The nature of stress, burnout, and coping mechanisms among a sample of professional social workers.

Kristine Louise Towers
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THE NATURE OF STRESS, BURNOUT, AND COPING MECHANISMS
AMONG A SAMPLE OF PROFESSIONAL SOCIAL WORKERS

by

Kristine Louise Towers

A Thesis
submitted to the
Faculty of Graduate Studies and Research
through the School of Social Work
in Partial Fulfillment of the requirements
for the Degree of Master of Social Work
at the University of Windsor

Windsor, Ontario, Canada
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UNIVERSITY OF WINDSOR
SCHOOL OF SOCIAL WORK

Master of Social Work (M.S.W.) Approval

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ABSTRACT

THE NATURE OF STRESS, BURNOUT, AND COPING MECHANISMS

AMONG A SAMPLE OF PROFESSIONAL SOCIAL WORKERS

by

Kristine Louise Towers

This quantitative-descriptive study reports data regarding the extent and nature of life stress, work stress, and burnout experienced by a group of professional social workers. It also examines their reactions to stress in their lives and work, and the mechanisms they use to cope with stress. The study sample was composed of 122 professional social workers who were members of the Windsor-Essex Branch of the Ontario Association of Professional Social Workers (OAPSW) in May, 1988. Data were collected with a mailed, self-administered, structured questionnaire.

Analyses indicated that in regard to socio-demographic characteristics, apart from there being slightly more females and more males and females with bachelor's degrees, these social workers were similar to those who comprised the population of OAPSW members. In addition, the sample perceived of themselves as physically and emotionally healthy, and were aware how stress affected them. They were experiencing low levels of life stress, work stress, and burnout, and positive social support from family, friends, and peers. Analyses of the major scales and indices used in computing the study variables,
the Social Support Index, the Maslach Burnout Inventory (MBI), the Cooper Work Stress Questionnaire, and the Life Stress Inventory, indicated that these measures had moderate to high degrees of internal consistency reliability, and were valid for this study sample.

Factors influencing burnout and work stress included: 1) life stress, 2) adequacy of preparation to deal with the stress of social work, 3) job category, and 4) personal annual income. Work stress was also related to: 1) peer support, 2) working overtime, 3) future job plans, 4) age, and 5) the number of strains or stress responses reported. Family status, hours of overtime per week, and the level of perceived social supports, especially from family were significantly associated with the levels of life stress reported. The number of coping mechanisms used by the sample was not found to impact on any of the major dependent variables. However, the specific coping mechanism of active exercise was related to levels of life stress, providing support for the contention that leisure time activities may reduce levels of stress. The discussion of implications of the study is directed toward future research, the education of social workers, and to social work professionals in general.
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INTRODUCTION

Articles on the topic of burnout have appeared in various media from daily newspapers and popular magazines to scientific and professional journals. To understand the concept of burnout and the recent interest in the subject, one must examine the research and literature on stress out of which the concept emerged. A plethora of information on stress has been compiled throughout the past four decades, and it has been studied from many perspectives.

Hans Selye is credited with pioneering the scientific examination and the theory development of stress (Appley & Trumbull, 1986; Ghermain, 1981). Dr. Selye, an endocrinologist, focussed on stress from a medical or biological point of view (Selye, 1956, 1974, 1983). His seemingly simple theory of the general adaptation syndrome (GAS) was developed as an explanation for the pituitary-adrenal reaction to stimuli which he termed stressors. As well, his theory explained diseases which he believed were caused by maladaptations to stressors.

Much of the early research on the biological responses to stress or stressors was conducted with animals in laboratories. This was extended to the study of the psychological and behavioral factors related to stress responses among animals. For example, Brady (1958) utilized monkeys in his analysis of the stress of making decisions, and Weiss (1968, 1971) conducted studies on the effects of coping with stress on rats. The results of this early research were applied to humans in general as the specialization of stress grew, largely in the
field of psychology.

Concurrently, researchers in the field of sociology developed more stress related research and further expanded its study into the physical and social environment (Lazarus & Folkman, 1984). For example, Lewisohn and Libet (1972) investigated the importance of behavioral control of the environment with respect to depression and stress. Appley and Trumbull (1986) in their review of the development of the concept of stress indicated that the editors of Psychological Abstracts began in 1972 to categorize articles on stress under the headings of "Environmental Stress, Occupational Stress, Physiological Stress, and Stress Reactions" (p. 8).

Many of the fields of study have overlapped and researchers have collaborated in their studies of the causes, effects, and types of stress. Indicative of the amount of interest and research on the topic is the library at the Institute of Stress Research in Montreal which contains over 200,000 books and articles which deal with the subject (Selye, 1983).

