has been cited in the literature by Dunham, 1977; Carpentier and Cazamian, 1978; Finn, 1980; and Simon, 1990. The interviews have revealed that although shift work may prevent individuals from participating in social activities, such interference only occurs if individuals allow work to be their first and foremost priority, as one 26 year old male porter explains:

Let's say I am in a restaurant eating supper. And I get paged into work, either I don't answer my pager, or I call them back and tell them that I am eating supper, and I could be at work in an hour and a half, instead of the designated hour. It's up to them to tell you that they can wait, or not. A lot of times they will page you and they will give you a few days. (5)

While others claim that they would rather sacrifice an appointment in order to make more money. For example, a 21 year old female switchboard operator states:

Working shift work, though, can be a problem at times. If I didn't have to worry, say I was living at home, and I didn't have to worry about bringing in an income, it would be different. I would say, no, I won't accept the shift because I have a doctor's appointment or whatever. But, when you know you have to bring in a certain amount, you have more responsibilities, and you have to think of work first. (12)

Rotating and permanent night shift work, may at times interfere with the social and leisure activities of single male and female shift workers. At times, it has to do with the fact that workers would rather go to work and make money, than participate in social activities. But, some workers have been able to work around these problems by either switching shifts with other co-workers; or by simply giving advance notice to

their supervisors that on a particular date they would be unable to work, thus, making time for leisure pursuits.

Research by Mott, Mann, McLoughlin, and Warwick (1965); Maurice (1975); Dunham (1977); Finn (1980); and Simon (1990) reveals that rotating shift workers have difficulty in keeping contacts with secondary groups ( the extended family, friends, and neighbours). This is especially true for single male porters and female switchboard operators. The interviews reveal that as a result, workers feel alienated from family and friends.

For instance, a 28 year old male porter states:

The only time I felt alienated was when I worked the night shift, all my friends went out, and I had to get in my car and go to work. Nobody's working nights. My job comes in between my relationship with my friends.  
(21)

A 29 year old female operator explains:

Sometimes I do feel alienated. Holidays sometimes, Christmas, New Years'. Everybody takes those for granted, that you are going to spend those with your family. But, at both hospitals, I am required to work one of them, but, I always work both of them. So, I think holidays, vacation time, that's when you feel more alienated from the rest of individuals. Because you want to freely spend time with them. And, you don't always have to watch your clock. You are either coming from a shift, or leaving to go to a shift. You have a birthday party and you may switch from a day shift or evening shift. Where you are going to have to leave a birthday party early to come in for a four o'clock shift. (16).

Rotating and night shifts interferes with time spent with family, friends, etc. The most alienating factor of shift work is when everyone is home enjoying statutory holidays; and, shiftworkers are working instead. The reason why this affects single shift workers more than married workers is because during the interviews, I discovered that

it is mostly part-time, single, male and females with no dependents, who work rotating shifts.

Workers do attempt to make time for formal and informal relations. A 27 year old female operator explains:

It is awkward, because most of my family have their own children, and they have weekends off. So, any activities they plan are on weekends. Which I can't participate in, very much. Unless I am always switching my shift, or giving my shift away. I would do that for birthdays, for special occasions, Communion, things like that, I will give my shifts away. The weekends, I find it difficult, with the kids, my brothers and sisters, they are always doing activities during the weekends. Evenings, I will set aside sometimes, when I am not in school. I do find it difficult setting aside time. If you are going to set an occasion you are going to give me advance notice. So, I can plan accordingly. I feel when I do want to participate in activities with friends and family that I do want to spend time with, it is always going to involve, some type of shift changing, or giving away a day, or making some kind of accommodation. I am constantly adjusting my schedule. (22)

A 24 year old male porter states:

For the club scene, and the evening scene, that's no problem. Because I am on the evening shift like I said. At ten thirty, I finish, meet friends downtown or somewhere and we can do stuff. During the day, I work on weekends, and it is hard for a group to get together. Because I am working, I'll get called in, and it is harder for that. You can't plan ahead, you have to plan a day before, and that's it. (23)

Mott, Mann, McLoughlin, and Warwick (1965) Dunham (1977) Finn (1981) and Simon (1990), indicate in their research that for rotating shift workers, there is an added dimension of difficulty whereby their friends, neighbours, etc., have trouble keeping track of their schedules. However my interviews reveal that if shift workers are provided with ample notice, they are able to adjust their work schedules, to

accommodate some time for family, friends, neighbours, and social events. Thus, it is not a totally impossible situation as the research would have us believe. As long as shift workers do not allow their work schedules to dictate their lives.

In conclusion, male porters and female switchboard operators with dependents, claim that family responsibilities limit their social activities and recreational activities, more than shift work. They also reveal that most of their leisure time is spent with their families; watching television, going to the movies, and restaurants together. Female switchboard operators and male porters who are single, with no dependents, reveal that permanent night shifts, and rotating shifts do interfere with their formal and informal relations, and it also gets in the way of their leisure activities. This is the time when most of their friends are enjoying leisure activities.

## **CHAPTER 10**

### **AGE EFFECTS**

This chapter will examine how age affects the perceptions of individuals who are working shifts. It will examine workers in their twenties and thirties, versus workers in their forties and fifties. It will investigate whether younger or older workers perceive shiftwork as having more benefits or disadvantages, and whether in the long-term they still see themselves working in the same occupation.

The findings reveal that 10 out of 23 female operators and 9 out of 23 male porters are between the ages of twenty to thirty. Most of the female operators and male porters between the ages of twenty to thirty (19/46) revealed that they feel that there are more advantages to working shift work. For example, a 21 year old female, who has been working as an operator for one year states:

If you have a life style that works well with shift work, then, it is fine. I personally have no problems with it. And if you are a person that can adapt, like I said, instead of having supper with friends, you invite them over for breakfast. But, then, there are times where you have to have friends who want to come over for breakfast. (12)

A 26 year old male, who has been working as a porter for five years, explains:

There are more advantages. The reason being, I believe most full-timers on day work, work Monday through Friday. And, they sit Sunday night at home, and complain to themselves, and say, Oh Great! Another week of work! Monday, my shift begins at five in the evening. If I get called into work, for the next day great, if not, it's no big deal. But, at least, I am not following some rigid routine. I would rather give up my leisure, to work shift work. (5)

A 29 year old female, who has been working as a switchboard operator for 4 years comments:

I think, working different hours has an advantage. You get a spice of life, it is not redundant! (16)

Finally, a 33 year old male, who has been working as a porter for 4 years, states:

If the person likes it, why not work the various hours, especially the rotating shifts. It makes life more interesting. (40)

Regardless of gender, or type of occupation, younger shift workers, between the ages of 20 to 30, feel that there are more advantages to working shift work, specifically, rotating shifts because employees are able to adjust work hours to their own rhythms (Bohlander and Hinman, 1977). In other words, workers are able to choose the shifts they want to work, and accommodate their social life accordingly.

However, the findings also reveal other reasons why younger workers prefer working a rotating shift schedule. For instance, each respondent was asked the question, "...in five or ten years from now, do you still see yourself doing the same job?..." And the following, is a summary of the responses. A 29 year old female operator reveals:

No, I think you can do it for a limited amount of time. I think it will serve its purpose, in life, while you are in school. While, you are taking care of things, I think, everybody needs a healthy change sometimes, and I think I am at the point where next year I am ready for a healthy change. I think it will have served its purpose for me. (16)

A 22 year old female operator claims:

I do not plan to make this into a life long career (3).

A 29 year old male porter explains:

I don't plan to be here for another five or ten years. If I start working everyday at my other job, as an electrician, then, I wouldn't need to be here. (14)

A 32 year old male porter states:

I don't think I will be doing the same job. Because I think it could be time to move on after ten years. I am

going to go back to school, and get some computer knowledge in me. (19)

According to the interviews, the reason why younger workers feel there are more benefits in working shift work is because for most of them the job is temporary and part-time. They are working shifts to accommodate other responsibilities, such as being able to attend school, keep a second job, or to earn a better pay. This is consistent with the findings of the US Department Of Labor, 1986, and Sunter, 1993. Further, those that like shift work do not have family responsibilities.

