Issues in Stress and Burnout for Women in Management and Non-management Positions

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Abstract

Issues in Stress and Burnout for Women in Management and
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Mary E. McCarthy
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Evidence exists to support that the female work experience is very different
from that of male counterparts. Furthermore, other data have suggested
that where one is located within the hierarchy of the organization can affect
both the perceptions and experiences of the environment. The primary
purpose of this study was to examine from an ecological perspective how
the factors of work environment, stress and psychological sense of
community impacted on the experience of burnout for women in
management and non management positions within a large organization.
Two hundred and eighty four female employees working for a large public
utility were sampled. 170 non-management employees and 114 of the
management employees voluntarily completed the Maslach Burnout
Inventory (MBI), the Work Environment scale (WES), the Sense Of
Community Index (SCI), the Daily Hassles scale (DH) and a demographic
questionnaire. The results indicated that the experience of burnout is
different depending on the level of the organization in that non-
management personnel experienced the highest burnout. Environmental
variables were found to significantly contribute to the experience of burnout
and their specific impact also varied with the respondents place in the
organizational hierarchy. Psychological sense of community was found to

be significantly and negatively related to burnout. Implications for current burnout conceptualization, women in the work force, the organization and pertinent treatment issues via primary and secondary prevention are discussed.

Preface

This study addresses the construct of stress in the work environment, as experienced by women in management and non-management positions. The following discussion identifies variables related to stress and the work environment which are indicative of an ecological focus. Attention is given to stress in terms of burnout and daily behavioral experiences, and on the work environment in terms of the psychosocial climate and psychological sense of community.

Comparing Gender Experiences in Work

The number of women working outside the home, today, is higher than ever. Initial research which addressed this phenomenon focused on determining if women working outside the home were at greater risk for developing illnesses (LaCroix & Haynes, 1987). More current research issues have addressed the identification of stressors and quality of workplace roles. Furthermore, researchers have noted the difficulty in examining these issues for women because of "differences in occupational sources of stress and strain for men and women and with the awareness that there is a possibility of gender differences in: expectations of work, perceptions of work environment qualities, role burdens outside the domain of work and abilities to adapt and cope with stressful job

situations"(LaCroix & Haynes, 1987 p. 96).

According to the Canadian Advisory Council on the Status of Women the female labour force increased by 119.4% between 1966 and 1982, while during this time there was only an increase of 35.6% in the male labour force (Canadian Advisory Council on the Status of Women, 1985 cited in Lips & Colwill, 1988). Married women aged 25 years and older have been the most significant contributors to the increase in the Canadian female labour force (Abella, 1984). The "average" Canadian family no longer consists of either an income earning husband with a work only at home wife, or women who only work outside the home until they marry and can be cared for financially by their husbands. For example in 1966 only 26% of married women within the 25 to 34 age range worked for pay while this figure soared by 1982 to encompass 61% of the women in this category (Lips & Colwill, 1988). According to Lips and Colwill (1988) "women now make · up 41% of the Canadian labour force; and 64% of single women, 52.3% of married women, 36.1% of widowed, divorced or separated women and almost half of all women with children under three years of age are employed" (Lips & Colwill, 1988 p. 57). By 1986 there were more than 700,000 women heading lone parent households and more than half of these women lived in poverty (Moore, 1987 cited in the Canadian Advisory Council on the Status of Women, 1989). In summary, an expanding population of Canadian women have joined men in working outside the home, thereby, assuming responsibilities for handling the multiple roles associated with adding the paid position onto their previous work loads.

Evidence exists that attitudes towards women working outside the home have become more positive and that both genders do have some employment issues that affect them similarly. However, it should be noted that the implications for these issues continues to be different for male and female workers as does the way their work is evaluated (Lips & Colwill, 1988). For example, in 1980 the International Labour Office calculated that "women do two-thirds of the world's work, receive 5% of the world's income, and own less than 1% of the world's assets, largely because housework and child care are, for the most part, unpaid, and not entered into a country's GNP" (Lips & Colwill, 1988, p. 57). Indeed, women in the work force face a variety of unique problems that their male counterparts do not have to address. For instance, women have to integrate child-bearing and child care with work demands, deal with sex and pay discrimination issues and confront the stereotypes which keep them from various kinds of work. In addition they have different types of health problems and concerns which can contribute to stress reactions (Lips & Colwill, 1988).

Despite this consistent growth in women's participation in paid employment gender differences have persisted which have continued to limit the types of occupations in which women are employed. According to the Canadian Advisory Council on the Status of Women (1985) about 60% of women working outside the home are found in the service, clerical or sales occupations. The clerical job sector also accounts for almost one-third of the total female job sector (Canadian Advisory Council on the Status of Women, 1985 cited in Lips & Colwill, 1988). It is also interesting to note

here how much of the psychological research done on women has focused primarily on dealing with issues and concerns of women in management and professional arenas (Lips & Colwill, 1988). "There is a scarcity of information about women in the trades (Colwill & Colwill, 1986), or even about women in secretarial positions "(Colwill, 1985 cited in Lips & Colwill, 1988 p. 65). Canadian stenographers, secretaries and typists are almost all female (Abella, 1984). Men, however, are more evenly dispersed and represented across the complete occupational arena. Administrative or managerial positions are held by almost 9% of men while females comprised only 4.2% of this market place category (Abella, 1984). Blau and Ferber (1987) found while using university faculty and federal civil service that women continued to be under-represented in upper levels of the occupation. In addition, a similar finding for managers of major corporations suggested that women are concentrated in lower and mid level management positions leaving very few women at the highest level of the organization (Business Week, 1984).

Furthermore, data also exist to suggest that not only is it difficult for women to enter high level managerial positions but that, "many women, including some of the best educated and most highly motivated are dropping out of the managerial workforce. A disquieting number of the dropouts are the pioneering women who have struggled so hard, often in the face of prejudice and economic adversity to earn the valued passport to high executive rank" (Taylor, 1986, p. 16). Men at upper levels of the organization have also been reported to receive more social support than their female counterparts (Cahoon & Rowney, 1984).

Pay discrimination for women continues despite the growing awareness of the inequalities associated with this issue. For instance, in 1982 Canadian female workers were paid only 63.9% of what their male counterparts received and women have continued to earn much less than men across all types of occupational categories. Even in the clerical sector women in 1982 only earned 66.9% of the salary that a male clerical would have obtained while working in the same position (Abella, 1984).

Occupational segregation limits access to working roles for women which thereby influences the qualities of physical and psychosocial work environments and their potential impact on womens' perceptions of stress/strain and actual health outcomes. For example, jobs held by women are often characterized by "tedious and repetitive tasks, low authority and autonomy, limited upward mobility, rewards for vicarious rather than direct achievements, and underutilization of skills and talents" (La Croix & Haynes, 1987, p. 98). Wright, Costello, Hachen & Sprague (1982) did a national survey of the U.S. labor force and found that women constituted a larger percentage of the "working class" which referred to having jobs that were removed from decision making, having little or no autonomy or authority and no supervisory capacity (Wright et al., 1982).

There are also data to suggest that the allocation of authority and power to men and women is unequal within the same occupations (Wolf & Fligstein, 1979; Wright et al, 1982). Furthermore, the tasks given to men and women working in the same job (computer programmer) have been found to differ

systematically with women performing fewer delegating and decision making functions and more supportive/supplemental functions (Kraft, 1984). Messing and Reveret (1983) conducted a study to examine the health problems and working conditions for the male and female workers at four different Quebec fish processing plants. Sex-segregation existed as women with the same job title as the male workers ended up performing different tasks. Generally, the women were assigned the worst tasks. The women were more likely to report that their " jobs were uninteresting, that they could not move around and that their work speed was fast. These stressful conditions resulted in higher levels of generalized fatigue; feeling stressed, tired hands, feet, backs, legs, insomnia, aches and pains, digestive problems and headaches"(Messing and Reveret, 1983 cited in the Canadian Advisory Council on the Status of Women, 1989 p. 24). Thus, the work environments of men and women tend to differ substantially because women not only hold different types of jobs, but, even within the same job are assigned to do different tasks than their male worker counterparts.

In 1984 the Canadian Mental Health Association conducted a survey of five different communities of 1,218 Canadian employees and found that women more often than men reported that their physical and psychological health was affected by negative stress in the work place (Canadian Mental Health Association, 1984 cited in Lips & Colwill, 1988). Similar types of results were also found in a survey of postal workers in Edmonton when female workers reported higher levels of psychological distress than did the male workers (Northcott & Lowe, 1984). This type of result was also found in

studies of American workers. For example, secretarial jobs (which were usually filled by female personnel) were rated as the second most stressful occupation in a National Institute for Occupational Safety and Health study of 22,000 workers in 130 occupations (Belanger, 1984).

As reported by Lips and Colwill (1988) secretarial positions are not the only stressful occupations for women; there are a variety of reasons for the women working outside the home to experience undue amounts of stress.

> "They usually add unrecognized unpaid domestic work to their full-time outside employment (deKonick, 1984). In addition, many employed women "face pay inequities (Abella, 1984), under utilization of skills (Belanger, 1984; de Konick, 1984), sex discrimination in performance evaluation and promotion (Larwood & Wood, 1977) and tokenism (Kanter, 1977), all of which have been related to negative physical and psychological stress symptoms"
> (Greenglass, 1985a; 1985b cited in Lips & Colwill, 1988 p. 61).

Gender and Stress

The next issue to address in the work setting is the experience of stress. "Stress" and "burnout" are two catchwords that have often been used throughout the 1970's and 1980's to describe the impact the work

environment and experience can have on people's lives. One serious drawback to much of the published research examining these areas has been the failure to include gender as a variable; thereby, resulting in an almost exclusive focus on the male experience (Canadian Advisory Council on the Status of Women, 1989). However recent research is pointing to the necessity for such considerations (LaCroix & Haynes, 1987). The following will discuss issues regarding stress which are the substance of this study.

According to Christina Maslach there is an increased risk for burnout

> "whenever people feel trapped by other people's demands,
>
> when they are weak and unassertive in their personal style,
>
> when they feel held down and boxed in by institutional
>
> demands and endless demands of those they serve. They have
>
> the sense that they are at the mercy of the situation and that
>
> there is nothing they can do about it" (Maslach, 1982, p. 146).

Although not specific only to females these conditions sound very similar to what many women experience on a daily basis in their working lives. Women face a variety of unique stressors which include:

> "heavy responsibilities for childrearing and household work;
>
> sexual harassment; sex discrimination in hiring, promotion,
>
> job assignments, performance evaluations, and rewards,
>
> pressures of token status in non-traditional occupations"
>
> (Canadian Advisory Council on the Status of Women, 1989, p.
>
> 19).

Given this it would be reasonable to anticipate that the female experience of stress and burnout is quite different than what is experienced by her male

counterpart. However, this cannot be properly ascertained by assuming that what happens in the male experience is necessarily generalizable to the female experience.

In many organizations workers are divided into management and non-management classifications. Typically in the past there have been less female than male managers which increases the likelihood that models based on male perspectives and assumptions have been generalized to explain female managers' behavior. However, with the continual increases of women in the work force, industry can no longer afford to assume that factors that influence male behavior necessarily affect women the same way. Indeed, if organizations are interested in cultivating and maintaining productive and effective female workers then it is necessary to extend research to address and understand the unique needs of women throughout the organization. The concept of burnout is describing one way non-supportive environments can have long term ' armful influences on women who have been made vulnerable by the systems in which they live and work.

The Burnout Syndrome

Burnout has been defined as "wearing out, becoming inoperative, and exhausted as a result of overwork, dissipation, or lack of energy" (Lavendero, 1981, p. 17). Freudenberger (1975) originated the term and saw

it as "resulting from wearing oneself out in the pursuit of an impossible set of expectations." Mattingly (1977) conceptualized burnout as "arising from the conflict between a professional obligation to give of self and the realization that one can never give enough" (Kottkamp & Mansfield, 1985, p. 29).

In coining the term "burnout" Freudenberger described it as a condition which has both somatic and behavioral manifestations. Some of the physical symptoms attributed to the syndrome are exhaustion, colds, headaches, fatigue, gastrointestinal disturbances and insomnia. Other behavioral manifestations have included crying, suspiciousness, feelings of omnipotence, quickness to anger, paranoia, overconfidence, stubbornness, rigidity, cynicism, withdrawal from non-work social contact and spending increasing hours of free time at work (Ursprung, 1986).

Besides being detrimental to the health of individuals there are also major economic costs associated with the effects of burnout. Including health care professionals, a conservative estimate in 1970 of the effects of stress on 23 million executives resulted in a figure between 10 and 20 billion dollars per year. With the escalating costs of health care, updated figures for 1980 yield estimates of 25 to 50 billion dollars. By 1990 these figures could more than double (Paine, 1984).