The study of burnout developed as an area of specialty under the umbrella of stress research. Freudenberger (1974) is credited with coining the term to refer to people who have worn themselves out in the helping professions (Cedoline, 1982). He, along with Maslach (1976), popularized the concept of burnout (Farber, 1983). A variety of definitions have been developed for the term, most of which involve descriptions of the physical, emotional, and behavioral symptoms of those believed to be burned out (Maslach, 1982b; Perlman & Hartman, 1982). Generally, burnout is seen as a syndrome of possible responses
to chronic stress encountered in occupations which require the employee to have contact with the public.

The issues of cause, effect, and control of the burnout syndrome are of concern to human service professionals, their agencies, administrators, and clients. Having mechanisms to decrease or cope with stress is believed to ameliorate or prevent burnout as well. These stress management approaches are being recommended to social workers who are deemed at risk for burnout due to their occupational realities.

Statement of Purpose

Preliminary studies of burnout attempted to determine the possible causes of this phenomenon among the helping professions. The variables examined in this regard may be broadly grouped into exogenous stressors or endogenous stressors. Stress reduction or burnout prevention strategies may also be grouped into the categories of organizational strategies and individual strategies.

The stressors of the work environment, or exogenous stressors, impacting on individuals in human service organizations include role ambiguity (Harrison, 1980), staff-client ratio (Pines & Maslach, 1978), and locus of control (Fuqua & Couture, 1986). Corresponding strategies are proposed for the organization to prevent burnout, such as role clarification, reduced caseloads, mutual support groups among staff, and increased input regarding decisions.

Personal and background characteristics (endogenous factors) such as education, experience (Fuqua & Couture, 1986), and personality types
(Freudenberger, 1975) have also been examined to discover if there is an association between these factors and levels of burnout. Proposed strategies with which individuals may attempt to reduce stress and prevent burnout include relaxation techniques, exercise, time off from work, and involvement in hobbies or pleasurable activities.

Each of these coping mechanisms for individuals involves the use of leisure time. One assumption of these suggestions is that individuals who plan their leisure time to incorporate these techniques will exhibit low levels of burnout potential and of stress.

The purpose of this study is to assess the nature of stress levels and burnout potential among professional social workers. As well, the coping mechanisms utilized by this population, notably leisure, recreation, and specific stress reduction techniques are examined. The primary emphasis is to determine if a relationship exists between stress, burnout levels and use of leisure time. There is a paucity of research on the question of whether, in fact, the factors of stress, burnout and use of leisure time are related. This study will explore the timely topic of burnout in an effort to contribute to the void in the literature in this regard.

Should a relationship between use of leisure time and stress or burnout be found, recommendations for further studies on various stress reduction techniques will be made. Professionals in the human service organizations may then be provided with suggestions on how to prevent burnout.
Concepts

Stress, according to Hans Selye (1974) is the "nonspecific response of the body to any demand" (p. 14). This definition is simplistic and does not connote the popular concept of stress as being taxing on a person, or negative. The more functional definition of stress that will be used for the purposes of this research is "a chronically high level of mental arousal and bodily tension that exceeds a person's capacity to cope, resulting in distress, disease, or an increased capacity to cope" (Neidhardt, Weinstein, & Conry, 1985, p. 2). Occupational or job stress is stress that is encountered because of work. Stressors are those factors that cause stress.

Coping mechanisms refer to the behaviors that people do to avoid being harmed by the stressors they encounter in their lives. These mechanisms are exercised in three ways: in an effort to modify the situation which causes the problem, by attempting to control the meaning of the experience and thus neutralize the problem, or by managing the consequences of stress -- generally through accommodation to it (Pearlin & Schooler, 1978, p. 6).

Burnout is described in the literature by its symptoms which result when coping mechanisms employed to manage job stress are inefficient. For the purposes of this study, Maslach and Jackson's (1981) definition will be used: burnout is a syndrome of physical and emotional exhaustion, depersonalization, and lowered personal accomplishment (p. 99). Depersonalization is a dehumanized perception of clients, or a callous or negative attitude toward others.

Social support is information leading subjects to believe one or
more of the following things: a) that they are cared for and loved, 
b) that they are esteemed and valued, and c) that they belongs to a 
network of communication and mutual obligation (Cobb, 1976, p. 300).

**Free time** is all non-work and daily maintenance time, or the time 
when work and the basic requirements for existence have been satisfied 
(Murphy, 1974, p. 3). **Leisure** is the condition or state of being free 
from the necessity to labor (Farina, 1980, p. 27).

**Recreation** is an activity differentiated from work by its 
voluntary element. It is undertaken for the purpose of revitalization 
or re-creation of mind, body, or spirit (Farina, 1980, p. 25).
Recreation occurs during leisure but not all free time is used for 
recreation (Clawson & Knetsch, 1974, p. 79).