This also explains why some younger workers do not mind working the night shifts and weekend shifts. For example, a 29 year old female operator explains:

I have worked on weekends for 4 years. Mostly due to the fact that I am still in school, and when you are in school, you are in school during the weekday. And, if you want to earn money to pay for school, to pay for rent, or just for everyday activities, you have to work on weekends. I don't mind working on weekends because of this. (16)

A 22 year old male porter states:

I enjoy working the weekend shifts, because there is less of a workload. There is less people around because all the testing places and clinics are closed. There is no traffic coming in. (31)

A 26 year old male porter claims:

I prefer the evenings because it is more quiet, there's less people, I am by myself, there is less responsibility, there is no dispatcher, no supervisors, there's nothing, we do all our own work, we work at our own pace. And sometimes I take advantage of this quiet time, I'll do my school homework, or catch up on some reading. For me, this is the advantage of night shift. (5)



A 21 year old female operator explains:

To tell you the truth, I don't mind working the night shift. Because there is less pressure, and you have less turmoil in the department, because there are less people working. (12)

The interviews reveal that younger workers prefer working shift work, specifically weekend and night shifts, because they feel they have more freedom from supervision, and more control over their work pace, and work methods. This is consistent to Hood's 1988 study. Younger switchboard operators and porters also note the benefits of a quieter workplace in that it gives them time to concentrate, to read, or do school homework. And also to earn extra money on the side.

There are 13 female switchboard operators and 14 male porters between the ages of forty to fifty in the sample. Some female switchboard operators (5/13) and male porters (14/14) in their forties and fifties agree that there are advantages to working shiftwork. For instance, a 43 year old female, working 10 years as a switchboard operator explains what are the benefits of shift work:

Benefits of shift work, it depends. Sometimes if it's a Thursday, and I go do my groceries, I work in the afternoons, and I go do it in the morning. For me, it's a benefit because there is no rush in the morning. I do my groceries, or I get to clean my house, so for me, this is a benefit. (7)

A 57 year old female, working 12 years as an operator, stipulates she likes her hours because they are permanent:

The schedule, I have now, the fixed 9:30 a.m. until 1:30 p.m., suits my life-style. I have time to spend with my partner. I have the whole afternoon to myself, to do whatever I want. (18)

A 57 year old male, working as a porter for 25 years, feels the flexibility of the hours is a positive aspect:

There are more advantages to working shifts. Someone gets sick, we are always covered. The reason for this is because the department has a recall list of workers, waiting to be called in at a moments notice. (6)

A 49 year old male, who has been working 16 years as a porter, explains he finishes early, and is able to go home earlier:

What I like about shifts is the fact that I am able to go home early, and have supper with my family. But, not only for that, I usually finish work at three forty five. And, when I get home, I usually get there before my wife and kids. It gives me a chance to relax in front of the TV, and take a nap, before everyone gets home. (20)

Older shift workers explain that the benefits of shift work are that they are able to pursue personal business and to attend to personal chores and it allows them to spend more time with their spouses or children. This is consistent with Carpentier and Cazamian's, 1978 findings. In addition to this, older workers have claimed that if they ever call in sick, it usually does not create any problems due to the fact that there is a large pool of employees who are on stand-by; waiting to be called into work whenever it is available. This explains that older workers are more likely to have permanent status, and they do not mind working shifts when it does not interfere with family obligations.

Older female switchboard operators also claim there are disadvantages to shift work. For example, a 43 year old female, working 10 years as an operator, reveals that it is more difficult to work shifts because of family responsibilities:

If you have children, it is a problem because you have to run your family-kids-husband-your friends-around your shift. If you're single, there's less responsibility. It's the opposite way, because you are free to come and go as you please, there are no responsibilities. (9)

A 45 year old female, who has been working 16 years as an operator, explains how it is better to work permanent shifts, than rotating shifts:

There are more disadvantages to shift work, again, due to the uncertainty of when you are going to work. However, if you work a fixed shift, you have less problems, less pressure, less stress. (28)

This same operator explains that shift work, specifically rotating shifts, negatively affects the health:

It's hard on your body. Because you are not only doing evening shift, you are doing evening shift, combined with day shift. Plus, I believe that it is harder in the long run, I think the first couple of years that you do shift work, it is not as bad. You are more energetic, you are more willing to compromise, it is a short term way of life. But, I think to do shift work in the long run, is more detrimental to your health. More so, if you work regular hours. It is harder to do. The longer that you do it, I think the more difficult it becomes to tolerate it. To tolerate working the weekends, the evenings, etc. But, the longer you do it, the worst it becomes. Because I feel shift work has underlying affects that is not apparent in the first couple of years that you are doing it. I think that in the long-run, even psychologically, you know that if you work weekends, every second weekend, for the rest of your life, the thought of that for a long period of time, it becomes more detrimental. Your energy level, your motivation, decreases with time, and shift work, will finally take its toll on you!

The question is, why older women claim that there are disadvantages to shiftwork?

Firstly, as was mentioned previously, switchboard operating is a very stressful occupation, causing more physical and psychological health problems. In addition to this, given the fact that most women between the ages of forty to fifty, have family responsibilities; and are usually in charge of coordinating the family schedules in accordance to their shift schedule and that of their spouses. All of these things added together increases the stress, making shift work less desirable for older women. Thus, explaining how the content of work, gender, and family responsibilities, determines who is more likely to be dissatisfied working shifts.

Older men who are porters, are more satisfied with shift work. It does not only have to do with the fact that the nature of their occupation is less demanding than that of switchboard operators. But, it is also has to do with other factors.

For example, when each respondent was asked the question in "...5 or 10 years from now, do you see yourself doing the same job?.." Most of the older male porters said that they would stay, and these are the reasons they gave:

"...Yes, I would stay, I have no choice, I have to support a family..." ( a 49 year old male porter, and father of 3 children ages, 5, 14, 16).

"...The benefit is security, you have a steady job, the money is not bad, the hours are not bad..." (a 57 year old male porter, and father of 2 daughters ages 20 and 25).

Hence, this indicates that most of the older male workers are sole wage earners (11/14) and therefore, whenever there is work, regardless whether it is shift work, it does not make a difference, as long as it provides for their families.

The older female switchboard operators responded to the same question differently. For instance, a 43 year old female operator and mother of 2 children ages 14 and 16 states:

That's a good question, because I don't know. I wouldn't really like to still work here. If I find myself something more stable, with the same salary probably I would move on. I don't wish to do this for the rest of my life. (7)

A 45 year old female switchboard operator claims:

No, I hope better changes are ahead for me. (28)

This reveals that most of the older women are not principal wage earners (11/13), and changing jobs becomes more of an option.

In conclusion, it seems that female operators and male porters in their twenties believe there are more advantages to working shift work, because they do not see themselves doing this in the long-term, and also because most of them have not been working shifts for a long time. For example, most of the younger respondents have been working as switchboard operators and porters between one year to maximum 5 years and therefore, the negative impact of shift work is experienced to a lesser extent. Older switchboard operators and porters who have been working longer than this, (between 16 and 25 years), may regard shift work as less satisfactory. However, given the fact that male porters do not complain about working shifts in contrast to female switchboard operators, gender linked responsibilities and occupational differences appear to be the important influential variables.

## **CHAPTER 11**

### **CONCLUSION**

This study has revealed that switchboard operating is a much more stressful occupation than portering regardless of the shift worked. Further, the stress level of operators increases when they work on rotating shift schedules. Those operators who work on permanent night shifts also complain about increased stress and complain about stress-related symptoms. Porters, on the other hand, do not appear to suffer from job-related stress, and shift work does not appear to have much effect on stress levels.