Emener, Luck and Gohs (1982) have developed a profile of the typical burned out person. The burned out person is one who has lost his or her enthusiasm or concern for co-workers, the organization, and purposes and

goals of their job. These people are bored, discouraged, resentful, disenchanted, confused, edgey, frustrated over insignificant concerns, and seem to feel that the world is against them. They are frequent complainers and tend to observe suggestions or ideas in a negative or pessimistic manner. This sour outlook on life culminates in a burned out person experiencing a disproportionate amount of negative events (Emener, Luck & Gohs, 1982).

Burnout Research

Traditionally, research in the area of human services has focused on the nature and needs of clients and their reactions to various interventions. However, within recent years an interest has emerged in the experience of the human service worker, particularly on the area of burnout. For example, the phenomenon has been noted in child care workers (Barrett & McKelvey, 1980; Freudenberger, 1977; Maslach & Pines, 1977; Shannon & Saleebey, 1980), in psychotherapists and counselors (Baron & Cohen, 1982; Bermack, 1977; Faber & Heifetz, 1981, 1982; Forney, Wallace-Shutzman & Wiggers, 1982; Warnath & Shelton, 1976), rehabilitation counselors (Emener & Rubin, 1980; Riggar, Godley & Hafer, 1984; Rubin & Emener, 1979), group home workers (Thompson, 1980), social workers (Daley, 1979; Edelwich, 1980; Harrison, 1980; Minahan, 1980; Pines & Kafry, 1980), special education teachers (Bensky, Shaw, Gouse, Bates, Dixon & Beane, 1980; Meadow, 1981; Weiskopf, 1980), nurses (Albrecht, 1982; Harris, 1984; Jenkins & Ostchega, 1986; Lavendero, 1981; Seuntjens, 1982; Leiter, 1988;

Leiter & Maslach, 1988), and in business executives (Freudenberger, 1977).
Although by no means exhaustive the above list is reflective of the degree of
interest the burnout construct has generated (Ursprung, 1986 p. 190).
However, it should be noted that burnout is not a function of only the
human service industry.

Maslach began examining burnout in the 1970s when research was
virtually nonexistent (Tabor, 1984). The broad definition she used to
describe the syndrome is

> "that it involves the loss of concern for people with whom one is
> working... (including) physical exhaustion... (and) is
> characterized by an emotional exhaustion in which the
> professional no longer has any positive feelings, sympathy, or
> respect for clients or patients" (Lavendero, 1981, p. 18).

From their research Maslach and Jackson (1979) have given clear
definitions to the three phases of burnout. The first phase, emotional
exhaustion, is a phase that can be characterized by both emotional and
physical exhaustion. Simply stated, the professional no longer feels that he
or she has the emotional energy to give to clients at a level which was
characteristic of their original work performance. The second phase,
depersonalization, occurs as a method of removing the self from clients
whose problems are perceived as stressful and involves the development of
negative and often cynical attitudes toward clients. The third and final
stage of burnout is characterized by a lack of sense of personal
accomplishment. Thus, the overall evaluation of self in terms of work with
others becomes negative and the professional resultingly becomes unhappy

with both their job and themselves (Kottkamp & Mansfield, 1985).

Measuring Burnout

The most frequently used assessment tool to measure burnout has been the
Maslach Burnout Inventory (MBI). This instrument was developed in 1981
by Maslach and Jackson to assess the three significant areas of burnout:
emotional exhaustion, depersonalization, and personal accomplishment
(Savicki & Cooley, 1983). In designing the inventory Maslach and Jackson
used interview and questionnaire data during exploratory research to
generate ideas about the attitudes and feelings that could characterize a
burned out person. They also reviewed other established scales for
potentially useful material but did not borrow any specific items. The
resulting items were written in the form of statements about personal
attitudes and feelings (Maslach & Jackson, 1981).

The Maslach Burnout Inventory contains twenty two items which are
distributed among three subscales: emotional exhaustion (9 items),
depersonalization (5 items), and personal accomplishment (8 items). In
using the inventory subjects are requested to respond to each item twice,
once for a dimension of intensity and once for a dimension of frequency.
The frequency ratings range from 0 (never) to 6 (daily). Separate mean
scores are computed for each dimension of each of the subscales with high
mean scores on the emotional exhaustion and depersonalization and low
mean scores on the personal accomplishment dimension being indicative of
high levels of burnout (Kottkamp & Mansfield, 1985). The reliability co-

efficients for the frequency and intensity dimensions, respectively, are as follows: emotional exhaustion (.90 and .87); depersonalization (.79 and .76); and personal accomplishment (.71 and .73). Validity was established by correlating MBI scores with (a) behavioral ratings made independently by outside observers (e.g., spouses and co-workers), (b) the presence of certain characteristics expected to contribute to experienced burnout, and, (c) measures of various outcomes hypothesized to be related to burnout. The MBI was developed on a sample of 1025 people from a wide range of health and service occupations. The sample was characterized by a relatively equal proportion of females (54%) and males (46%). The respondents varied in age from 18 years to 70 years, with the majority in the 25-40 year range. Sixty percent of the respondents were married while 40% were either single, divorced, or widowed.

Research on Burnout and Gender

In 1985, Maslach and Jackson conducted two large surveys to assess the relationship of demographic variables to burnout. Initially, the primary purpose of the study was to determine the extent to which public contact employees were experiencing burnout. However, this focus changed when it was recognized that the large and representative nature of the sample also made it ideal for analysis concerning the impact gender differences had on burnout. This nationwide survey involved public contact employees in a federal agency whose specific duties differed; yet, all employees were

involved in service to the public (Maslach and Jackson,1985). The agency consisted of, service and telephone service representatives. Claim representatives were responsible for authorizing and determining if claims were valid while service representatives were responsible for assisting the claim representatives and giving information to clients. Telephone service representatives dealt with clients via the telephone; but, had no direct face to face client contact (Maslach & Jackson, 1985).

Prior to this study there had been conflicting reports regarding the issue of gender difference in the experience of burnout. Some researchers had asserted that women were more at risk than men for developing burnout (Levine, 1981; Pines, Aronson & Kafry, 1981; Ryerson & Marks, 1981 cited in Maslach & Jackson, 1985). Some of the suggested reasons for this occurrence were: due to sex-role socialization women were more likely to become involved emotionally with others and therefore, more likely to experience emotional exhaustion; as women were more likely to enter occupations that necessitated 'people contact' they enhanced their risk for burnout and their vulnerability increased as they occupied more 'front line' positions (versus as administrative role) and further strain was also suspected as women were seen as the primary caretakers of the emotional needs of the family (Maslash & Jackson, 1985).

Upon analysis of these suspected gender differences Maslach and Jackson found that men continued to score significantly higher than women on both dimensions of depersonalization. There was no difference in the frequency scale on either emotional exhaustion or personal accomplishment;

however, women did have higher scores on the intensity dimensions of these two subscales. Multiple Regression analyses indicated that the relationship of gender to burnout was of minor importance. In examining the actual figures it was felt the slight significant difference found could have been attributed to the large sample size of the study (Maslach & Jackson, 1985).

Job Categories. Maslach and Jackson also found some confounding of job and gender within the agency sample as men were more likely to be claim representatives (a position with more authority, pay and prestige) whereas women were more likely represented within the service representatives. The differences in job duties could explain in part the gender differences in depersonalization; however, the most consistently burned out group (on all aspects of burnout) were the telephone service representatives.

Education. In addition, another possible confound with both sex and job category was amount of education. Men were more likely to have entered their job level directly from college. Maslach and Jackson have suggested that education may have some important psychological implications for burnout in that it influences one's subsequent expectations. People with higher levels of education may have greater expectations both for what they accomplish in life and for their future career. For example, a college degree may be seen as a guarantee to obtain the good things in life; however, when the job fails to meet these expectations people may become dissatisfied with it. On the other hand, someone with the same job who did not have the same educational opportunity may view the job with pride

because it was better than what they expected to obtain (Maslach & Jackson, 1985).

As reported in Krumman and Kleiner (1985) intelligence or education may not be helpful in decreasing stress. It has been suggested that managers when placed in highly stressful situations rely more heavily on their experience than on their intelligence (Fiedler, Potter, Zais, & Knowlton, 1979 cited in Krumman & Kleiner, 1984). Additionally, individuals with higher educational backgrounds may experience more stress on the job due to the fact the educationally defined role may conflict with the role as defined by the employing organization (Breif, Sell, Aldog, & Melone, 1979 cited in Krumman & Kleiner, 1984).

Family Responsibilities. In the telephone company study no support was obtained for the hypothesis that greater burnout was experienced with increased family responsibilities for either men or women. In fact, employees with children scored lower on all three aspects of burnout than did childless employees regardless of the employee's se·. (Maslach & Jackson, 1985).

Management versus non-management. At this time there have been no studies located which directly examined the burnout experience for female management versus female non-management personnel. Although the previous study found that the telephone service representatives experienced the highest amount of burnout these results may be influenced more by the

gender factor than the burnout issue in question. Therefore, it was hypothesized in this study that different factors would predict and explain the burnout experience in female managers and non-managers. However, the direction of this relationship was not specified at this time.

Effects of Burnout

The effects of burnout are widespread. Maslach and Jackson (1979) found that higher burnout scores on one or more of the three phases were correlated with: "complaints about work, sense of meaninglessness about one's job, dissatisfaction with co-workers and children, desire for isolation, anger targeted at spouse and children, physical illness, absenteeism and job turnover" (Kottkamp & Mansfield, 1985 p. 30).

There are also other important implications of the exhaustion phase that affect the individual's general day to day functioning in four areas such as: health, intellectual functioning, emotional functioning and social and interpersonal functioning. For example, stress-related physical problems such as muscular pains, stomach problems, cardiovascular problems or diseases associated with the immune system are more likely to become evident. Developing physical exhaustion can also lead to other potential health problems as people become involved in self treatment by abusing caffeine, tobacco, alcohol and legal or illegal drugs (Paine, 1984).

In terms of intellectual functioning the stress associated with burnout can

degrade memory, problem solving, attentional and response selection functions (Paine, 1984). Although the specific lines between intellectual performance and job stress have not been well described, Adams (1978) has cited some of the more frequently encountered symptoms. These include the inability to set priorities for tasks, going by the book, avoidance of responsibility and the blocking out of new information (Adams, 1978 - cited in Paine, 1984).

There are also significant implications for both the individual, work organizations and society as a whole when the issue of social or interpersonal exhaustion is addressed. As noted by Freudenberger and Richardson (1980) "individuals in the process of burning out tend to exhaust their support networks " (Freudenberger & Richardson, 1980 cited in Paine, 1984, p. 4). Unfortunately, people in the process of burning out not only drain those around them, and are thus unable to strengthen their work or personal relationships; but, they also tend to "pass their stress around." The long term consequence for such an individual is isolation and an increase in the severity of the stress encountered as others around them begin to avoid them. Furthermore, in the work place impaired relationships increase stress on everyone, not just the individual's burning out (Paine, 1984).

The process for manifesting burnout is not structured but is variable in nature. Indeed, before the label burnout was applied to the helping professions there was an awareness of the phenomenon in business

executives. Executives who developed drastic attitude changes, decreased job performance, "office paranoia" and chronic fatigue were identified as "flame outs or burn outs" (Patrick, 1984). Burnout may develop rapidly as people with unrealistically high expectations experience major failures on a repetitive basis. In other people however, the burn out process is of a slower, more gradual, onset with serious symptomatology only becoming evident at the end stages of the process (Paine, 1984).

Burnout and Stress

A central theme in the burnout literature involves a sense of depletion or exhaustion. This fits with the general adaptation syndrome developed by Selye which defined the reaction to stress in three phases: alarm, resistance and exhaustion (Paine, 1984). For instance, the MBI seems to measure more subjective or reflective experiences of stress whereas the DH focuses on a more behavioral, daily experience of stress. In fact, many researchers use stress and burnout synonymously. However, stress may or may not lead to burn out, not all individuals who are stressed do burn out (Brill, 1984). According to Maslach and Jackson, burnout is different from occupational stress because of the composition of its three components. However, emotional exhaustion may provide only a general measure of the overall amount of strain a person is experiencing (Leiter, 1988). Conversely, "definitions of occupational stress focus primarily on the experience of strain" (Rambo, 1982 cited in Leiter, 1988 p. 119).