A **professional social worker** is defined in the Canadian 
Association of Social Workers Code of Ethics (1983) as "an individual 
who is duly authorized to practice social work" (p. 2). For this 
study, the term is further specified to mean those social workers who 
have post-secondary social work education (a B.S.W., M.S.W., or higher) 
from an accredited school of social work, and are members of the 
Ontario Association of Professional Social Workers (OAPSW).
The study of stress in social work practice comprises a small portion of the literature on job stress. Occupational or job stress is, in turn, only one facet of research considered under the rubric of stress. Aspects of employment which may cause or contribute to stress are many and varied. As well, a myriad of other elements such as an individual's social support may impinge on the levels of stress experienced.

In order to enhance an understanding of the stress process, this chapter provides a review of the literature pertaining to the study of stress among professional social workers. The review is presented according to the theoretical and empirical research related to: 1) the nature of stress with specific reference to occupational stress, and 2) the nature of coping with sub-sections about the common coping mechanisms recommended to deal with stress and the maladaptive responses which may arise when coping mechanisms fail.

The Nature of Stress

Selye's Theory

Selye (1956, 1974) developed a theory of stress as a tri-phasic reaction syndrome to a stimulus or stressor. This general adaptation syndrome (G.A.S.) consists of: 1) an alarm reaction, 2) a stage of resistance, and 3) a stage of exhaustion. In response to exposure to a
stimulus, whether pleasant or noxious, a biochemical reaction occurs in the body. This alarm reaction, involving changes in the adrenal glands, the thymus, thalamus and other lymphatic structures, as well as the epidural and gastrointestinal organs, is viewed as preparing the body for a fight or flight response, or demanding a readjustment to the stimulus or stressor (Gherman, 1981).

During the resistance stage, the energy level, raised by the alarm reaction, remains elevated to provide the mental and physical strength necessary to adapt to or remove the stressor. If the stressor is overcome, the physical signs of stress disappear and the body returns to its normal homeostatic state.

If the stressor is sufficiently severe or prolonged, the adaptation or resistance energy is depleted and the body enters the stage of exhaustion. The signs of the alarm reaction reappear but are no longer helpful in mobilizing resistance. Should the stress continue, disease and eventually death ensues. Although sleep or rest from a stressful situation may restore one's resistance and adaptability, Selye (1974) proposed that complete restoration is probably impossible because biological activity leaves "chemical scars" (p. 28) which accumulate to constitute the signs of aging and disease.

The applicability of Selye's model was challenged in the fields of both physiology and psychology. For example, Mason (1975) reported that researchers were questioning the all-or-none nature of the physiological response and whether or not it occurred in the absence of specific psychological factors. Cooper, Cooper and Eaker (1988) concurred with this critique. They stated that Selye's theory ignored
the psychological impact of stress on an individual and the
individual's ability to recognize stress and act to change the
situation (p.11). Further, Appley and Trumbull (1986) reported that
the researchers who presented at a 1965 conference on psychological
stress had found that reactions to various stressors or even the same
stressor over time, could not be generalized as to the extent,
intensity, direction, duration, or permanence of the effect (p. 6).

As a result of these and other research findings, new models of
the stress process were developed within the various branches of stress
research. For example, Lazarus (1966) and later Lazarus and Folkman
(1984) emphasized the individual's appraisal of stress and the effect
of coping on adaptational outcomes. Others, such as Cobb (1976),
examined stress vulnerability profiles in terms of social supports.
Similarly, stress personalities or characteristic styles of responding
to challenging person-environment interactions or situations were
categorized by Friedman and Rosenman (1959, 1974) and deemed to have a
causal role in stress-related illnesses. As well, Beehr and Bhagat
(1985) developed a framework for explaining stress in work-place
settings.

One theme common to these emergent conceptual frameworks is that
the stress process is perceived to be the result of the complex
interaction of various systems such as the physical or social
environment and the intrapsychic functioning of the individual.
The study of occupational stress focuses on the interaction between the work environment and the employee. Following a review of the literature on work stress, Kasl (1987) stated that these variables consisted of:

1. Those that describe the objective environmental conditions in the work setting;

2. Those that deal with subjective descriptions - perceptions and evaluations - of the work setting;

3. Those that represent intermediate outcome variables, such as biological indicators;

4. Those that might be described as the more distal outcome variables in which the investigator is interested, such as coronary heart disease, or major depression, or burnout, or being fired; and,

5. Those variables that help us understand modifying influences and mediating processes in the overall work stress dynamics (p. 16).

Few of the studies reviewed encompassed all five variables in a single design; however, other theories have been proposed to explain their interrelatedness. The following is a presentation of one such theory.