The findings reveal that switchboard operators with dependents, are more likely to perceive shift work, specifically rotating and permanent night shifts, as interfering with their marital and family roles. Most female switchboard operators are part-time and working to add supplemental means in the household, and even when employed are responsible for coordinating the individual schedules of family members to match that of their working husbands, as well as their own. As a result, females may feel overburdened, and working shifts, adds to the pressure. Most porters do not perceive shift work as interfering with marital and family roles because most porters are full-time principal wage earners, and, they see their work as necessary to provide for their families. Hence, gender defined roles in the household appear to influence perceptions of shift work. Most men have adopted what has been termed as the "provider role," and because of this, have learned to separate their family responsibilities from work responsibilities. Most women, have adopted the "care-giving role" (Folkard and Monk, 1992), and have a more difficult time separating work from family responsibilities.

Male porters, like female switchboard operators, agree that rotating shifts, specifically weekend and night shifts, may at times, reduce the amount of time spent with their spouse and their children. They also reveal that it is more difficult to cope with shift work when both partners are on a rotating shift schedule, because it interferes with child-care, marital relations, and recreational time. Thus, role conflict and alienation may occur.

Workers with dependents, regardless of their occupation, claim that shift-scheduling in conjunction with child-care responsibilities, is what may prevent them from indulging in "out-side" leisure activities, away from their families. Many shift workers who have children overextend themselves and compensate to their families for their lack of availability, and the little time they spend with their children, takes them away from indulging in leisure activities. This also explains why most female switchboard operators and male porters do not feel alienated from friends and relatives, because any spare time that they do have will be spent with their spouses and children. But, unlike female operators, male porters are able to accept this as a criteria of their job requirements. Whereas, female operators tend to feel guilty over the fact that shiftwork reduces the time spent with the family.

Both female operators and male porters who have dependents, claim that there are also some advantages to working shifts. For instance, they have claimed that they prefer to work the early morning and afternoon shifts, because they are able to spend more time with their families, and it makes it easier to organize family and household responsibilities. In addition to this, it also allows them to get home earlier, and, in some cases, they have been able to avoid the "rush hour rage," and have arrived at work, before or after peak load times. This is consistent to what has been found in the research by Bohlander and Hinman, 1977; The US Department Of Labor, 1986; and Hood, 1988.

What the research ( Presser, 1986, 1988; Monk and Folkard, 1992) failed to reveal was the fact that shift work, specifically rotating weekend and night shift may cause some problems for female operators and male porters with dependents. What has been made clear throughout this study is the fact female operators and male porters, have always managed to accommodate family time and leisure time around the hours they work by not planning ahead, or organizing themselves on a daily basis, thus preventing shift-scheduling from constantly interfering with their marital and family roles as well as leisure activities.

The interviews have also revealed that female switchboard operators and male porters both of whom are single, and who do not have children, are more likely to feel the negative impact of rotating and night shifts on their social lives. The reason for this is because most of them do not have family responsibilities to contend with. As a result of this, some feel that they are socially alienated from friends, relatives, etc. This corresponds to what has been cited in the literature by Dunham (1977) Finn (1981) and Simon (1990). However, many of the respondents in this study have been able to work around those problems by either switching shifts with other co-workers, or by simply giving advance notice to their supervisors that on a particular date, they are not available to work.

Furthermore, when comparing female operators and male porters in their twenties, versus those in their forties and fifties. It seems that younger shiftworkers, regardless of occupation or gender, believe there are more advantages to working shift work, specifically weekend and night shifts. They like to work during these times because the hospital is less busy, there is less supervision, they take advantage of this time by doing their job at their own pace, most of them work shifts to accommodate other responsibilities such as being able to attend school, or keep a second job. All of this is consistent with what has been found in the literature by the US Department Of Labor 1986, and Sunter, 1993.



Maurice, 1975; Jamal and Baba, 1990; claim that individuals on rotating shift schedules are more likely to take more sick days for serious illness than those individuals who work permanent shifts. However, respondents in my sample revealed that regardless of occupation, or gender, those who work rotating shift schedules are not frequently absent from work because they are part-timers, and their sick days are not paid for. Unlike the findings of Maurice (1975); Jamal and Baba (1990); my research revealed that switchboard operators and porters who work permanent shifts are more likely to take sick days, because they are full-timers, and are financially covered for these days. Both switchboard operators and porters tend to call in sick during the morning and afternoon shifts. This does not disclaim the fact that workers on rotating shifts are more likely to call in sick for serious illness (Jamal and Baba, 1990). However, it does suggest that, regardless whether workers are on a fluctuating or fixed schedule, their economic status will be a stronger determinant of whether they decide to take sick days or not.

Switchboard operators and porters claim that on-the-job errors are more frequent during the day, and less incessant during the night shift. However, during the night shift, on-the-job errors tend to be more severe because of lack of supervision. This is consistent to the findings of Maurice (1975); Carpentier and Cazamian, Walker (1978); Monk and Folkard (1992). The interviews and diaries have revealed that switchboard operators frequently commit on-the-job errors due to the stress level of the job. Porters may also commit on-the-job misjudgments, but it happens more infrequently.

The Circadian Theory provides us with information on how shift work negatively affects the sleep/wake cycle of individuals, and how their bodily rhythms can never fully adjust to this method of working. The Psychological Paradigm describes shift workers' experience of fatigue and stress, and their inability to cope at home or at work due to lack of sleep or irregular sleeping patterns. These models are

not specific about how these problems vary according to the shift workers occupation, gender, age, socio-economic status, family and child-care responsibilities.

The Sociological Model also describes why individuals are unable to cope with shift work, by focusing on role conflicts and social relations. For instance, the Sociological Model explains that working various shifts, results in varying effects on spousal relationships and other family responsibilities (Mott, Mann, McLoughlin, and Warwick, 1965; Maurice, 1975; Carpentier and Cazamian, Walker, 1978; Charlton and Hertz, Cunningham, 1989; Simon, 1990).

The Sociological Model is useful in making us understand why female switchboard operators encounter more difficulties. It explains the fact that family responsibilities weigh heavily on most female switchboard operators shoulders, and these responsibilities increase with age. They have to constantly worry about making sure their work hours do not conflict with family time. This does not only have to do with the fact that women are primary care-givers, but most women with dependents, work part-time rotating shifts and they work to add supplemental means in the household. Male porters have less role conflicts of this nature because they tend to be less involved in these kinds of family roles.

Switchboard operating is also a more demanding occupation than portering. This in itself explains why female switchboard operators experience more anxiety, and stress, in contrast to porters.

Each of these Paradigms (The Circadian, Psychological, and Sociological Theory); only explain the negative impact of shift work, and how shift workers have a difficult time living a healthy and normal life. The interviews and diaries in this study have revealed that it may be more difficult for individuals on a rotating shift schedule to manage their time in comparison to those individuals who work permanent shifts. But, one thing that has been made clear throughout the study, is that shift work does not always constrain an individual from living a healthy and normal life. Switchboard

operators and porters have found ways to cope with shift work. Role conflict, and social alienation occurs less frequently than what previous research suggests. Shift workers do not live in an impossible situation.

There have been some limitations to the study. For example, the study compares men and women each of whom worked in different occupations. As a consequence of this, female switchboard operators, because they work in an occupation which is stressful, were more likely to view shift work negatively. But this research did highlight gender differences in the way in which respondents organized their lives to accommodate shift work.

Other limitations to the study are the following: I was interested in the absentee rates of both switchboard operators and porters. I wanted to get the exact proportion of these rates from documented records which I believed the supervisors would have on file. When I asked the supervisors for the absentee list of the employees, all the supervisors told me that Human Resources had this type of information. However, I was unable to obtain these records, but I did ask each respondent, "...how many times were you absent from work, last month and this month?...", and relied on their responses for this information.

The advantages of field research such as this, are that more interpretive, contextual data can be included (see Babbie, 1995:300). However, this approach does not lend itself to generalizations. Nevertheless, it is intended to be both informative and suggestive of the consequences of shift work in other settings.