Nonetheless, it is important to address the specific role stress may play in the development of burnout. For example, it has been shown that the return to occupational stress on Mondays has been found to be a presumed basis for the development of arrhythmias frequently associated with sudden death. This syndrome is known as the "Monday Factor". Other studies have shown sudden and non sudden deaths have been slightly higher on Monday especially for men without a prior history of heart disease (Wallstreet Journal, 1980 cited in Krumman & Kleiner, 1984).

It seems the big crises can be handled, but, it is the day-to-day problems which accumulate that eventually cause heart attacks. (James, 1981 cited in Krumman & Kleiner, 1984). It has also been reported by Etzion that the central factors in producing burnout are the chronic daily stresses rather than critical life events (Lazarus & Cohen, 1978; Dohrenwend & Dohrenwend, 1974, 1980 cited in Etzion, 1985).

Measures of Stress

Most of the research in the area of stress has focused on the health consequences of life change events. These life change events are considered to be stressful due to the extent that they require adjustment. In 1967, two researchers Holmes and Rahe developed the Social Readjustment Rating Scale which listed a variety of potentially stressful events and assigned point values to them. To use this questionnaire a person was asked to examine a list of events and to identify every event that had happened to them over the past year (Holmes & Rahe, 1967). There are a number of

problems associated with this particular measurement of stress. For example, the questionnaire is retrospective; therefore, people must depend on their memories to determine the amount of stress they have experienced. Occupational stressors were discussed only in global terms such as business readjustment, trouble with the boss, and being fired from work. In terms of scoring there was also no recognition of the part individual differences can play in the perception and subsequent experience of stress.

More recent studies into stress have called into question whether "stress" should be equated with "change" and have therefore suggested stress inventories should address the everyday problems of life. Indeed, the importance of this type of stress in predicting health outcomes has been the subject of several studies. For example, Chiriboga and Cutter (1980) reported that chronic stresses, hassles and scheduling difficulties contributed as much to the prediction of changes in adaptation as had life event measures (Chiriboga & Cutter, 1980 cited in Burks & Martin, 1985).

The first clear cut attempt to develop a scale for measuring daily hassles or stress caused by everyday events was reported by Lazarus et al. (1981) (cf. Kanner, Coyne, Schafer, & Lazarus, 1981; Delongis, Coyne, Dakof, Folkman, & Lazarus, 1982 cited in Burks and Martin, 1985). The scale measured both hassles and uplifts, as well as the negative and positive things of daily life. Uplifts were only weakly associated with outcome measures while hassles were found to be more strongly predictive of

concurrent psychological and health symptoms than were standard life event scores (Burks & Martin, 1985). Hassles are known as the "irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment" (Kanner, Coyne, Schaefer & Lazarus, 1981). Thus, the hassle scale was reflective of contact with psychosocial environmental factors and was observed by the behavioral experiences of the respondents. The development of the daily hassle scale (DH) by this previous research staff was based on a variety of areas such as work, health, family, friends, practical considerations, the environment and chance occurrences. Initially participants rated each hassle for both severity and persistence on 3 point scales. The severity and persistence subscales yielded essentially the same information (r = .95) and, therefore in subsequent analyses, only the severity scores were used. This measure was constructed and administered once a month for 10 consecutive months to a community sample of middle-aged adults. The test retest reliability has been reported at .79.

Stress and Burnout in the Work Environment

Work Relationships. The classic assumption of the underlying cause of burnout is the unique, non-reciprocal nature of the professional-client relationship (Farber & Heifetz, 1982; Maslach, 1978 cited in Ursprung, 1986). Another perspective considers that burnout results from the extended periods of occupational stress helping professionals experience in their close encounters with their clients and their clients' problems (Kottkamp & Mansfield, 1985; Randolph, Price and Collins, 1986; Leiter,

1988; Leiter & Maslach, 1988). However, Cherniss (1980) has suggested it is the scope of the relationship and not the amount of time spent in direct services with clients that influences the amount of burnout experienced (Cherniss,1980 cited in Ursprung, 1986). Other suggested causes include career development crises (Cardinell, 1981 cited in Meier, 1983), poor economic conditions (Crase, 1980 cited in Meier, 1983) and lack of perceived success and work overload (Weiskopf, 1980 cited in Meier, 1983). Recent work by Eisenstat and Felner (1983) has found that although client and non-client related job stress may be contributing factors they are insufficient in themselves in explaining burnout, and that characteristics of the work environment must also be considered (Eisenstat & Felner, 1984). Additionally, most discussions of burnout have proposed that it is a product of both environmental and personal factors and various studies have addressed either one or a combination of both to account for the phenomenon. However, most research outcomes to date have identified the environmental characteristics, especially those associated with the work setting, as the ones most related to understanding the burnout phenomenon (Leiter, 1988).

Organizational Factors. It is also necessary to examine the effect the organization has on the worker because, "the working individual is also an active being, who acts and affects the situations encountered" (Lennerlof,1986). Although the perspective has changed over the years, the consequences of working conditions have been addressed by social critics from at least the beginning of industrialization. For example, in the 1920s, when industry turned to psychology, it was to arrange work so it could be

done more efficiently. However, with social progress the concept "quality of life" found a parallel in the expression "quality of work" (Lennerlof, 1986). By directing attention towards the impact of the work environment on employees the focus will have extended to become one that addresses issues concerning "quality of work life".

Organizationally, burnout can have severe repercussions as it spreads throughout the workplace. Low morale, depression, and minor/major illness can lead to substance abuse and absenteeism. Furthermore, the consequences of low morale, dysfunctional relationships, impaired decision making and decreased energy levels can be observed on the quantity and quality of the work produced by employees (Paine, 1984). Both environmental characteristics and the unique demands of a career or job can impact on the risk for burnout (Patrick, 1984).

As reported in Krumman and Kleiner (1985) the structure of the organization can serve to either enhance or reduce work-related stress for employees. According to Moch, Bartinett and Brass (1979) "a structure with openness of communication, a task feedback system and other "organic" attributes has been associated with lower levels of experienced stress, particularly in organizations employing a complex technology" (Moch, Bartinett, & Brass, 1979 - cited in Krumman & Kleiner, 1985).

Intuitively, it is easy to understand the ubiquitous nature of the burnout syndrome within organizations. As individuals throughout the

organization succumb to burnout and therefore become less productive other employees associated with these individuals must work harder to ensure their co-workers' duties are done. Unfortunately, in time this increased work strain manifests itself by the co-workers themselves becoming burnt out. As noted by the organizational consultant Brill (1984) "interventions based solely on the interpersonal are almost always doomed to fail. The core issue is the task function of the organization; the interpersonal and development issues must be dealt with as they affect the accomplishment of the task" (Brill, 1984, p. 18). Thus, it is necessary to predominantly focus intervention on the core issues of development of sense of achievement, and accomplishment and progress at the organizational, not interpersonal level.

Job Characteristics. Eisenstat and Felner (1984) examined the relationships between workers' attitudes toward their jobs, the characteristics of the human service work environment and reported behavior/attitudes towards clients. They found that job enriching characteristics were related to the job satisfaction, worker's levels of job involvement and sense of personal accomplishment; yet, were not associated with the amount of experienced emotional exhaustion. Although job stressors were not related to work involvement or accomplishment it was associated with emotional exhaustion. The commitment to clients and the amount of accomplishment felt was associated with feedback from clients; however, job satisfaction was most influenced from staff feedback. Their final conclusion was that increased resistance to stress was associated with general job involvement and

training while higher levels of involvement with clients were associated with experiencing less resistance to stress (Eisenstat & Felner, 1984).

There are many components of the work environment that can affect worker health and productivity. For example, Barad (1979) found that workers low in job autonomy rated themselves as participating in more depersonalizing behaviors towards their clients than did workers with more control over their work (Barad, 1979 cited in Eisenstat & Felner, 1984).

Social Climate. Moos and Insel (1974) developed an instrument called the Work Environment Scale (WES) to assess the social climate of all types of work units. The WES focused on the description and measurement of interpersonal relationships between both managers and employers and also among employees themselves. It also examined the basic organizational structure of the unit and the work units' direction of growth and development. There were three subscales (involvement, peer cohesion, and staff support) measured under the relationship dimension; two subscales (autonomy and task orientation) measured under the personal growth dimensions and five subscales (work pressure, job clarity, control, innovation and physical comfort) measured under the system maintenance and system change dimensions (Rosenthal, Teague, Retish, West, and Vessell, 1983).

Rosenthal (1983) explored the relationship between burnout and the work environment in park and recreational professionals by using the Maslach

Burnout Inventory and the WES. Using canonical analyses they found the first canonical variable (a combination of the emotional exhaustion and depersonalization subscales) had the strongest relationship with the staff support, work pressure and clarity subscales of the work environment instrument. The second canonical variable was a combination of the personal accomplishment and depersonalization subscales from the MBI and a combination of the physical comfort, clarity and involvement subscales of the WES. In addition, a high emotional exhaustion score most likely occurred when the individual experienced a high level of work pressure and felt little staff support, job clarity and involvement. Conversely, a high accomplishment score was accompanied by high involvement, physical comfort and clarity scores. As a possible explanation for these findings, Rosenthal suggested that people's subjective perceptions may be very different from what is objectively observed or experienced in the work environment (Rosenthal et al, 1983).

Other researchers have also addressed how the work environment influences the experience of burnout. Constable and Russell (1986) used the MBI and WES (as well as another social support measure) to measure the impact of social support and work environment on the burnout experienced by nurses. They hypothesized that negative aspects of the work environment (role conflict/ambiguity, lack of occupational self-esteem, and workload) would have a direct effect on the extent of burnout. They expected that nurses with higher levels of social support would have lower levels of burnout. The WES subscales of autonomy, clarity, task orientation, innovation and physical comfort were summed to form a variable called job

enhancement. Two additional dimensions of the work environment were found in the subscales of work pressure and control. The results indicated that work pressure and job enhancement dimensions were statistically significant predictors of the emotional exhaustion experienced by nurses. For example, nurses who reported they worked under greater work pressure and in a more negative setting also experienced higher levels of emotional exhaustion. In terms of social support the lack of support from supervisors was the only significant predictor of emotional exhaustion in the nurses. Job enhancement had a significant effect on depersonalization in that nurses low on this also reported higher levels of depersonalization. Nurses that reported a greater sense of personal accomplishment also tended to evaluate their job setting more favorably. It was also interesting to note that the effects of job enhancement on emotional exhaustion did vary with level of supervisor support. For example, moderate and high levels of supervisor support served to eliminate the effect a negative work environment had on emotional exhaustion (Constable and Russell,1986).

Psychological Sense of Community. Historically, when the interest in the supportive aspects of social networks began, it related to their potential role in the treatment of mental disorders (Bergin, 1971 cited in Hirsch, 1979). Further research indicated that social networks could also contribute to the development of positive mental health as well as help prevent mental disorders (Kelly, Snowden & Munoz, 1977 cited in Hirsch, 1979). An interest in the psychological sense of community began in 1974 while Sarason was examining national book review periodicals. At this time he noticed a rapid increase in the themes of alienation, rootlessness, loneliness, and not

belonging and to express concern about this phenomenon he coined the term "psychological sense of community" (Glynn, 1981).

Although responsible for labelling the term Sarason, was not the first person to develop an awareness of this issue. Durkheim, in the latter half of the nineteenth century noticed that the nature of community relationships was changing from those based upon shared values and interests to those founded on functional interests and impersonalization. Common themes of the erosion of traditional social supports in communities were also found in Tonnies' (1957 cited in Glynn, 1986) concepts of Gemeinschaft and Gesellschaft; Cooley's (1909 cited in Glynn, 1986) notion of primary and secondary groups and Warren's (1963 cited in Glynn, 1986) concepts of horizontal and vertical community patterns.

Psychological sense of community is a desirable feeling associated with the development or presence of a common bond with other people. Therefore, a loss or decline in it may be indicated by continual feelings of anomie, loneliness, isolation, alienation, loss of local autonomy, loss of personal involvement in one's community and a growing inability to maintain a mutually supportive, readily available network of relationships (Glynn, 1981).

The "sense of community " neighbors may develop with their neighborhood involves shared socioemotional connections, feelings of membership and belongingness. According to Sarason (1974) some of the components

comprising sense of community are:

> "the perception of similarity to others, and acknowledged
> interdependence with others, a willingness to maintain this
> interdependence by giving or doing for others what one expects
> from them, the feeling that one is part of a larger dependable
> and stable structure"(Unger & Wandersman, 1985 p. 155).