Since research indicates that workers are having difficulty coping with shift work, it would seem to be a good idea for industries to adopt pamphlets, booklets, and videos, that provide workers with strategies to cope with the negative effects of shift work and work that is generally stressful. This may provide workers with better insights on how to ameliorate their shift problems. Furthermore, industries should seriously consider implementing policies that provide management with shift work

awareness programs that educate management on how to make the working environment more pleasant for workers. For example workers would undoubtedly benefit from company shift work clinics where physicians, chronobiologists, sleep clinicians and family therapists could be available to help those who are coping poorly. Management could be educated on the importance of adopting within their establishment resources which can be more helpful in enabling their shift workers to cope, for example, implementing programs that assist employees to better integrate family needs with work responsibilities for both men and women.

## **BIBLIOGRAPHY**

- Akkinawo, Ebenezer, Olutope. "Psychopathology Of Shift Work." Social Behavior And Personality. Volume 17, no. 1, 1989, pp. 103-109.
- Babbie, Earl. The Practice Of Social Research- Seventh Edition. Wadworth Publishing Company, United States Of America, 1995.
- Akyeampong, E.B. and Siroonian, J. " Work Arrangements Of Canadians- An Overview." Perspectives On Labour And Income. (Statistics Canada Catalogue 75-001 E) 5, No. 3, (Autumn 1993): pp. 8-10.
- Bunnage, D. "Study On The Consequences Of Shift Work On Social And Family Life." In The Effects Of Shift Work On Health, Social and Family Life. Dublin, European Foundation For the Improvement Of Living And Working Conditions, (1981) (225).
- Bernstein, Irving. "Time And Work." Presidential Address. Industrial Relations Research Association. Proceedings Of The 29th Annual Winter Meeting, September 16-18, Atlantic City. Madison, Wis.: IRRA, 1976.
- Betancourt, Roger, R & Clague. Capital Utilization-A Theoretical And Empirical Analysis. Department Of Economics, University Of Maryland, Cambridge University Press, Cambridge, 1981.
- Bohlander, George, W. & Hinman, Felicitas. Flextime-A New Face On The Work Clock-A Policy And Practice Publication. Institute Of Industrial Relations, University Of California, Los Angeles, 1977.
- Calasanti, Toni, M., and Bailey, Carol, A. "Gender Inequality And The Division Of Household Labor In The United States And Sweden: A Socialist-Feminist Approach." Social Problems. Volume 38, 1991, pp. 34-53.
- Carpentier, J. & Cazamian, P. Night Work-Its Effects On The Health And Welfare Of The Worker. International Labour Office, Geneva, 1978.
- Colquhoun, W. P. & Rutenfranz J. Studies Of Shiftwork. Taylor & Francis Ltd. London, 1980.
- Cunningham, J. Barton. "A Compressed Shift Schedule: Dealing With Some Of The Problems Of Shift-Work." Journal Of Organizational Behavior. Volume 10, no. 3, (July 1989), pp. 231-245.

- Czeisler, C.A., & Moore-Ede, M.C., Coleman RM. "Rotating Shift Schedules That Disrupt Sleep Are Improved By Applying Circadian Principles." Science. Volume 217, 1982, pp. 460-463.
- Czeisler, C.A., & Allan, J.S. "Acute Circadian Phase Reversal In Man Via Bright Light Exposure: Application To Jet Lag." Sleep Research, 1987, Volume 16, pp. 605.
- Dumont, M., Montplaisir, J., Infante-Rivard C: "Insomnia Index Among Nursing Personnel With Past Experience Of Night Work: Results Of A Survey." Sleep Research. 1988, Volume 17, pp. 371.
- Dunham, R. B. "Shiftwork: A Review And Theoretical Analysis." Academy Of Management Journal. Volume 2, 1977, pp. 624-634.
- Dunham, R.B. Community Structure And The Experiences Of Shift Workers. Springfield, VA: National Technical Information Service, 1979.
- Finn, P. " The Effects Of Shift Work On The Lives Of Employees." Monthly Labor Review. Volume 104, no. 10, 1981, pp. 31-35.
- Folkard, Simon, & Monk, Timothy, H. Hours Of Work Temporal Factors In Work-Scheduling. John Wiley & Sons Ltd., Chichester, New York, Brisbane, Toronto, Singapore, 1985.
- Froberg, J.R. "Twenty-Four Hour Patterns In Human Performance, Subjective And Physiological Variables And Differences Between Morning And Evening Active Subjects." Biological Psychology. Volume 5, (1977), pp. 119-134.
- Gadbois, C. "Women On Night shift: Interdependence Of Sleep And Off-The-Job Activities." In A. Reinberg, N. Vieux and P. Andauler (eds), Night And Shift Work: Biological and Social Aspects, Oxford, Pergamon Press, (1981) pp. 223-230.
- Harrington, J.M. Shift Work And Health- A Critical Review Of The Literature. Report Commissioned By The Employment Medical Advisory Service Of The Health And Safety Executive, 1978.
- Hertz, Rosanna, & Charlton, Joy. " Making Family Under A Shiftwork Schedule: Air Force Security Guards And Their Wives." Social Problems. Volume 36, no. 5, (December 1989), pp. 491-507.
- Hood, Jane, C. " From Night To Day: Timing And The Management Of Custodial Work." Journal -Of- Contemporary- Ethnography. Volume 17, no. 1 (April 1988), pp. 96-116.

- Hochschild, Arlie. The Second Shift: Working Parents And The Revolution At Home. New York : Viking, 1989.
- Hunt, Janet G., and Hunt, Larry, L. "Dilemmas And Contradictions Of Status: The Case Of The Dual-Career Family." Social Problems. Volume 24, 1977, pp. 407- 416.
- International Labour Organization. Management Of Working Time In Industrialized Countries. Main Documents Of An ILO Symposium On Arrangement Of Working Time And Social Problems Connected With Shift Work In Industrialized countries. Geneva 3-11, May 1977.
- Jamal, Muhammad & Xie, Jia-Lin. Canadian Employees On Shift Work: How Much Do We Really Know? Working Paper Series, Faculty Of Commerce And Administration, Concordia University, Montreal, Canada, 1988.
- Jamal, Muhammad & Baba, Vishwanath. Shiftwork And Department-Type Related To Job Stress, Work Attitudes And Behavioural Intentions: A Study Of Nurses. Department Of Management, Concordia University, Faculty Of Commerce And Administration, Montreal, Canada, 1990.
- Lang, Peter. Studies In Industrial And Organizational Psychology-Night And Shiftwork: Long Term Effects And Their Prevention. Proceedings Of The VII International Symposium On Night And Shift Work, Igls. Austria, Frankfurt AM Main, Bern. New York, 1985.
- Loban, M.C. The Entrainment Of Circadian Rhythms In Man, In Cold Spring Harbor. Symposium On Quantitative Biology, Cold Spring Harbor Laboratory Of Quantitative Biology, Volume 25, 1960, pp. 325-332.
- Maclean, Ian & Bernau, Simon. The Economics Of Capital Utilization-A Report On Multiple-Shift Work. At The University Press, Cambridge, 1964.
- Maurice, Marc. Shiftwork-Economic Advantages And Social Costs. International Labour Office, Geneva, 1975
- Minors, D.S. & Waterhouse, J.M. Circadian Rhythms And The Human. Bristol, Wright PSG., 1981, (ch. 2, 7, 11, 14).
- Moline, M.L., Pollack, C.P., Monk, T.H. et al. "Age Related Differences In Recovery From Simulation Jet Lag." Sleep. Volume 14, no.5, (1991), pp.42-48.
- Monk, Timothy, H., & Folkard, Simon. Making Shiftwork Tolerable. Taylor & Francis, London, Washington, D.C., 1992.