McMillan and Chavis (1986) used concepts from sociology, political science, social and community psychology to propose four principles or elements of sense of community. These elements were membership, influence, integration and fulfillment of needs, and shared emotional connection. Membership was defined as "the feeling that one has invested part of oneself to become a member and therefore has a right to belong" (Aronson & Mills, 1959; Buss & Portnoy, 1967 cited in McMillan & Chavis, 1986 p. 9). The element "membership" was comprised of several attributes such as:

> "recognized boundaries which defined who belongs; emotional
> safety; sense of belonging and identification; personal
> investment which involved active participation in the group;
> and common symbol systems which involved holding of
> similar language, rituals, ceremonies of other signs of
> commonality" (Unger and Wandersman, 1985 p 155).

The second element, "influence", concerned whether an individual can affect the group and the extent to which a group is able to exert power over other larger systems that contain the group. Additionally, the group may also exert pressure on the individual to conform to some of the group rules or to perform necessary tasks (Unger & Wandersman, 1985). The third

component of the definition of the sense of community was integration and fulfillment of needs which translated to "reinforcement." For a group to develop and maintain their positive sense of togetherness the group association should be observed to be rewarding to individual members. A concept which contributes to reinforcement is shared values. In discovering shared values people often find that they have similar needs and goals; thus, working together may enhance meeting these goals and obtaining reinforcement. The final component of sense of community is "shared emotional connection" which is based, in part, on a shared history. The group members have not necessarily participated in the formation of history; however, they must be able to identify with it (McMillan & Chavis, 1986).

The Sense of Community Index (SCI), was developed by Chavis and McMillan (1986) to measure the amount of psychological sense of community experienced by the respondents. A short form was developed by Chavis (1987); this index is comprised of 12 questions and is answered in a true/false format. The questionnaire yields scores on four dimensions of the psychological sense of community, namely, membership, influence, reinforcement, and shared emotional connection. The reliability has been reported as .71 (Chavis, 1987). In this following study the variables that will be addressed are work relationships as assessed by social climate and sense of community.

Sense of Community and Social Climate Related to Burnout

Pretty (1990) demonstrated a relationship between social climate characteristics and sense of community in the university residence community. In this study the University Residence Environment Scale (Moos & Gerst, 1974) and Sense of Community Index were administered to undergraduate students. A Multiple Regression analyses indicated that 54% of the variance of sense of community scores was accounted for by a combination of the involvement, academic achievement and support characteristics of the residents social climate. This research suggested that psychological sense of community is influenced by perceptions of the environment, including performance demands as well as interpersonal networks and support. Another purpose of this study was to determine if similar relationships existed within a work setting by testing the hypothesis that factors from both the relationship and system maintenance domains of the Work Environment Scale would predict the total amount of psychological sense of community (as measured by the SCI).

In another study examining psychological sense of community and burnout McCarthy, Pretty and Catano (1990) found there was a significant negative relationship between the amount of psychological sense of community experienced and the amount of burnout reported by undergraduate students. Students with less psychological sense of community experienced higher rates of burnout (McCarthy et al, 1990). Thus another hypothesis of this study examined whether this finding also

generalized to the work environment and was also based on the literature previously reviewed concerning the WES and MBI. Therefore, from these findings it was hypothesized that female employees with low levels of staff support, peer cohesion, psychological sense of community, job clarity and involvement would report higher levels of burnout as measured by the MBI.

Stress and Women

Studies have suggested that professional women who compete in male dominated environments are subject to chronic stress and that these women experience more stress than do housewives (Hayes & Feinleib, 1980). Davidson and Cooper (1980) found in a study of women and occupational stress that respondents encountered such psychological ailments as, "tension, anxiety, depression, low self-esteem, sleeplessness, frustration and dissatisfaction with life and work. Overall 71% of women felt their physical and psychological problems were related to high levels of stress experienced at work" (Davidson & Cooper- cited in Nelson & Quick, 1985 , p. 212).

Alpert and Culbertson (1987) used the Daily Hassles Scale (DH) to examine the stress and coping strategies of dual-earner and non-dual earner women. Dual-earner women reported significantly more hassles than non-dual earner women. However, there were no significant differences found in the intensity of the hassles reported by the different groups of women (Alpert & Culbertson, 1987).

The Daily Hassles Scale was used in this study to determine whether the work environment (as measured by the WES subscales and SCI) or the amount of stress (as measured by the DH) accounted for more burnout in the management and non-management employees. There was no prediction regarding a direction at this time due to the lack of research available.

Summary

Overall, studies investigating stress and burnout have neglected examining how these factors impact on the experience for women in the work place. Most of the data available has only focused on male workers. This has resulted in a poor understanding of the problems and issues working women must confront on a daily basis. The need for this type of research has become even more critical with the ever increasing numbers of women entering the work force. The larger female population of workers can also be further sub-divided into two categories comprising management and non-management personnel. Despite the larger numbers of women in the later category little research has been conducted to examine their particular needs. In many respects this research was exploratory in nature. The main purpose of this study was to examine (from an ecological perspective) the relationship between the psychosocial work environment, as assessed by the sense of community scale and the work environment scale, and stress of women in management and non-management

positions as measured by the Maslach Burnout Inventory and the Daily Hassles Scale. The study also attempted to determine the combined effects of these factors and their affect on the burnout experienced by the two categories of working women. Many researchers use the words stress and burnout inter-changeably; thus, it was also hoped that it might be possible to more fully understand the nature of the relationship between these two constructs.

Another purpose of the study was to determine whether the previous research finding that psychological sense of community was significantly and negatively related to the burnout experience in undergraduate students could be replicated and generalized to a different type of population. Furthermore, it was also hoped that knowledge could be obtained about the qualities of the physical and psychosocial work environments for working women and that the potential impact from them could be determined in the womens' perceptions of stress and strain.

Hypotheses

The hypotheses were as follows:

(1) Factors entering the regression equation to predict stress would differ in weights and combinations for female managers versus non-managers.

(2) Factors from both the relationship and system maintenance domains of the Work Environment Scale (WES) would predict psychological sense of community (as measured by the SCI).

(3) As a group, female employees with low levels of staff support, peer cohesion, sense of community, job clarity and involvement would report higher levels of burnout as measured by the MBI.

(4) The psychosocial work environment (as measured by the WES subscales and SCI) would account for different amounts of burnout in the management and non-management employees than would the amount of stress (as measured by the DH). No direction was predicted at this time due to the lack of available research.

Method

Participants

Two hundred and eighty four female employees participated voluntarily in the study. Approximately 300 non-managers and 150 female managers were sampled. The sample that returned their questionnaires consisted of 170 female non-management employees and 114 of the female management employees. Participants ranged in age from 18 - 64 years. The majority of the women had worked with the organization between 11 and 20 years. The highest level of education obtained for most of the women was at high school. The demographic data for the entire sample as well as management and non-management positions are summarized in Table A1 of Appendix A.

Measures

Maslach Burnout Inventory - (MBI)

As described in the previous introduction the MBI (Maslach & Jackson,1981) has three subscales that assess the three different components of experienced burnout; emotional exhaustion, depersonalization, and personal accomplishment. It assesses both the

frequency and the intensity of these feelings. Higher burnout is experienced with high scores on the emotional exhaustion and depersonalization scales and low scores reported on the personal accomplishment subscale. According to Meier and Schmeck (1985) "no single dimension of the MBI has been identified as the indicator of burnout", therefore, the three subscales were combined to produce one burnout score for this study (Meier & Schmeck, 1985 p. 64). In addition, none of the hypotheses of the study sought to investigate specific relationships among the three subscales of the MBI with other variables. Furthermore, the study was interested in burnout from a more global perspective. In light of these the overall MBI score was used instead of the three subscales. The Cronbach alpha was .86 for the MBI.

Work Environment Scale - (WES)

This scale assessed the individuals' perceptions of the social climate of their work environments on ten subscales. Moos and Insel (1974) developed this instrument to assess the social climate of all types of work units. The WES has focused on the description and measurement of interpersonal relationships between both managers and employers and also among employees themselves. It has also examined the basic organizational structure of the unit and the work units' direction of growth and development. There were three subscales (involvement, peer cohesion, and staff support) measured under the relationship dimension; two subscales (autonomy and task orientation) measured under the personal growth dimensions and five subscales (work pressure, clarity, control, innovation

and physical comfort) measured under the system maintenance and system change dimensions (Rosenthal, Teague, Retish, West, and Vessell, 1983). The ten scales have adequate internal consistencies (ranging from .69 to ,86 and acceptable one month test-retest reliabilities (ranging from .69 to .83). Support for the construct validity of the WES has been established both in the U.S. and cross-culturally. The Cronbach alpha for this scale in this study was .71.

The Daily Hassles Scale - (DH)

Hassles are the "irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment" (Kanner, Coyne, Schaefer & Lazarus, 1981). This scale consisted of 100 hassles previously generated by other researchers and is based on a variety of areas such as work, health, family, friends, practical considerations, the environment and chance occurrences. Initially participants rated each hassle for both severity and persistence on 3 point scales. The severity and persistence subscales yielded essentially the same information (r = .95) and therefore in subsequent analyses only the severity scores were used. This measure was constructed and administered once a month for 10 consecutive months to a community sample of middle-aged adults. The test retest reliability has been reported at .79. The Cronbach alpha was .95.

Sense of Community Index - (SCI)

The Sense of Community Index (SCI), was developed by Chavis and McMillan (1986). This index was used to measure the amount of psychological sense of community experienced by the respondents. A short form was developed by Chavis (1987). This short form was used in this study and comprised 12 questions which were answered in a true/false format. The questionnaire yields scores on four dimensions of psychological sense of community, namely, membership, influence, reinforcement, and shared emotional connection. However, due to concerns about potential problems with multi-collinearity (as found in other studies) only the total sense of community score was computed and used for this study. The reliability has been reported as .71 (Chavis, 1987). The Cronbach alpha for this study was .65.

Demographics

Participants included their age, employment classification category, tenure and highest level of education obtained. Questions were also asked regarding whether or not they had a partner/spouse, and if so what percentage of household duties they were responsible for and if and to what extent they were responsible for child care. However, the household/family questions were not used for the purposes of this study.

Procedure

The Medical Director of the Occupational Health Department wrote the cover letter introducing the reason for the study to the employees. The name and affiliation of the researcher was identified and clear instructions were given regarding the confidentiality of their answers. In addition the fact that their participation was of a voluntary and anonymous nature was acknowledged. See Appendix B for a copy of the instructions given to the participants. The survey sample was chosen by using a random number table to determine the entry point on the master list of all regular full time female employees throughout the management and non-management levels of the organization. The master list of the names of the employees was only seen by the researcher and did not leave the company's Occupational Health Department at any time. The employees received the survey package of questionnaires by company mail. They were given time at work to complete the questionnaires in private. This time varied from between one half to three-quarters of an hour to complete. All employees received a follow up letter one week after the initial mail out to encourage and remind them to complete and return their surveys. Overall there was a 63.1% response rate. The response rate was 76% for the female managers and 56% response rate for non-managers.

Study Design and Analytic Techniques

This study was based on a survey method design. The total number of subjects initially chosen for sampling was 450. This was calculated by

determining the number of subjects needed for running stable regression analyses using the 30 subject per variable rule. At least 280 subjects were the minimum requirement for running relatively stable regression analysis. This criteria was achieved with an overall return rate of 284.

Before testing the hypotheses the data were subjected to preliminary analyses. The first involved correlating all the major variables of the study with each other to determine the extent of their relationships. Then a number of t-tests corrected for multiple comparisons were conducted to determine if there were significant differences for the management and non-management groups on the major variables in the study.

The first hypothesis stated that different factors would predict and explain the stress phenomenon in female management and female non-management employees. This was tested by computing stepwise multiple regression equations on the MBI and the DH scales for the management and non-management groups. The MBI and DH scales were both chosen as criterion measures of stress because it appeared that each measure may tap into different components of the stress experience. For instance, the MBI measures more subjective or reflective experiences of stress whereas the DH focuses on a more behavioral, daily experience of stress.

The second hypothesis stated that factors from both the relationship and system maintenance domains of the WES would predict total psychological sense of community as measured by the SCI. To test this hypothesis eight

specific subscales within both the system maintenance and relationship domains of the WES were entered into a stepwise multiple regression equation with psychological sense of community as the criterion variable.

The third hypothesis predicted that female employees with low levels of staff support, peer cohesion, psychological sense of community, job clarity and job involvement would report higher levels of burnout. This was tested by correlating these variables to determine if significant inverse relationships existed between these variables and the MBI criterion.

The final hypothesis examined whether the work environment (as measured by the WES and SCI) or amount of stress (as measured by the DH) would account for more burnout in the managers and non-managers. This hypothesis was tested through stepwise multiple regressions in which the ten WES subscales, SCI and DH were all entered into separate regression equations for both the management and non-management groups, using MBI as the criterion. All three regression analyses used a stepwise procedure because of the exploratory nature of the study and because there was no basis for predicting order in hierarchical relationships.

All analyses were conducted using the extended version of the Statistical Package for the Social Sciences (SPSS[x], 1988).

Results

Table 1 shows the intercorrelations for the entire sample for the major variables of the study. There were significant negative relationships between eight of the ten WES subscales and the MBI. Of the remaining two, a significant positive relationship was found between work pressure and the MBI (r = .236, p <.001); physical comfort was the only WES subscale that was not significantly correlated with the MBI. The MBI was positively related to the DH scale (r = .254, p <.001) and negatively to the SCI (r = -.385, p = .000). The only demographic variable that had a significant relationship with the MBI was classification (r = -.279, p = .000). See Table 1.

To explore the data in greater detail, management and non-management groups were compared on each of the major variables (Table 2). Non-managers had higher amounts of burnout and had more control than their management counterparts. Managers, on the other hand, were found to have significantly higher levels of staff support, job involvement, autonomy and innovation than did the non-management personnel. See Table 2. There were no significant differences found between the two groups on peer cohesion, job clarity, work pressure, task orientation, physical comfort, amount of daily hassles and sense of community. Although not significant non-managers

Table 1

Correlation matrix for variables in the study (n = 283)

	1	2	3	4	5	6	7	8	9	10	11	12
1 Hassles												
2 MBI	0.254 *											
	p=.000											
3 Total PSC	-0.193	-0.386 *										
	p=.001	p=.000										
4 Involve-	-0.203	-0.497	0.502									
ment	p=.000	p=.000	p=.000									
5 Peer	-0.245	-0.373	0.491	0.527								
Cohesion	p=.000	p=.000	p=.000	p=.000								
6 Staff Support	-0.161	-0.364	0.367	0.476	0.503							
	p=.003	p=.000	p=.000	p=.000	p=.000							
7 Autonomy	-0.096	-0.313	-0.334	0.463	0.31	0.563						
	p=.053	p=.000	p=.000	p=.000	p=.000	p=.000						
8 Task	-0.241	-0.262	0.356	0.489	0.357	0.253	0.135					
Orientation	p=.000	p=.000	p=.000	p=.000	p=.006	p=.000	p=.012					
9 Work	0.106	0.236	-0.24	-0.046	-0.189	-0.22	-0.057	0.011				
Pressure	p=.038	p=.000	p=.000	p=.217	p=.001	p=.000	p=.168	p=.425				
10 Clarity	-0.254	-0.274	0.39	0.506	0.532	0.509	0.312	0.563	-0.232			
	p=.000	p=.000	p=.000	p=.000	p=.000	p=.000	p=.000	p=.000	p=.000			
11 Control	-0.049	0.166	-0.013	-0.145	-0.029	-0.267	-0.36	0.268	0.14	0.11		
	p=.206	p=.003	p=.415	p=.007	p=.312	p=.000	p=.000	p=.000	p=.009	p=.032		
12 Innovation	-0.052	-0.387	0.323	0.544	0.385	0.512	0.572	0.302	0.002	0.377	-0.216	
	p=.190	p=.000	p=.000	p=.000	p=.000	p=.000	p=.000	p=.000	p=.482	p=.000	p=.000	
13 Physical	-0.059	-0.062	0.158	0.058	0.237	0.138	0.013	-0.162	-0.224	0.317	0.208	0.105
Comfort	p=.161	p=.148	p=.000	p=.167	p=.000	p=.010	p=.411	p=.003	p=.000	p=.000	p=.000	p=.038

* n= 284

had higher mean scores on the physical comfort subscale of the WES while managers reported slightly higher amounts of psychological sense of community.

Table 2

Means and standard deviations for female employees, female managers and female non-managers.

Variable	Total Sample n=284		Management n=114		Non- management n=170		Comparison		
	Mean	SD	Mean	SD	Mean	SD	t	df	p*
MBI	92.772	40.795	84.228	36.869	98.419	42.387	2.91	282	0.004
Involvement	5.459	2.448	6.211	2.084	4.953	2.549	-4.37	283	0.001
Peer Cohesion	5.392	2.175	5.474	2.134	5.337	2.206	-.61	283	ns
Staff Support	4.372	2.249	5.237	2.126	4.379	2.270	-3.20	283	0.002
Autonomy	5.316	1.984	5.711	1.885	4.787	1.967	-3.94	283	0.001
Task Orientation	6.258	1.943	5.974	1.980	6.454	1.899	2.03	283	ns
Work Pressure	5.967	2.327	6.228	2.316	5.793	2.324	-1.55	283	ns
Goal Clarity	4.898	2.526	4.754	2.494	4.994	2.551	.78	283	ns
Control	5.212	2.200	4.632	2.154	5.604	2.160	3.73	283	0.001
Innovation	3.943	2.516	4.579	2.697	3.515	2.297	3.56	283	0.001
Physical Comfort	4.025	2.504	3.684	2.396	4.254	2.557	1.89	283	ns
Hassles	33.504	29.042	33.026	27.985	33.284	29.807	.23	282	ns
SCI total	8.880	2.192	9.026	2.131	8.782	2.233	-.92	282	ns

* all significant differences remained after adjustment for multiple t-tests using the Bonferroni method (Keppel, 1982)

Hypothesis 1- Factors Predicting Stress As Measured by the MBI and DH

The first hypothesis stated that different factors would predict and explain the stress phenomenon in female management and female non-management employees. This hypothesis was tested by computing multiple regression equations on the MBI and the DH scale for the management and non-management groups.

To determine the best predictors of stress in female management and non-management employees, the ten WES subscales, total SCI and tenure in the organization were entered into stepwise multiple regression analyses. Tenure was included because, intuitively, the amount of stress should also increase with the amount of time spent in an organization. Summaries of these analyses are presented in Table 3 and Table 4.

As expected, different factors predicted the stress experience as measured by the MBI in female managers and non managers. For managers peer cohesion entered the regression equation first, followed by task orientation and work pressure. Total sense of community did not enter the regression equation as a predictor of managerial stress. For female non-managers involvement entered the regression equation first, followed by control and total sense of community. Tenure did not enter either equation (Table 3).

Table 3

Regression results predicting stress from WES, Total SCI, and tenure for management and non-management employees as measured by the MBI.

Criterion	Variables in regression equation	R	R^2_{step}	beta	t [a]
Management Employees n=114					
MBI	Peer Cohesion	0.373	0.139	-0.373	-4.24***
	Task Orientation	0.444	0.197	-0.252	-2.82*
	Work Pressure	0.523	0.282	-0.282	3.38**
Non-management Employees n=170					
MBI	Involve	0.529	0.28	-0.529	-8.04***
	Control	0.56	0.31	0.184	2.82*
	Total SCI	0.582	0.33	-0.191	-2.5*

***p < .000   **p < .001   *p < .05

[a] t value for a variable's beta weight in the final equation, after all variables have been entered.

Different factors predicted stress for the managers and non-managers as measured by the DH scale. For managers, sense of community entered the regression equation first, followed by task orientation and innovation. However, for non-managers peer cohesion was the only variable to enter the regression equation. Once again tenure did not enter either regression equation for the managers or non-managers. See Table 4.

Table 4

Regression results predicting stress from WES, Total SCI, and tenure for management and non-management employees as measured by the DH.

Criterion	Variables in regression equation	R	R^2_{step}	beta	t [a]
Management Employees n=114					
DH	Total SCI	0.36	0.13	-0.363	-4.11 ***
	Task Orientation	0.44	0.19	-0.261	-2.92 **
	Innovation	0.49	0.24	0.247	2.62 **
Non-management Employees n=170					
DH	Peer Cohesion	0.279	0.07	-0.279	-3.479 **

***$p < .000$ **$p < .001$ *$p < .05$

[a] t value for a variable's beta weight in the final equation, after all variables have been entered.

Hypothesis 2   Predicting Psychological Sense of Community

The second hypothesis stated that factors from both the relationship and system maintenance domains of the WES would predict total psychological sense of community as measured by the SCI. To test this hypothesis eight specific subscales within both the system maintenance and relationship domains of the WES were entered into a stepwise multiple regression equation with psychological sense of community as the criterion variable.

Table 5 shows the results of this analysis.

As predicted, factors from both the relationship and system maintenance domains entered the regression equation for the SCI. Involvement, which is from the relationship dimension, entered the regression equation first, followed by another factor from the relationship dimension, peer cohesion. The final factor to enter the equation, work pressure, came from the system maintenance dimension of the WES. These factors accounted for 35% of the variance in predicting total psychological sense of community. See Table 5.

Table 5

Regression results predicting Psychological Sense of Community from relationship and system maintenance domains of the WES.

Criterion	Variables in regression equation	R	R^2_{step}	beta	t^a
Total SCI	Involvement	0.502	0.252	0.502	9.738 ***
	Peer Cohesion	0.568	0.323	0.313	5.417 ***
	Work Pressure	0.593	0.351	-0.172	-3.49 ***

*** $p < .000$

[a] t value for a variable's beta weight in the final equation, after all variables have been entered.

Hypothesis 3- Psychological Environmental Variables Predicting Burnout

Hypothesis 3 predicted that female employees with low levels of staff support, peer cohesion, psychological sense of community, job clarity and job involvement would report higher levels of burnout. This was tested by correlating these variables to determine if significant inverse relationships existed between these variables and the MBI.

Table 6 shows the intercorrelations between the MBI, SCI, staff support, peer cohesion, job clarity, and job involvement. As predicted there were significant negative relationships between the female employees' experience of burnout and the predicted variables. See Table 6.

Table 6

<u>Pearson correlations for total sample, management and non-management.</u>

Variable	Total Sample	Management	Non-management
Staff Support	-0.3642	-0.343	-0.343
	n=283	n=114	n=169
Peer Cohesion	-0.3724	-0.372	-0.374
	n=283	n=114	n=169
Total SCI	-0.3855	-0.346	-0.402
	n=284	n=114	n=170
Job Clarity	-0.2747	-0.342	-0.256
	n=283	n=114	n=169
Job Involvement	-0.497	-0.345	-0.53
	n=283	n=114	n=169

All coefficients significant beyond .001

Hypothesis 4 - Comparing Environmental Personality and Behavioral
Experiences of Stress as Predictors of Burnout

The fourth hypothesis examined whether the work environment (as measured by the WES and SCI) or amount of stress (as measured by the DH) would account for more burnout in the managers and non-managers. This hypothesis was tested through stepwise multiple regressions in which the ten WES subscales, SCI and DH were all entered into separate regression equations for both the management and non-management groups, using MBI as the criterion.

In the management group peer cohesion entered the stepwise regression equation first, followed by the daily hassles, work pressure and finally innovation. These four variables accounted for 32% of the variance in the burnout in the management group. This contrasted with the regression outcomes for the non-management group. For non- managers involvement entered the regression equation first, followed by control and finally by sense of community. Slightly more variance was accounted for in this group than in the management group with a total 34% variance explained after sense of community entered the regression equation. It was interesting to compare this with the regression outcome for both the combined management and non-management groups. In the combined management and non-management group involvement entered the regression equation first, followed by work pressure, innovation and finally by the amount of daily hassles. These four variables accounted for 33% of

the variance in the burnout associated with the overall female employees. From these results it appears that it is the environmental factors rather than the behavioral experiences that best explains the burnout found in the managers, non-managers and employees as a combined group. See Table 7.

Table 7

Regression results predicting burnout from the WES, SCI, and DH for the entire sample and management versus non-management employees.

Criterion	Variables in regression equation	R	R^2_{step}	beta	t^a
Total Sample	n = 284				
MBI	Involve	0.49	0.24	-0.497	-9.6 ***
	Work Pressure	0.54	0.29	-0.487	4.25 ***
	Innovation	0.56	0.31	-0.173	-2.94 *
	Hassles	0.57	0.33	0.149	2.96 *
Management Employees	n = 114				
MBI	Peer Cohesion	0.37	0.14	-0.372	-4.24 ***
	Hassles	0.45	0.21	0.274	3.2 *
	Work Pressure	0.5	0.256	0.216	2.59 **
	Innovation	0.56	0.32	-0.287	-3.29 **
Non-management Employees	n = 170				
MBI	Involve	0.53	0.28	-0.538	-8.25 ***
	Control	0.56	0.32	0.184	2.84 **
	Total SCI	0.58	0.34	-0.182	-2.42 *

***$p < .000$ **$p < .001$ *$p < .05$

[a] t value for a variable's beta weight in the final equation, after all variables have been entered.