- Morris, Lydia, & Lyon, Stina, E. Gender Relations In Public And Private-New Research Perspectives. British Sociological Association, St. Martin's Press, Inc., 1996.
- Mott, Paul, E., Mann, Floyd, C., Mcloughlin, Quin, & Warwick, Donald, P. Shift Work- The Social, Psychological, And Physical Consequences. University Of Michigan Press, United States Of America, 1965.
- Presser, Harriet, B. " Shift Work Among American Women And Child Care." Journal-Of-Marriage-And-The-Family. Volume 48, no.3, (August 1886), pp. 551-563.
- Presser, Harriet, B. " Shift work And Child Care Among Young Dual-Earner American Parents." Journal-Of-Marriage-And-The-Family. Volume 50, no.1, (Feb.1988), pp. 133-148.
- Proclamation And Orders In Council Having Force Of Law In The Province Of Quebec. An Act respecting the limiting of working hours. (Chapter 40, Assented to, 13th of April, 1933)
- Rathkey, Paul. Time Innovations And The Deployment Of Manpower-Attitudes And Options. Gower Publishing Company Limited, Avebury, 1990.
- Regestein, Quentin, R. & Monk, Timothy, H. " Is The Poor Sleep Of Shift Workers A Disorder?" American-Journal-Of-Psychiatry. Volume 148, no. 11, (November 1991), pp. 1487-1493.
- Rutenfranz, J. and Coloquhoun, W.P. "Shift Work: Theoretical Issues And Practical Problems." Ergonomics. Volume 21, (1978), pp. 737-874.
- Shelton, Beth Anne. " The Distribution Of Household Tasks: Does Wife's Employment Make A Difference?" Journal Of Family Issues. Volume 11, 1990, pp. 115-135.
- Silverstein, Pam, & SRB., Jozetta, H. Flextime: Where, When And How? New York State School Of Industrial And Labor Relations-A Statutory College Of The State University Ithaca, New York, 1979.
- Simon, Barbara, Levy. " Impact Of Shift Work On Individuals And Families." Families-In-Society. Volume 71, no. 6, June 1990, pp. 342-348.
- Smith, Dorothy, E. The Everyday World As Problematic: A Feminist Sociology. Boston: Northeastern University Press, 1987a.



- , 1987b. " Women's Inequality And The Family." In Families And Work.  
 Edited by N. Gerstel and H.E. Gross. Philadelphia: Temple University Press.
- Sunter, D. "Working Shift." Perspectives On Labour And Income. (Statistics  
 Canada) Catalogue 75-001 E., no. 1 (Spring 1993): pp. 16-23.
- Tait, Heather. "Sleep Problems: "Whom Do They Affect?" Canadian Social Trends-  
Statistics Canada. document no.# 11-008, (Winter, 1992).
- US Department Of Labor. Consequences Of Shift Work. BLS Publication No.86-  
 1231. Washington, D.C. US Government Printing Office, 1986.
- Walker, James. The Human Aspects Of Shift Work. Institute Of Personnel  
 Management Central House, Upper Woburn Place, London 1978.
- Wharton, Carol, S. "Finding Time For The " Second Shift": The Impact Of Flexible  
 Work Schedules On Women's Double Days." Gender And Society. Volume  
 8, no. 2, June, 1994, pp. 189-205.
- Wilson, James T., & Rose, Karen, M. The Twelve-Hour Shift In The Petroleum And  
Chemical Industries Of The United States And Canada: A Study Of Current  
Experience. Industrial Research Unit The Wharton School University Of  
 Pennsylvania Philadelphia, Pennsylvania, USA, May, 1978.

## APPENDIX A

**Table 1.****Distribution Of Sample.****23 FEMALE SWITCHBOARD OPERATORS.**

16 out of 23 female switchboard operators worked part-time, rotating shifts, none of them were principal wage earners.

**Out of these 16 females:**

5 female switchboard operators were single with no dependents (they either lived at home, or with room-mates)

11 were married/cohabiting with someone with dependents.

**Out of these 11 females:**

3 worked part-time fixed shifts, and they rotated on weekends.

3 had spouses who worked alternating shifts as well.

7 Female Switchboard Operators worked full-time, permanent shifts and were principal wage earners.

**Out of these 7 females:**

1 female switchboard operator was a single mother.

3 lived alone. 1 was divorced and 1 was widowed and 1 never married.

3 were married with no children.

**None Of The Female Operators were double-Jobbing.**

10 Out of 23 were between the ages of 20 to 30.

**Out of these 10 females:**

3 worked for 1 year.

7 worked between 3 to 5 Years.

13 Out of 23 were between the ages of 40 to 50 .

**Out of these 13 females:**

13 worked between 10 to 16 years.

**23 MALE PORTERS.**

8 out of 23 Male porters worked **part-time, rotating shifts, and 6 of them were not principal wage earners.**

**Out of these 6 males:**

4 male porters were **single with no children ( living at home or with room-mates).**  
 2 were **married, living with someone, had children, were the sole wage earners.**  
 2 were **married with dependents, wives worked rotating shifts as well.**

---

15 out of 23 male porters worked **full-time, permanent shifts, all of them were principal wage earners.**

**Out of these 15 males:**

6 male porters were **married, living with someone with dependents.**

**Out of these 6 males:**

2 had spouses that worked rotating shifts, and the men themselves only recently switched to working fixed shifts- I have compared their experiences of working rotating shifts as well as fixed shifts.

4 male porters were **married/ living with someone with no dependents.**  
 5 were **single living alone. 2 of them divorced, 3 of them never married.**

---

**13 OUT OF 23 MALE PORTERS WERE DOUBLE-JOBGING.**

**Out of these 13 males:**

All 8 **part-timers who were working rotating shifts were moonlighting at other jobs.**

5 **full-timers who worked permanent full-time shifts held a second job.**

---

9 out of 23 male porters were between the **ages of 20 to 30.**

**Out of these 9 males:**

2 worked for **1 year.**  
 7 worked between **3 to 5 years.**

---

14 out of 23 male porters were between the **ages of 40 to 50.**  
 8 worked between **10 to 16 years.**  
 6 worked between **16 to 25 years.**

## APPENDIX B



October 13, 1995

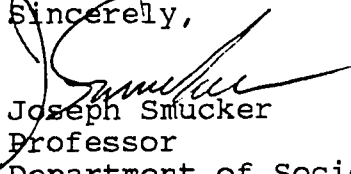
To Whom It May Concern:

Ms. Gina De Iaco is currently enrolled in our graduate program. As you may know graduate students working for their Master's degrees may choose to engage in original field research from which they are expected to produce a thesis. The thesis, in turn, is subjected to evaluation by three members of the Department faculty before the student obtains a degree. I should also mention that before the student begins interviews in the field, her or his project is scrutinized by an ethics committee in our Department.

Ms. De Iaco has chosen to study in detail the effects of shiftwork on employees. As part of her study, she wishes to collect in-depth data on the experiences of individuals currently employed at times other than typical daylight hours. Since hospitals require staffing 24 hours a day, they provide an ideal source of subjects to interview. It is for this reason that we would hope for your permission to interview a number of employees who are working other than day shifts.

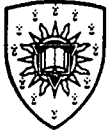
Upon completion of the thesis itself, Ms. Iaco will be pleased to furnish you with a summary of her findings. She can explain in more detail the nature of her project. Should you have any questions about this project, please do not hesitate to contact me.

Sincerely,



Joseph Smucker  
Professor

Department of Sociology-Anthropology  
Tel: 848-2151 or 848-2140



Thursday, October 19, 1995.

To whom it may concern:

I am a graduate student in Sociology at Concordia University. I am presently conducting a study on the impact of shift work and its effects on the worker's job performance and satisfaction, general health, social life, leisure time, personal relationships, family relationships, and child-rearing practices.

I would appreciate it if I were able to obtain interviews from your switchboard operators & porters. The interviews would be conducted either before they begin their shifts, or after they finish working their shifts, or during their breaks. In this way I would not be disturbing them while they are working. The interviews will last between 30 to 45 minutes and their responses would be strictly confidential and anonymous.

After my thesis has been successfully written and published, I will be more than happy to provide you with a summary of my thesis for the hospital's library.

Thank-you for your cooperation, it is sincerely appreciated.

Gina De Iaco.

## APPENDIX C



## **CONSENT FORM TO PARTICIPATE IN RESEARCH**

This is to state that I agree to participate in a program of research being conducted by Gilda (Gina) De Iaco as part of her study on Shiftwork under the supervision of Joseph Smucker , professor of the Department of Sociology -Anthropology at Concordia University.

### **A. PURPOSE**

I have been informed that the purpose of the research is based on the impact of shiftwork and its effects on the worker's job performance and satisfaction, general health, social life, leisure time, personal relationships, family relationships, and childrearing practices.

### **B. PROCEDURES**

The research will be conducted at the .... I will be interviewed and required to answer questions pertaining to the research being conducted on Shiftwork. I have been informed that the interview will last between 30 to 45 minutes. I have also been informed that I will be required to keep a diary for a week explaining how I order my life around the shift schedule or schedules I work. I have also been informed that there are no risks involved in doing the interview, or in keeping a diary. For instance, I have been made to believe that special safeguards are being taken in order to protect my well being and identity, which will remain confidential (only the researcher will know who I am).

### **C. CONDITIONS OF PARTICIPATION**

I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.

I understand that my participation in this study is purely voluntary.

I understand that my identity will remain confidential. My identity will only be known to the researcher and my identity will not be revealed in the study results.

I understand that the data from this study may be published.

I understand the purpose of this study and know that there is no hidden motive of which I have not been informed.

**I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT, I FREELY CONSENT AND AGREE TO PARTICIPATE IN THIS STUDY.**

NAME (please print) \_\_\_\_\_

SIGNATURE \_\_\_\_\_

WITNESS  
SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

## APPENDIX D

## QUESTIONNAIRE OF SHIFT WORK

### BACKGROUND QUESTIONS

DATE OF INTERVIEW:

NAME:

OCCUPATION:

WORK STATUS:

SHIFT STATUS:

NUMBER OF HOURS WORKED:

PERIOD OF TIME WORKING AT THE HOSPITAL:

GENDER:

AGE:

MARITAL STATUS:

ETHNIC BACKGROUND OF RESPONDENT:

**\*NOTE\* WHETHER RESPONDENT GAVE DIARY OR NOT (LONG FORM OR SHORT FORM. ).**

---

### SOCIO-ECONOMIC BACKGROUND OF MARRIED AND COHABITING RESPONDENTS

1. Does your mate also work, (i.e., part-time, full-time, does not work)?
2. How many hours does your mate work?
3. Does your mate work shifts as well?
4. If so, which shift does your mate usually work?
  - i. day shift (is a fixed schedule consisting of morning and afternoon shift-may be worked part-time or full-time).
  - ii. evening shift (is a fixed schedule consisting of the night shift-may be worked part-time or full-time)
  - iii. rotating shift (consists of a rotating schedule that alternates from morning, afternoon and evening shifts-may be worked part-time or full-time).

5. What are the hours your mate usually works?

#### SOCIO-ECONOMIC BACKGROUND OF RESPONDENTS

6. Who do you live with (i.e., alone, spouse, family, relatives, or children)?
7. Are you a sole or principal wage earner in your household?
8. Does your present schedule require that you work on weekends?
9. If so, what are the hours you usually work on weekends?
10. Specifically, why do you enjoy/dislike working the morning/afternoon/or night weekend shift?
11. Given the choice, would you like to work on weekends?
12. In general, why do you enjoy/dislike working on weekends?
13. Do you work another job?
14. If so, do you work full-time or part-time at your other job?
15. How many hours per week do you work at your other job?
16. Why are you working a second job?
17. Are you also a student?
18. Are you a full-time or part-time student?

#### SHIFT SCHEDULING

19. Do you work a fixed shift or rotating shifts?
20. Which of the shift or shifts do you usually work (i.e. morning, afternoon, or night)?
21. What are the hours you usually work?
22. Given the choice, would you prefer to work a fixed shift or rotating shifts?
23. Why would you prefer to work a fixed shift/rotating shifts?
24. Of all of the shifts you worked morning, afternoon, and nights, do you prefer working, and why?
25. Of all of the shifts you worked morning, afternoon, and nights, do you dislike working, and why?

26. Do you feel satisfied/dissatisfied with the hours that you work?
27. Why do you feel satisfied/dissatisfied with the hours that you work?
28. Which shift causes you to feel most satisfied/dissatisfied and why?

#### NATURE OF THE WORK

29. Describe, what it means to be a switchboard operator/porter?
30. Do you feel satisfied/dissatisfied with your work?
31. Why do you feel satisfied/dissatisfied with your work?
32. How would you describe your working environment?
33. Do you feel you work in favorable or unfavorable conditions?
34. Do you feel you get the value you deserve for the kind of work that you do why or why not?

#### JOB PERFORMANCE AND SATISFACTION

35. How many times were you absent from work this month and last month?
36. Have any errors/mistakes occurred in your work environment last month and this month? If so, what were the mistakes/errors you made?
37. In your opinion, on which shift (morning shift, afternoon, night shifts) do mistakes/errors occur?
38. In your opinion, on which shift (fixed versus rotating shifts) do most mistakes/errors occur?
39. How would you describe the relationship between full-timers and part-timers?
40. In general, do you frequently observe conflict between part-timers and full-timers?
41. If so, what are the conflicts you observe between part-timers and full-timers?
42. Have you had any conflicts at work? And what were the conflicts?
43. If you were offered a job on day work (i.e. standardized 9 to 5 work) with the same pay and the same conditions as your shift work job which would you choose? Why would you choose day work as opposed to shift work or vice versa? Is it because of the hours, pay, benefits, convenience, or maybe it is for some other reason?

Please explain...

### **PHYSICAL HEALTH**

- 44. Have you ever worked standard hours, for example, 9 to 5?
- 45. Ever since you have been working shifts;
- 46. Have you experienced changes in your eating habits?
- 47. Have you experienced any weight loss or gain?
- 48. Have you become addicted to smoking, drinking, caffeine, or any other kind of chemical intake?
- 49. Have you developed any gastrointestinal disorders such as ulcers, constipation, stomach cramps, etc.?
- 50. Has there been an increase in headaches, backaches?

### **PSYCHOLOGICAL HEALTH**

- 51. Relative to the nature of your work, or of the hours that you work, how often do you feel tired on the job, and why?
- 52. How often do you feel nervous and agitated on the job?
- 53. On which shift do you often feel most nervous/agitated and why?
- 54. Do you often feel motivated/not motivated on the job?
- 55. If so, explain why you feel/do not feel motivated on the job?
- 56. If so, explain on which shift do you often feel motivated/not motivated to work?
- 57. Relative to working regular work hours for instance, a standard shift, do you have trouble going to sleep?
- 58. If so, why do you have trouble going to sleep?
- 59. Do you have trouble waking up?
- 60. Why do you have trouble waking up?
- 61. Explain which shift causes you to have problems going to sleep or waking up?

## PERSONAL AND FAMILY RELATIONSHIPS

### SINGLE AND DIVORCED RESPONDENTS

62. Are your relationships negatively affected by shift work?
63. If so, how are your relationships negatively affected by shift work?
64. Are you able to have a long-term relationship?
65. If not, is working shifts preventing you from having a long-term relationship and why is this so?

### MARRIED AND COHABITING RESPONDENTS

66. How many hours per week do you spend with your mate?
67. Do you feel you spend enough time with your mate why or why not?
68. Do you frequently argue with your spouse because your work schedule keeps interfering with your time together?
69. Are your sexual relations negatively affected by shiftwork?
70. Do you feel able or unable to cope at home?
71. If so, why do you feel able or unable to cope at home?

### SOCIAL LIFE AND LEISURE TIME

72. How does shift work interfere with being able to participate in various social activities such as clubs, recreational meetings, sports, hobbies, etc.?
73. On the average week, how many hours of leisure do you spend with your  
-family/relatives-  
-friends-  
-alone-
74. Do you find it difficult setting aside time to spend with your family, friends, or alone?
75. Do you ever feel alienated from your family, friends?
76. Are most of your friends shiftworkers of well?