Post Hoc Observations of Psychometric Properties

MBI and the DH Scales: Different Elements of Stress

It was important to examine the stress component in this study in relation to the burnout component. Many researchers have assumed that stress and burnout are synonymous with each other, or that burnout is equal to the accumulation of chronic stress experiences. This study suggests a relationship which is not additive. The correlation of the MBI and DH scales was significant (r = .254, p = .000) but, there was not a one to one ratio found between both of these measures and the correlation only explained a percentage of the variance. However, it was interesting to observe that each scale was able to measure different elements of the stress experience for both the management and non-management groups. The specific elements of the WES subscale that were accessed depended upon what level of the organization and the specific measure chosen as the criterion variable.

Validating the SCI as a measure of psychological sense of community

The correlations of the SCI with the other environmental variables from the WES subscales were examined. This analysis lent support for the construct validation of the SCI as a measure of psychological sense of community as defined by McMillan and Chavis. As expected, the SCI correlated positively

with the WES subscales as would have been predicted by the sense of
community theory (r = .5023, p = .000) for involvement; (r = .4910, p = .000)
for peer cohesion and (r = .3669, p = .000) for staff support. As was also
expected the SCI did not correlate positively with the control subscale of the
WES (r = .-.0128, p = n.s.). These correlations assist in providing further
evidence of construct validity of the SCI because the components that should
and should not correlate with it on a theoretical basis have done so.

Discussion

Stress as a function of organizational status and psychological measure

Using the MBI as the stress criterion peer cohesion entered the regression equation first, followed by task orientation and work pressure for the managers. Total sense of community did not enter the regression equation as a predictor of managerial stress. For female non-managers involvement entered the regression equation first, followed by control and total sense of community. Tenure did not enter either equation.

When the DH scale was used as the criterion measure for non-managers with the same variables used in the first regression equation different factors were also found to predict the stress for the managers and non-managers. For managers, sense of community entered the regression equation first, followed by task orientation and innovation. However, for non-managers peer cohesion was the only variable to enter the regression equation. Once again tenure did not enter either equation for the managers or non-managers.

Since this hypothesis was exploratory in nature there were no research findings available for contrast and comparison. Given this fact it is of even greater importance that people who are involved with intervention aspects of stress and burnout become aware of the potential differential nature of the environmental impact on the experience of these conditions. The

regression analyses suggest that factors which affect managers are not necessarily what affect non-managers. Thus, the findings from this specific hypothesis should be able to make a significant contribution in extending the body of research literature to date. Intuitively, it makes sense that different environmental factors would impact on the experience and perception of stress for managers and non-managers. For example, job responsibilities, factors that influence interactions with others, and actual tasks and duties all differ depending upon where one is located in the organizational hierarchy.

The MBI and DH scales were both chosen as criterion measures of stress because from observation it appeared that each scale might measure different components of the stress experience. For instance, in reviewing the MBI it was observed that this measure focused on more subjective or reflective qualities of the experience of stress whereas the DH focused on the more easily identifiable, behavioral experiences of stress. Both stress measures were significantly and positively correlated with each other; however, from the results of the regression analyses it appeared there were differences in the elements that both scales were able to measure. This outcome seems to suggest that the relationship of stress and burnout and the overlap of these constructs may be even more complex than originally acknowledged.

It was also interesting to note that tenure did not account for any stress for either the managers or non-managers. One would initially expect the opposite because the longer people are in organizations the more

opportunity they have had to come into contact with stressors and other depleting factors. Perhaps, though it is the converse of the argument that best explains this particular finding. For instance, as time in an organization increases the stress level may increase; yet, time may also assist in the development of constructive ways of coping with the specific stressors thereby, negating this previously expected finding. Another possible explanation for this finding could be that people who have experienced stress have left the organization. One potential way for examining this explanation would be to consider rates of turnover.

In examining whether the work environment (as measured by the WES subscales and SCI) or the amount of stress (as measured by the DH) would account for more burnout in the management and non-management employees, it was not surprising that again the results varied depending on the group. Perceptions of the environment are affected by experiences which seem to vary depending upon where one is in the larger picture. Given the exploratory nature of the hypothesis in question, once again there was no larger body of research literature with which to compare or contrast these findings. The profiles of the regression analyses were different for all three groups. For instance, in the total sample group "hassles" or the daily behavioral experience of stress was the last variable to enter the regression equation and it only increased the total explained variance by 2%. This followed the three WES subscales of involvement, work pressure and innovation. The other environmental predictor variable, sense of community, did not factor into the equation. This pattern was quite

different for the management group. In this case "hassles" followed peer cohesion and accounted for a 7% increase in the variance associated with burnout. Once again the other environmental variable, sense of community, did not factor into the equation and the "hassles" variable was then followed by two other WES subscales of work pressure and innovation. In the non-management group the pattern was very different in that "hassles" or the daily behavioral experience of stress did not account for any of the explained variance associated with burnout. However, it was interesting to note that the other environmental variable, sense of community, did enter the equation, following the other WES subscales of involvement and control.

Thus, for the non-management group it seems to be the experience of environmental factors that more highly influences the burnout rather than the daily experience of daily stress. The non-management group is also the group in the company experiencing the highest burnout; therefore, this finding may be important in terms of influencing the type of intervention strategy chosen to assist these workers in combatting their experience of burnout. Indeed, for all the three groups there is some evidence to suggest that it is the experience of environmental personality factors of the organization rather than a daily behavioral experience of stress that better accounts for the burnout.

Importance of Work Environment

As expected, factors from both the relationship and system maintenance domains of the WES were able to predict a significant portion of the variance in the psychological sense of community variable. Although all the specific factors of this hypothesis were not located in the literature previously reviewed, this outcome is not surprising given the previous findings of Pretty (1990). In that study a relationship between social climate characteristics and psychological sense of community was demonstrated for students in the university residence community. That study suggested that sense of community is influenced by perceptions of the environment, performance demands, as well as interpersonal networks and support. Also according to the outcomes of the Multiple Regression analyses for the Pretty study 54% of the variance of sense of community scores was accounted for by a combination of the involvement, academic achievement and support characteristics of the residents social climate.

Likewise, this study produced similar outcomes as involvement and peer cohesion (from the relationship domain of the WES) and work pressure (from the system maintenance domain) all entered the regression equation to account for 35% of the variance associated with sense of community. Although the total variance explained is less than that in the Pretty (1990) study, it is still significant that both relationship and system maintenance dimensions entered the prediction equation for sense of community in a much different type of environment. This adds support for the argument that sense of community is indeed influenced by perceptions of the

environment, performance demands and interpersonal networks and support.

Furthermore, it was interesting to note that the involvement subscale was the variable to first enter Multiple Regression equations predicting sense of community in both this and the Pretty study. Certainly these findings are also not surprising given the nature and strength of the relationships initially observed in the correlation matrix of the study variables. Given how involvement was an important variable for both studies it is also interesting to note examples of specific items in this subscale. An example of the types of items that are found in the WES involvement subscale are "there's not much group spirit" and "people seem to take pride in the organization". Indeed, the results even make sense from an intuitive standpoint given the nature of the four components of sense of community (membership, influence, integration and fulfillment of needs, and shared emotional connection) as originally conceptualized by McMillan and Chavis (1986). To develop a sense of community it is first necessary for people to become involved with others. Without initial contact one cannot be reinforced or develop a feeling of membership and sense of shared emotional connection with others. There may be overlap found between the WES subscale peer cohesion and what the membership, reinforcement and shared emotional connection components are able to measure. One ' also expect work pressure to impact on sense of community because as work demands and pressures increase the amount of time and energy people have to invest in contact with others decreases. This was also

substantiated by the significant and negative correlation coefficient found between sense of community and the work pressure subscale.

In a previous study investigating sense of community and burnout McCarthy, Pretty and Catano (1990) found that students with a higher sense of community reported experiencing less burnout. In this study this finding was also generalizable to the work environment as there was a significant, negative relationship obtained between the sense of community and burnout for the female employees. Furthermore, the relationship obtained for the corporate employees was more than three times as strong as the original relationship found for the students. Although a relationship between these two variables has been further demonstrated by the results of this second study it must be remembered that causal inferences cannot be determined at this time because the research is based on a correlational design.

This study supported the position that female employees with low levels of staff support, peer cohesion, psychological sense of community, job clarity and involvement would report higher levels of burnout. As expected significant, negative relationships were obtained between each of these variables and the burnout measure. It was difficult to contrast and compare these findings with those reported in the research literature because only some of these factors have been combined to examine burnout. In addition, the population of interest and specific combination of variables has differed as has the types of analytic techniques conducted in these studies.

Rosenthal et al. (1983) studied, for example, the relationship between burnout and the work environment in park and recreational professionals by using the MBI and the WES. However, they used two separate component scores of the MBI in various combinations with other variables to interpret their findings. Therefore, it was not possible to compare this study's findings with other studies. Nevertheless, the results were consistent with what would be expected from an intuitive basis. Given the symptoms reported for the burnout phenomenon it was not unexpected that burnt out employees would report experiencing decreased staff support, peer cohesion, sense of community, job clarity and job involvement. It was also interesting to note that status in the organization did not change the significance or direction of the relationships; although, some of the relationships were slightly strengthened or weakened for the managers or non-managers. One interpretation of this finding could be that perceptions and experiences of the psychological work environment do impact on people's health and well-being via the burnout experience. Thus, once again this seems to provide support for considering the psychological work environment when specific types of intervention strategies are considered for addressing the burn out for personnel in the organization.

It is also important to note that the present study has focused only on the female experience of burnout and stress; however, past research has indicated that there is a confound between gender and rank. That is male workers have held higher ranking positions than the female workers who have more often been found at the lower ranks of the organization.

Although this study does not permit this type of exploration the gender factor versus the rank factor does warrant further attention. To more adequately examine this issue another study should be conducted that contains both male and female subjects. This way it would be possible to compare both men and women and their ranks so that the confound associated with this issue could be more effectively resolved.

Conclusion

This study has provided new information to assist in advancing the understanding of how stress and burnout are experienced by female managers and non-managers in a large organization. From the regression analysis it was first determined that stress and burnout were not experienced the same way by employees working in different levels of the organization. Thus, the experience of burnout and stress may not have a fit-one-fit-all quality that is so often detected in readings based on past conceptualizations of burnout. The findings from regression analyses were suggestive that environmental personality factors associated with social climate characteristics influenced the employees experience of burnout differently depending on employee status within the organization. Furthermore, the findings were also suggestive that it was the environmental experience rather than a daily behavioral experience of stress that was more able to explain the burnout for the workers. Psychological sense of community was also found to be negatively and

significantly related to the amount of burnout experienced by the workers in the organization.

Clinical Implications

This study has provided some evidence to suggest that environmental variables do have a direct connection to the outcome measures of stress and burnout. Furthermore, it seems what people experience is also related to where they are located within the organizational hierarchy. There can be some important ramifications from these findings. For instance, much of the burnout literature seems to have explained the phenomenon in quite absolute terms. One is left with the sense that this is how burnout is experienced – even by widely discrepant types of people who work in a variety of conditions.

> "Burnout appears to be a response to interpersonal stressors
> on the job, in which an overload of contact with people results
> in changes in attitudes and behaviors towards them. More
> specifically, burnout has been defined as as a syndrome of
> emotional exhaustion, depersonalization, and a reduced sense
> of personal accomplishment, which can occur among
> individuals who work with people in some capacity "
> (Maslach & Jackson, 1986 cited in Leiter, 1988 p. 297).

From this quotation one is given the distinct impression that burnout is the

individual's problem. There is something inherently wrong with him or her and the way they cope; therefore, they succumb to burnout. Serious consequences can exist from this victim blaming attitude. Women who are experiencing difficulties at work are left with the sense that there must be something wrong with them and therefore, they need to work that much harder to "shape up". As previously mentioned many women are already responsible for heavy work loads so that this additional strain would only make symptoms and performance worse not better.

Perhaps, what is most troublesome about this interpretation of burnout is that there is virtually no consideration given to the potential impact environmental factors and conditions could have on worker productivity. In the need to explain why this phenomenon is experienced by only some people, and in the absence of other clear and consistently identifiable variables, it seems that explanations have been focused back on the one consistent variable in the burnout equation, the individual worker. Thus, one can see the potential importance of the findings from this study because blaming the employee experiencing burnout does not seem to help the individual worker or the organization cope with it's harmful effects.

Given the supportive evidence that environmental factors do play some part in the burnout experience within the organization provides possible alternative means for helping employees function more productively. Certainly becoming cognizant of the environmental component in burnout is one step organizations could take in addressing issues associated with

the phenomenon. Perhaps, organizations could also be assisted in developing different types of strategies based on more global and environmental types of interventions. This could be applied to help assist both the employees who have not yet experienced burnout and also those employees who are currently experiencing burnout. Thus, both the employee and the organization could potentially benefit from the development of these types of intervention strategies. In addition the onus for the female employee to handle the problem, usually alone, would be removed. This could help in decreasing the personal suffering associated with the phenomenon and the company could also benefit by having healthier and more productive employees.

In summary, most women are located at lower levels of the organization; therefore, attention to gender differences in the experience of burnout has been clearly warranted. With some evidence to suggest there is both a differential and environmental component in the experience of burnout it is not beneficial to maintain only a blame the victim attitude. Therefore, by beginning to tailor more global types of organizational interventions we might find new and better ways to help to reduce the amount of burnout in employees. Given the rampant and devastating effects associated with this phenomenon finding new means for decreasing burnout would be most welcome from both an organizational and individual perspective.

Limitations

In examining the multiple regression analysis it is important to address the potential affect multicollinearity could have on the stability of the regression equations. For example many of the subscales of the WES are intercorrelated and also correlated with the SCI; however, the actual strength and direction of the correlation varies depending on which subscales are examined. In noting this and the fact that DH and MBI were also significantly correlated with each other it becomes important to consider the potential impact multicollinearity could have on the stability of the regression equations. One way to address this issue would be to cross validate these findings on other populations and future research studies should consider addressing this. In addition there may have been some effect from only having one measure of stress in this study and future research may want to address this by adding other stress measures to more adequately balance the representation of the variables in question.

Future Research

The findings from this study are suggestive that one's environmental experience may affect their perception and experience of stress and burnout. However, because this research is exploratory and correlational in nature one must be cautious in not drawing causal inferences from the findings. This is a new area of research and more definitive studies will be needed to both confirm these findings and extend this body of enquiry.

References

Abella, Judge R.S. (1984). *Equality in employment: A Royal commission report*. Ottawa: Supply and Services Canada

Adams, J.D. (1978). Improving stress management. *Social Change: Ideas and Applications, 8,* 1-11.

Albrecht, T.L. (1982). What job stress means for the staff nurse. *Nursing Administration, Fall,* 1-11.

Alpert, D. & Culbertson, A. (1987). Daily hassles and coping strategies of dual-earner and nondual-earner women. *Psychology of Women Quarterly, 11,* 359-366.

Aronson, E. & Mills, J. (1959). The effect of severity of initiation on liking for a group. *Journal of Abnormal and Social Psychology, 59,* 177-181.

Baron, A. & Cohen, R.B. (1982). Helping telephone counselors cope with burnout: A consciousness-raising workshop. *Personnel and Guidance Journal, 60,* 508-510.

Barad, C.B. (1979). Study of burnout among social security administration field public contact employees. Unpublished report, Social Security Admin.

Barrett, M.C. & McKelvey, J. (1980). Stresses and strains on the child care worker: Typologies for assessment. *Child Welfare, 59,* 277-285.

Belanger, S. (1984). Women and technology. *Canada's Mental Health, 32,* 17-18.

Bensky, J.M., Shaw, S.F., Gouse, A.S., Bates, H., Dixon, B. & Beane, W.E. (1980). Public law 94-142 and stress: A problem for educators. *Exceptional Children, 47,* 24-29.

Bergin, A.E. (1971). The evaluation of therapeutic outcomes. In A.E. Bergin & S.L. Garfield (Eds.) Handbook of psychotherapy and behavior change: An empirical analysis. New York: Wiley.

Bermack, G.E. (1977). Do psychiatrists have special problems? *American Journal of Psychiatry, 37,* 141-146.

Buss, A.H. & Portnoy, N.W. (1967). Pain tolerance and group identification. *Journal of Personality and Social Psychology, 6,* 106-108.

Breif, A., Sell, M., Aldog, R., & Melone, N. (1979). Anticipatory socialization and role stress among registered nurses. *Journal of Health and Social Behavior, 20,* 165.

Brill, P.L. (1984). The need for an operational definition of burnout. *Family and Community Health, 6,* 12-24.

Burks, N. & Martin, B. (1985). Every problems and life change events: Ongoing versus acute sources of stress. *Journal of Human Stress, 11,* 27-35.

Cahoon, A.R. & Rowney, J.I. (1984). Variables influencing job satisfaction and stress in female managers. Paper presented at the Forty-fifth Annual Conference of the Canadian Psychological Association, Ottawa: June.

Canadian Advisory Council on the Status of Women (1985). *Women and work.* Ottawa: Canadian Advisory Council on the Status of Women.

Canadian Mental Health Association (1984). *Work and well-being: The changing realites of employment.* Toronto: Author.

Cardinell, C. (1981). Burnout? Midlife crisis? Let's understand ourselves. *Contemporary Education, 52,* 103-108.

Chacko, T.I. (1982). Women and equal employment opportunity: Some unintended effects. *Journal of Applied Psychology, 67,* 119-123.

Chavis, D.M. (1986). Sense of community through Brunswick's lens: A first look. *Journal of Community Psychology, 14,* 24-40.

Cherniss, C. (1980). *Professional burnout in human service organizations.* New York: Praeger.

Chiriboga, D.A. & Cutter, L. (1980). Stress and adaption: Life span perspectives. In L.W. Poon (Ed.) *Aging in the 1980's: Psychological Issues.* Washington DC: Amer. Psychological Association.

Chusmir, L.H. (1985). Motivation of Managers: Is gender a factor. *Psychology of Women Quarterly, 9,* 153-159.

Colwill, N.L. (1985). The secretarial crisis: Toward evolution or extinction? *Business Quarterly, 50,* 12-14.

Colwill, N.L. & Colwill, H.D. (1986). Women with blue collars: The forgotten minority. *Business Quarterly, 50,* 15-17

Constable, J,F. & Russell, D.W. (1986). The effect of social support and the work environment upon burnout among nurses. *Journal of Human Stress, 12,* 20-26.

Crase, D. (1980). Antecedents of faculty frustration. *Physical Education, 37,* 118-121.

Davidson, M. & Cooper, C. (1980) The extra pressures on women executives. *Personnel Management, 12 ,*45 - 51.

Daley, M.R. (1979). Burnout: Smoldering problem in protective services. *Social Work, 24,* 375-379.

DeLongis, A., Coyne, J.C., Dakof, G., Folkman, S., & Lazarus, R.S. (1982). Relationship of daily hassles, uplifts, and major life events to health states. *Health Psychology, 1,* 119-136.

Dohrenwend, B.S. & Dohrenwend, B.P. (1974). *Stressful life events: There nature and effect.* New York: Wiley.

Dohrenwend, B.S. & Dohrenwend, B.P. (1980). What is a stressful life event? In H.Selye (Ed.). *Selyes guide to stress research.* New York: Van Nostrand Reinhold.

Edelwich, J. (1980). *Burnout: Stages of disillusionment in the helping professions.* New York: Human Services Press

Eisenstat, R.A. & Felner, R.D. (1984). Toward a differentiated view of burnout: Personal and organizational mediators of job satisfaction and stress. *American Journal of Community Psychology, 12,* 411-431.

Eisenstat, R.A. & Felner, R.D. (1983). Organizational mediators of the quality of care: Job stressors and motivators in human service settings. In B.A. Farber (Ed.) *Stress and burnout in the human service professions.* New York: Pergamon Press.

Eisenstat, R.A. & Felner, R.D. (1984). Toward a differentiated view of burnout: Personal and organizational mediators of job satisfaction and stress. *American Journal of Community Psychology, 12,* 411-430.

Emener, W.G., Luck, R.S. & Gohs, F.X. (1982). A theoretical investigation of the construct burnout. *Journal of Rehabilitation Administration, xx,* 188-197.

Emener, W.G. & Rubin, S.E. (1980). Rehabilitation counselor roles and functions and sources of role strain. *Journal of Applied Rehabilitation Counseling, 11,* 57-ι .

Etzion, D. (1984). Moderating effect of social supnort on the stress burnout relationships. *Journal of Applied Psychology, 69,* 615-622.

Farber, B.A. (1983). *Stress and burnout in the human service professions.* New York: Pergamon Press.

Farber, B.A. & Heifetz, L.J. (1982). The process and dimensions of burnout in psychotherapists. *Professional Psychology, 13,* 293-301.

Farber, B.A. & Heifetz, L.J. (1981). The satisfaction and stresses of psychotherapeutic work: A fact r analytic study. *Professional Psychology, 12,* 621-630.

Fieldler, F., Potter, E., Zais, M., & Knowlton, W. (1979). Organizational stress and the use and misuse of ma ιgerial intelligence and experience. *Journal of Applied Psychology, 64,* 646.

Forney, D.S., Wallace-Schutzman, R. & Wiggers, T.T. (1982). Burnout among career development professionals: Preliminary findings and implications. *Personnel and Guidance Journal, 60,* 435-439.

Freudenberger, H.J. (1975). The staff-burnout syndrome in alternative institutions. *Psychotherapy: Theory, Research and Practice, 12,* 73-83.

Freudenberger, H.J. (1977). Burnout: Occupational hazard of the child care worker. *Child Guidance Quarterly, 6,* 90-99.

Freudenberger, H.J. (1977). Burnout: The organizational menace. *Training and Development Journal, July,* 26-27.

Freudenberger, H.J. & Richardson, G. (1980). *Burn-out: The high cost of high achievement. What it is and how to survive it.* Garden City, NY: Doubleday.

Glynn, T.J. (1986). Neighborhood and sense of community. *Journal of Community Psychology, 14,* 341-352.

Greenglass, E.R. (1985a). Psychological implication of bias in the workplace. *Academic Psychology Bulletin, 1,* 227-240.

Greenglass, E.R. (1985b). An interactional perspective on job related stress in managerial women. *The Southern Psychologist, 2,* 42-48.

Harris, P.L. (1984). Burnout in nursing administration. *Nursing Administration Quarterly, Spr.,* 61-70.

Harrison, W.D. (1980). Role strain and burnout in child protective service workers. *Social Science Review, 54,* 31-44.

Higgins, N.C. (1986). Occupational Stress and working women: The effectiveness of two stress reduction programs. *Journal of Vocational Behavior, 29,* 66-78.

Hirsch, B.J. (1979). Psychological dimensions of social networks: A multi-method analysis. *American Journal of Community Psycho'ogy, 7,* 263-277.

Holahan, C.J. & Moos, R.H. (1982). Social support and adjustment: Predictive benefits of social climate indices. *American Journal of Community Psychology, 10,* 403-415.

Holahan, C.J. & Moos, R.H. (1983). The quality of social support: Measures of family and work relationships. *British Journal of Clinical Psychology, 22,* 157-162.

Holmes, T.H. & Rahe, R.H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research, 11,* 213-218.

James, E.L. (1981). *Excessive stress takes toll from work as well as play.* Los Angeles Times, 12 Feb.

Jenkins, J.F. & Ostchega, Y. (1986). Evaluation of burnout in oncology nurses. *Cancer Nursing, 9,* 108-115.

Jick, T.D. & Mitz, L.F. (1985). Sex differences in Work Stress. *Academy of Management Review, 10,* 408-420.

Kanner, A.D., Coyne, J.C., Schafer, C., & Lazarus, R.S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavior Medicine, 4,* 1-39.

Kanter, R.M. (1977). *Men and women of the corporation.* New York: Basic Books.

Kelly, J.G., Snowden, L.R. & Munoz, R.F. (1977). Social and community community interventions. *Annual Review of Psychology, 28,* 323-361.

Keppel, G. (1982). *Design and Analysis.* Englewood Cliffs, New Jersey: Prentice Hall.

de Koninck, M. (1984). Double work and women's health. *Canada's Mental Health, 32,* 28-31.

Kottkamp, R.B. & Mansfield, J.R. (1985). Role conflict, role ambiguity, powerlessness and burnout among high school supervisors. *Journal of Research and Development in Education, 18,* 29-38.

Kraft, P. (1984). *Computer Programming: Do males and females do the same work?* Paper presented at the Office of Technology Assessment Symposium on the Impacts of Office Automation and Computer Mediated Work on the Quality of Worklife, Washington, DC.

Krumman, J. & Kleiner, B. (1985). *The nature and importance of stress management.* The Journal, winter, 10-14.

LaCroix, A.Z. & Haynes, S.G. (1987). Gender differences in the health effects of workplace roles. In R.C. Barnett, L. Biener, & Baruch, G.K. (Eds.) *Gender and Stress* (pp. 96-121). New York: The Free Press.

Larwood, L. & Wood, M. (1977). *Women in management.* Lexington, Mass: Lexington Books.

Lavendero, R. (1981). Nurse burnout: What can we learn. *The Journal of Nursing Administration, Nov.,* 17-23.