- 77. Do you have any problems scheduling appointments with doctors, dentists, estheticians, hairdressers, etc.?
- 78. If yes, why do you have problems scheduling appointments with doctors, dentists, estheticians, hairdressers, etc?
- 79. Do you frequently go out to movies, dance clubs, restaurants, and theaters?
- 80. If no, how do you feel working shifts prevents you from attending movies, dance clubs, restaurants, theaters?

### CHILD-REARING PRACTICES

- 81. Do you have any children?
- 82. If so, how many children do you have?
- 83. What are their ages?
- 84. Who is the primary care-giver at home?
- 85. When you are working who takes care of the children?
- 86. In your opinion, do you ever have any problems in finding someone to baby-sit the children?
- 87. Due to your shift schedule, to what degree is there a problem with obtaining proper child care?
- 88. Are the household tasks evenly divided between you and your spouse?
- 89. Do you have time to attend school meetings?
- 90. If no, why don't you have time to attend school meetings?
- 91. Do you have time to carpool children to and from school?
- 92. Do you have time to help your children with their school homework?
- 93. If no, why don't you have time to help your children with their school homework?
- 94. Do you have time to participate in activities with your children?
- 95. In other words, do you read to them, play sports and games with them?

**ADVANTAGES AND DISADVANTAGES OF SHIFT WORK**

96. Are you fully adjusted to shift work?

Are you fully adjusted to being a switchboard operator/porter?

97. What were the factors for choosing shift work?

98. What in your opinion do you feel are the benefits of shift work?

i. What in your opinion do you feel are the benefits of being a porter/switchboard operator?

99. What in your opinion do you feel are the disadvantages of shift work?

i. What in your opinion do you feel are the disadvantages of being a switchboard operator/porter?

100. Do you feel there are more advantages or disadvantages to shift work?

i. Do you feel there are more advantages or disadvantages to being a switchboard operator/porter?

101. What is your overall assessment of shift work?

i. What is your overall assessment of being a porter/switchboard operator?

102. In five or ten years from now, do you still see yourself doing the same job?

## APPENDIX E

This diary is based on how you order your life according to the type of shift or shifts you work.

Beginning Monday ending on Sunday. (Please indicate the type of shift or days you worked)...Add additional paper if needed.

1. How much time did you spend with family, friends, partner, or alone? Please explain...
2. Do you feel you spend enough time with family, friends, partner, or alone? Please explain...
3. Have you had time for any sort of social activities? Explain briefly the activities...
4. Did you have any problems scheduling appointments of any sort this week? Please explain...
5. Did you have time to take care of personal business, and chores?
6. Did you have time for leisure activity, such as reading, watching TV etc....
7. Briefly explain, if the type of shift or shifts worked this week prevented you in any way from doing what was mentioned above.
8. Were you absent from work this week? Please provide reasons why you were absent from work?
9. Did any mistakes/errors occur this week at work? What were the errors/ mistakes? Please provide reasons why you think these errors/mistakes occurred?
10. Please explain your eating habits of this week? Did you eat well or not well enough?
11. Did you smoke, drink, indulged in caffeine or any kind of chemical intake (took more aspirins than usual) this week? Please elaborate?
12. Please explain if you had any trouble getting to sleep or waking up?
13. Were you nervous/agitated or tired in any way this week? Please explain why?
14. Did you feel motivated/ not motivated to work this week? Please explain why?
15. Did you feel able/unable to cope at home, work, and in your personal life, due to the pressures of work? Please explain?

Your cooperation is greatly appreciated if you do not understand a question or have any problems, please do not hesitate to contact me at 384-3650.

Gilda (Gina) De Iaco.

This diary is based on how you order your life according to the type of shift or shifts you work.

Beginning Monday ending on Sunday: (Please indicate the type of shift or days you worked)...Add additional paper if needed.

Please indicate below the amount of time you spent with your family, children, friends, partner, or alone? Please indicate what activities you engaged in (i.e., having supper with family, visiting friends, helped with children's homework, read a book, etc.....)

**Monday:                      ACTIVITIES:                      HOURS:**

-----

-----

-----

**Tuesday:                      ACTIVITIES:                      HOURS:**

-----

-----

-----

**Wednesday:                      ACTIVITIES:                      HOURS:**

-----

-----

-----

**Thursday:                      ACTIVITIES:                      HOURS:**

-----

-----

-----

**Friday:****ACTIVITIES:****HOURS:**

---

---

---

**Saturday:****ACTIVITIES:****HOURS:**

---

---

---

**Sunday:****ACTIVITIES:****HOURS:**

---

---

---

Please indicate below the amount of time you spent engaging in various sorts of social activities? (i.e., sports, recreational meetings, hobbies, clubs, etc.)

**Monday:****ACTIVITIES:****HOURS:**

---

---

---

**Tuesday:****ACTIVITIES:****HOURS:**

---

---

---

**Wednesday:****ACTIVITIES:****HOURS:**

---

---

---

**Thursday:****ACTIVITIES:****HOURS:**

---

---

---

**Friday:****ACTIVITIES:****HOURS:**

---

---

---

**Saturday:****ACTIVITIES:****HOURS:**

---

---

---

**Sunday:****ACTIVITIES:****HOURS:**

---

---

---

Please indicate below if you had problems scheduling appointments of any sort this week? (i.e. scheduling appointments with doctors, estheticians, dentists, hairdressers etc.) Please explain...

**Monday:**

---

---

---

**Tuesday:**

---

---

---

**Wednesday:**

---

---

---

**Thursday:**

---

---

---

**Friday:**

---

---

---



**Saturday:**

---

---

---

**Sunday:**

---

---

---

Indicate below the time you spent taking care of personal business, and chores?

**Monday:                      HOURS:                      PERSONAL BUSINESS/CHORES:**

---

---

---

**Tuesday:                      HOURS:                      PERSONAL BUSINESS/CHORES:**

---

---

---

**Wednesday:                      HOURS:                      PERSONAL BUSINESS/CHORES:**

---

---

---

**Thursday:                    HOURS:                    PERSONAL BUSINESS/CHORES:**

---

---

---

**Friday:                    HOURS:                    PERSONAL BUSINESS/CHORES:**

---

---

---

**Saturday:                    HOURS:                    PERSONAL BUSINESS/CHORES:**

---

---

---

**Sunday:                    HOURS:                    PERSONAL BUSINESS/CHORES:**

---

---

---

Indicate below the amount of time you spent on leisure activities, such as reading, watching T.V. etc.

**Monday:**                      **HOURS:**                      **LEISURE ACTIVITY:**

---

---

---

**Tuesday:**                      **HOURS:**                      **LEISURE ACTIVITY:**

---

---

---

**Wednesday:**                      **HOURS:**                      **LEISURE ACTIVITY:**

---

---

---

**Thursday:**                      **HOURS:**                      **LEISURE ACTIVITY:**

---

---

---

**Friday:**                      **HOURS:**                      **LEISURE ACTIVITY:**

---

---

---

**Saturday:                      HOURS:                      LEISURE ACTIVITY:**

---



---



---

**Sunday:                      HOURS:                      LEISURE ACTIVITY:**

---



---



---

Please indicate below any activities you wanted to do or should have done? Also indicate whether or not your shift work has prevented you to do what you wanted to do or should have done?

**Monday:                      HOURS:                      ACTIVITIES:**

---



---



---

**Tuesday:                      HOURS:                      ACTIVITIES:**

---



---



---

**Wednesday:                      HOURS:                      ACTIVITIES:**

---



---



---

**Thursday:****HOURS:****ACTIVITIES:**

---

---

---

**Friday:****HOURS:****ACTIVITIES:**

---

---

---

**Saturday:****HOURS:****ACTIVITIES:**

---

---

---

**Sunday:****HOURS:****ACTIVITIES:**

---

---

---

Please indicate below if you were absent from work this week ? Please provide reasons why you were absent from work?