Lazarus, R.S. & Cohen, J.B. (1978). Environmental stress. In I. Altman & J.F. Wohwill (Eds.) *Human behavior and the environment. Current theory and research.* New York: Plenum Press.

Leiter, M.P. (1988). Commitment as a function of stress reactions among nurses: A model of psychological evaluations of work settings. *Canadian Journal of Community Mental Health, 7,* 117-133.

Leiter, M.P. & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior, 9,* 297-308.

Lennerlof, L. (1986). Psychology at work: Behavioral science in the work environment research. *International Review of Applied Psychology, 35,* 79-99.

Levine G. (1981). *I quit! A guide to burnout prevention.* Orange, CA: Indeco.

Lips, H.M. & Colwill, N.L. (1988). Psychology addresses women and work: Canadian Research in 1980s. *Canadian Psychology, 29,* 57-68.

Maslach, C. (1982). *Burnout - the cost of caring.* Englewood Cliffs, NJ: Prentice-Hall.

Maslach, C. & Jackson, S.(1979). *The measurement of experienced burnout.* Unpublished manuscript, University of California, Berkeley, Ca.

Maslach, C. & Jackson, S.(1981). The measurement of experienced burnout. *Journal of Occupational Behavior, 2,* 99-113.

Maslach, C. & Jackson, S.(1985). The role of sex and family variables in burnout. *Sex Roles, 12,* 837-850.

Maslach, C. & Pines, A. (1977). The burnout syndrome in the day care setting. *Child Care Quarterly, 6,* 100-1113.

Mattingly, M. (1977). Sources of stress and burnout in professional child care work. *Child Care ' ·:erly, 6,* 100-113.

McCarthy, M., Pretty, G. & Catano, V. (1990). Psychological sense of community: An issue in student burnout. *Journal of College Student Personnel, 31.* 211-216.

McMillan, D.W. (1976). Sense of community: An attempt at definition. Unpublished manuscript. George Peabody College for Teachers, Nashville Tenn.

McMillan, D.W. & Chavis, D.U. (1986). Sense of community: A definition and theory. *Journal of Community Psychology, 14,* 6-23.

Meadow, K.P. (1981). Burnout in professionals working with deaf children. *American Annals of the Deaf, 26,* 13-22.

Meier, S.T. (1983). Toward a theory of burnout. *Human Relations, 36,* 899-910.

Meier, S.T., & Schmeck, R. R. (1985). The Burned -Out College Student: A Descriptive Profile. *Journal of College Student Personnel, Jan,* 63-69.

Minahan, A. (1980). Burnout and organizational change. *Social Work, 25,* 87.

Moch, M.K. Bartinett,T., & Brass, D.J. (1979). Structure, task characteristics and experienced role stress in organizations employing complex technology. *Organizational Behavior and Human Performance, 24,* 266.

Moos, R. & Gerst, M. (1974). *University Residence Environment Scale Manual.* Palo Alto, Calif.: Consulting Psychologists Press.

Moos, R. & Insel, P.M. (1974). *Combined preliminary manual, family, work and group environment scales.* California: Consulting Psychologists Press.

Nelson, D.L. & Quick, J.C. (1985). Professional women: Are distress and disease Inevitable? *Academy of Management Review, 10,* 206-218.

Neufeld, R.W. (1982). *Psychological stress and psychopathology.* New York: McGraw-Hill.

Northcott, H.C. & Lowe, C.S. (1984). The influence of working conditions on psychological distress in the Post Office. *Canada's Mental Health, 32,* 25-27.

Paine, W.S. (1984). Professional burnout: Some major costs. *Family and Community Health, 6,* 1-11.

Patrick, P.K. (1984). Professional roles at risk for burnout. *Family and Community Health, 6,* 25-31.

Patrick, P.K. (1984). Preventing burnout: Coordinating the employee health function. *Family and Community Health, 6,* 76-92.

Paykel, E.S. (1982). *Handbook of affective disorders.* New York: Guildford Press.

Pines, A., Aronson E. & Kafry, D. (1981). *Burnout: From tedium to personal growth.* New York: Fress Press.

Pretty, G. (1990) Psychological sense of community and social climate factors. *Journal of Community Psychology.18.*

Pines, A. & Kafry, D.S. (1978). Occupational tedium in the social services. *Social Work, 23,* 499-507.

Randolph, G.L., Price, J.L., & Collins, J.R. (1986). The effects of burnout prevention training on burnout symptoms in nurses. *The Journal of Continuing Education, 17,* 43-49.

Riggan, T.F., Godley, S.H. & Hafer, M. (1984). Burnout and job satisfaction in rehabilitation administrators and direct service providers. *Rehabilitation Counseling Bulletin, 27,* 151-160.

Rosenthal, D., Teague, M., Retish, P., West., & Vessell, R. (1983). The relationship between work environment attributes and burnout. *Journal of Leisure Research, 2,* 125-135.

Rubin, S.E. & Emener, W.G. (1979). Recent rehabilitation counselor role changes and role strain - A pilot investigation. *Journal of Applied Rehabilitation Counseling, 10,* 142-147.

Sarason, S.B. (1974). *The psychological sense of community: Prospects for a community psychology.* San Francisco: Jossey-Bass.

Savicki, V. & Cooley, E. (1983). Theoretical and research considerations of burnout. *Children and Youth Services Review, 5,* 227-238.

Seuntjens, A.D. (1982). Burnout in nursing - what it is and how to prevent it. *Nursing Administration Quarterly, fall,* 12-19.

Shannon, C. & Saleebey, D. (1980). Training child welfare workers to cope with burnout. *Child Welfare, 59,* 463-468.

Spaniol, L. & Caputo, J. (1979). Professional burnout. In R.S. Luck (Ed.) Shaping the future in rehabilitation education and training: A regional partnership. Virginia Commonwealth University, Fisherville, Virginia. Conference Proceedings of a Mid-Atlantic Regional Consortium on Rehabilitation Personnel and Training.

Tabor, M. (1984). Job burnout rates higher for social services profession. *Occupational Health and Safety, Mar,* 51-52.

Taylor, A. (1986). Why women managers are bailing out. *Fortune, 114,* 16-23.

Terborg, J.R. (1977). Women in management: A research review. *Journal of Applied Psychology, 62,* 647-664.

Thompson, J,W. (1980). Burnout in group home house parents. *American Journal of Psychiatry, 137,* 710-714.

Ursprung, A.W. (1986). Burnout in the human services: A review of the literature. *Rehabilitation Counseling Bulletin, March,* 190-199.

Unger, D.G. & Wandersman, A. (1985). The importance of neighbors: the social, cognitive and affective components of neighboring. *American Journal of Community Psychology, 13,* 139-169.

Wallstreet Journal (1980). Monday factor gets large part of blame for fatal coronaries. Sept 19.

Warnath, C.F. & Shelton, J.L. (1976). The ultimate disappointment: The burned out counselor. *Personnel and Guidance Journal, 54,* 172-175.

Weiskopf, P. (1980). Burnout among teachers of exceptional children. *Exceptional Children, 47,* 18-23.

Wolf, W.C. & Fligstein, N.D. (1979). Sexual stratification: Differences in power in the work setting. *Social Forces, 58,* 94-107.

Wright, E.O., Costello, C., Hachen, D., & Sprague, J. (1982). The American class structure. *American Sociological Review, 47,* 709-726.

APPENDICES

Appendix A

Summary of demographic variables used in the study.

Variable	Total N	Total %	Man. N	Man. %	Non-man. N	Non-man. %
Age						
18 -22	6	2.1	1	.9	5	2.9
23 - 34	105	37.4	41	36	64	37.6
35 - 49	135	48	60	52.6	75	44.1
50 - 64	35	12.5	11	9.6	24	14.1
Tenure						
0 - 1 year	11	3.9	5	4.4	6	3.5
1 - 5 years	46	16.3	13	11.4	33	19.4
6 - 10 years	37	13.1	15	13.2	22	12.9
11 - 20 years	127	45	54	47.4	73	42.9
21 - 30 years	53	18.8	23	20.2	30	17.6
31 - 40 years	8	2.8	3	2.6	5	2.9
Education						
Highschool	145	51.4	50	43.9	95	55.9
Technical	74	26.2	20	17.5	54	31.8
University	63	22.3	44	38.6	19	11.3

Appendix B

Cover letter sent with survey questionnaire.

Dear Participant,

In 1988, Occupational Health Services completed a health survey looking at risk factors for a number of major health problems. The results of the survey have been presented to all Health and Safety Committees within the company and feedback from the committees has become an important part of our future planning for health and prevention programs.

One of the most consistent comments that we heard from Health and Safety Committees relates to the question of stress. Although the original health survey contains some general questions about stress it did not provide us with enough detail to plan future programs for employees for the stress issue. Consequently we are completing a survey to give us better insight into work related factors that can cause or serve as stressors for all of us.

Your name was chosen at random along with 12% of other employees to participate in the survey. Several points about the survey should be noted:

1. Participants in the survey were randomly selected from a list of all regular full time employees from all levels throughout the corporation.

2. Your participation is voluntary and anonymous. While some personal information is requested, the survey can not be linked or related to any individual. Our interest is gathering summary information reflecting employee concerns about this issue.

3. The survey is being completed in co-operation with Mary McCarthy-Boyle of St. Mary's University who will be assisting in the analysis of the information.

.../2

The original health survey has been of tremendous value in establishing future directions for   Several Pilot Programs are now in progress. They will determine the types of programs we can and should offer in future. Similarly by completing the survey you will be providing us with valuable information to enable us to develop future programs for the company.

Would you please complete the survey and forward it in the enclosed confidential envelope to Occupational Health Services by November 1, 1989. Respond to the questions with your initial impression - don't dwell at length with any question. If you have any questions about the survey please contact me at 421-5587.

Thank you for your participation.

Yours truly,

J.D. Prentice, M.D.
Medical Director

JDP/ejb
Enclosure

Appendix C

<u>Sample questions for the Maslach Burnout Inventory</u>

1.   I feel emotionally drained from my work.

2.   I can easily understand how my recipients feel about things.

3.   Working with people all day is really a strain for me.

4.   I feel like I'm at the end of my rope.

5.   I feel recipients blame me for some of their problems.

Appendix D

<u>Sample questions from the Work Environment Scale</u>

1. The work is really challenging.

2. Few employees have important responsibilities.

3. There always seems to be an urgency about everything.

4. Employees rarely do things together after work.

5 Variety and change are not particularly important.

6. Few people ever volunteer.

7. You can take it easy and still get your work done.

8. It is hard to get people to do any extra work.

9. The colors and decorations make the place warm and cheerful to work in.

10. The rooms are well ventilated.

Appendix E

<u>Sample questions from the Daily Hassles Scale</u>

The respondents answered the question by first, indicating whether they experienced the hassle, and second, by indicating whether the hassle was somewhat severe, moderately severe, or extremely severe.

1. Misplacing or losing things

2. Smoking too much.

3. Not enough money for food.

4. Silly practical mistakes.

5. Sexual problems that result from physical problems

6. Too many things to do.

7. Problem with aging parent.

8. Problems with your children.

9. Financial dealings with friends or acquaintances.

10. Not enough money for transportation.

Appendix F

Sample questions from the Sense of Community Index.

1. I think my department is a good place for me to work.

2. My fellow workers and I want the same things from this job.

3. I feel at home in this office.

4. Very few workers know me.

5. It is very important for me to work in this department.

Appendix G

Demographic questionnaire used in the study.

1. Are you male? _____ female? _____

2. Which age category best reflects your age?

   18-22 _____
   23-34 _____
   35-49 _____
   50-64 _____

3. What is your employment classification?

   non-management _____
   management _____

4. How long have you been employed by this company?

   0-1 yr _____
   1-5 yrs _____
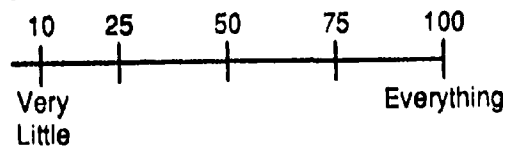   6-10 yrs _____
   11-20 yrs _____
   21-30 yrs _____
   31-40 yrs _____

5. Do you share your household with a partner or spouse? _____ yes _____ no

   If yes, what percentage of household duties (i.e., shopping, cleaning, cooking, washing, money management, etc.) are you responsible for?

   ```
        10    25    50    75    100
        +-----+-----+-----+-----+
        |     |     |     |     |
       Very                  Everything
       Little
   ```

6. Are you responsible for child care?

   yes (totally) _____
   partly (share with other parent) _____
   no _____

7. Which category reflects your highest educational experience?

   High School _____
   Technical/Vocational _____
   University _____