**Monday:**

---

---

---

**Tuesday:**

---

---

---

**Wednesday:**

---

---

---

**Thursday:**

---

---

---

**Friday:**

---

---

---

**Saturday:**

---

---

---

**Sunday:**

---

---

---

Did you find yourself making mistakes or errors this week at work, if so, what were the errors or mistakes?

**Monday:                      HOURS:                      ERRORS/MISTAKES:**

---

---

---

**Tuesday:                      HOURS:                      ERRORS/MISTAKES:**

---

---

---

**Wednesday:                      HOURS:                      ERRORS/MISTAKES:**

---

---

---

**Thursday:                      HOURS:                      ERRORS/MISTAKES:**

---

---

---

**Friday:                      HOURS:                      ERRORS/MISTAKES:**

---

---

---

**Saturday:                      HOURS:                      ERRORS/MISTAKES:**

---

---

---

**Sunday:                      HOURS:                      ERRORS/MISTAKES:**

---

---

---

Please explain your eating habits of this week? Did you eat well or not well enough?  
(For example, did you snack more than usual, eat more or less than in the past?)

**Monday:**

---

---

---



**Tuesday:**

---

---

---

**Wednesday:**

---

---

---

**Thursday:**

---

---

---

**Friday:**

---

---

---

**Saturday:**

---

---

---

**Sunday:**

---

---

---

Please indicate below the degree of the use of the following: smoking, drinking, caffeine, snacking, has changed because of shift work ?

**Monday:**

---

---

---

**Tuesday:**

---

---

---

**Wednesday:**

---

---

---

**Thursday:**

---

---

---

**Friday:**

---

---

---

**Saturday:**

---

---

---

**Sunday:**

---

---

---

Please indicate below if you had any trouble getting to sleep or waking up ?

**Monday:                      HOURS:                      SLEEPING/WAKING UP:**

---

---

---

**Tuesday:                      HOURS:                      SLEEPING/WAKING UP:**

---

---

---

**Wednesday:                    HOURS:                    SLEEPING/WAKING UP:**

-----

-----

-----

**Thursday:                    HOURS:                    SLEEPING/WAKING UP:**

-----

-----

-----

**Friday:                    HOURS:                    SLEEPING/WAKING UP:**

-----

-----

-----

**Saturday:                    HOURS:                    SLEEPING/WAKING UP:**

-----

-----

-----

**Sunday:                    HOURS:                    SLEEPING/WAKING UP:**

-----

-----

-----

Indicate below the time in which you felt nervous/agitated this week? Please explain why?

**Monday:**                      **HOURS:**                      **NERVOUS/AGITATED:**

-----

-----

-----

**Tuesday:**                      **HOURS:**                      **NERVOUS/AGITATED:**

-----

-----

-----

**Wednesday:**                      **HOURS:**                      **NERVOUS/AGITATED:**

-----

-----

-----

**Thursday:**                      **HOURS:**                      **NERVOUS/AGITATED:**

-----

-----

-----

**Friday:**                      **HOURS:**                      **NERVOUS/AGITATED:**

-----

-----

-----

**Saturday:****HOURS:****NERVOUS/AGITATED:**

---

---

---

**Sunday:****HOURS:****NERVOUS/AGITATED:**

---

---

---

Indicate below the time in which you felt tired this week? Please explain why?

**Monday:****HOURS:****TIRED:**

---

---

---

**Tuesday:****HOURS:****TIRED:**

---

---

---

**Wednesday:****HOURS:****TIRED:**

---

---

---

**Thursday:                      HOURS:                      TIRED:**

---

---

---

**Friday:                      HOURS:                      TIRED:**

---

---

---

**Saturday:                      HOURS:                      TIRED:**

---

---

---

**Sunday:                      HOURS:                      TIRED:**

---

---

---

Indicate below the times in which you felt motivated, somewhat motivated, and not motivated to work this week? Please explain why?

**Monday:                      HOURS:                      DEGREE OF MOTIVATION:**

---

---

---

**Tuesday:                      HOURS:                      DEGREE OF MOTIVATION:**

---

---

---

**Wednesday:                      HOURS:                      DEGREE OF MOTIVATION:**

---

---

---

**Thursday:                      HOURS:                      DEGREE OF MOTIVATION:**

---

---

---

**Friday:                      HOURS:                      DEGREE OF MOTIVATION:**

---

---

---

**Saturday:                      HOURS:                      DEGREE OF MOTIVATION:**

---

---

---



**Sunday:                      HOURS:                      DEGREE OF MOTIVATION:**

-----

-----

-----

Indicate the times if any, you felt unable to cope at home, work, and in your personal life, due to the pressures of work? Please explain?

**Monday:                      HOURS:                      DEGREE OF COPING/  
at home, work, personal life:**

-----

-----

-----

**Tuesday:                      HOURS:                      DEGREE OF COPING/  
at home, work, personal life:**

-----

-----

-----

**Wednesday:                      HOURS:                      DEGREE OF COPING/  
at home, work, personal life:**

-----

-----

-----

**Thursday:                      HOURS:                      DEGREE OF COPING/  
at home, work, personal life:**

-----  
-----  
-----

**Friday:                      HOURS:                      DEGREE OF COPING/  
at home, work, personal life:**

-----  
-----  
-----

**Saturday:                      HOURS:                      DEGREE OF COPING/  
at home, work, personal life:**

-----  
-----  
-----

**Sunday:                      HOURS:                      DEGREE OF COPING/  
at home, work, personal life:**

-----  
-----  
-----

Your cooperation is greatly appreciated if you do not understand a question or have any problems, please do not hesitate to contact me at 384-3650.

Gina De Iaco

## APPENDIX F

***SHIFT SCHEDULING FOR SWITCHBOARD OPERATORS*****Weekday Schedule- Monday through Friday-****BIG CONSOLE SWITCHBOARD**

Morning shifts: 6:30 a.m.-2:30 p.m.  
                   8:00 a.m.-4:00 p.m.  
                   9:30 a.m.-1:30 p.m.

Afternoon shifts: 11 a.m. -7:00 p.m.

Night shifts: 2:30 p.m.-10:30 p.m.  
                   midnight -6:30 a.m.

**LOCATING SWITCHBOARD**

6:30 a.m.-2:30 p.m.  
 8:00 a.m.-4:00 p.m.  
 10:00 a.m.-6:00 p.m.

1:30 p.m.-9:30 p.m.

4:00 p.m. -midnight.  
 midnight -6:30 a.m.

**Weekend Schedule-Saturday and Sunday-**

Morning shifts: 6:30 a.m.-2:30 p.m.  
                   8:00 a.m.-4:00 p.m.  
                   9:30 a.m. -1:30 p.m.

Afternoon shifts: 11:00 a.m.-7:00 p.m.

Night shifts: 2:30 p.m.-10:30 p.m.  
                   midnight- 6:30 a.m.

6:30 a.m.-2:30 p.m.  
 8:00 a.m.-4:00 p.m.  
 10:00 a.m.-6:00 p.m.

1:30 p.m.-9:30 p.m.

4:00 p.m. -midnight  
 midnight- 6:30 a.m.

***SHIFT SCHEDULING FOR PORTERS*****Weekday Schedule- Monday through Friday-**

Morning shifts: 7:00 a.m.-2:00 p.m.  
                   8:00 a.m. -3:00 p.m.  
                   9: 00 a.m.- 3:45 p.m.

Afternoon shifts: 3:45 p.m.- midnight  
                   5:00 p.m.-9:00 p.m.

Night shifts: 4:00 p.m. -midnight.

**Weekend Schedule-Saturday and Sunday-**

Morning Shift: 7:00 a.m.-2:45 p.m.  
8:00 a.m.-3:45 p.m.

Afternoon Shift: 3:30 p.m.- 11:15 p.m.

Night Shift: 3:45 p.m.- midnight.