The Person-Environment Fit Theory

At the Institute for Social Research in Ann Arbor, Michigan, the study of social environment and mental health led to the development of the Person-Environment (P-E) Fit Theory to describe the relationships of job environment, nature of the employee, and resultant health consequences (French, Caplan, & Harrison, 1982, p. 2). This framework was developed over several years following research such as the study of job demands and worker health by Caplan, Cobb, French, Harrison, and
The model, illustrated in Figure 1, is used to describe the interrelationship of the person and environment in terms of their fit or congruence with each other. Two types of fit are examined with respect to occupational stress. One is the extent to which the needs of the person are met in the job environment, the other is the degree to which a person's skills and abilities match the demands and requirements of the job. It is assumed that a misfit of either form will cause strain or stress and threaten the individual's well-being (Harrison, 1978).

Figure 1. Person-Environment Fit Model adapted from French, Caplan & Harrison (1982) and Harrison (1978).
There are four basic elements of this model. One is the objective environment, that is, the environment as it exists. In terms of one's occupation, this includes the demands of the job and the supplies or resources such as income. The subjective environment represents the person's perceptions of the objective environment. The objective person is the person who exists in terms of abilities such as knowledge and skills, and motives such as needs, goals, and preferences. Correspondingly, the subjective person exists in terms of the individual's self-perception of their abilities and motives.

Job stress occurs when there is either a subjective or objective misfit which the individual's subjective social support, defense mechanisms, or coping strategies are unable to ameliorate. This stress may lead to a deviation from the normal state or responses of the person which French, Rodgers and Cobb (1974) refer to as strain. These deviations include psychological strains such as job dissatisfaction and anxiety, physiological strains such as high blood pressure, and behavioral symptoms such as excessive smoking and consumption of alcohol. Burnout may also be defined as a strain that results from unmitigated occupational stress. Continued high levels of these strains may culminate in various types of illnesses such as chronic depression (mental health) and coronary heart disease (physical health).

According to this model, illness is not necessarily an outcome of stress. For example, positive outcomes are possible in that a good P-E fit can enhance the individual's self-worth or mental health and motivate physical health maintenance. As well, when a poor P-E fit
results in strain, the individual may seek to improve the fit between self and environment and prevent illness through what the theory’s authors term coping and defenses. Feedback relationships are intrinsic to this framework if coping or defenses are employed to reduce strain. (For a more detailed explanation of the interaction of the theory’s constructs, see French et al., 1982.)

It can thus be seen that the person-environment fit theory builds on Selye’s theory of chronic or repeated stress leading towards disease. It is a more comprehensive theory in that it takes into account the person’s psychological or cognitive characteristics. That is, it not only looks at the objective person and the objective environment, but also at the individual’s self-perception and at objects and events as they are viewed subjectively by the person.

Recent Research Findings

The P-E Fit theory has been utilized as the basis for recent research, and these studies have had a major impact on the field of stress research, primarily due to the study of 2010 men employed in 23 occupations conducted by Caplan et al. (1975). These researchers generally found that the perception of either insufficient or excessive job demands was correlated to an increased level of physiological, psychological, and behavioral strains. Specifically, measures were obtained regarding the P-E Fit with respect to concepts such as complexity, role ambiguity, role conflict, quantitative and qualitative workload, responsibility for persons, overtime and income.

Further, a positive correlation was found to exist between the strains of job dissatisfaction, workload dissatisfaction, boredom, and
depression and the misfit of job complexity (too complex or too simple compared to the preference shown) and role ambiguity (roles in the organization were too rigidly or too loosely defined). Cooper et al. (1988) and Matteson and Ivancevich (1982) reported similar findings with respect to exposure to both of these stressors.

The effects of work overload and work underload on stress and workers' health have been studied from both quantitative and qualitative viewpoints. Quantitative workload refers to the amount of work or the amount of time allocated to do work, while qualitative workload refers to the difficulty or challenge of the workload. Quantitative measures have found that too much work affects job dissatisfaction and health (Cooper et al., 1988; French et al., 1982; Matteson & Ivancevich, 1982), while boredom and ill health have been correlated with job underload (Cox, 1980; French et al., 1982).

However, French et al. (1982) reported that a misfit in the quantitative workload was a less important stressor across the 23 occupations studied than was a misfit in the subjectively measured qualitative nature of the workload (p. 92).

In examining the actual workload of the sample, Caplan et al. (1973) found a correlation between strains and P-E Fit on responsibility for persons; both too much and too little responsibility was related to the strains of job dissatisfaction and boredom. Others found that workload dissatisfaction and anxiety increased only with increased responsibility for the lives or safety of persons (Crump, Cooper, & Smith, 1980; MacBride, 1984; MacBride, Cochrane, Sheldon, Lancee, Dolgoy, & Freeman, 1981; McLean, 1979).
In their study, Caplan et al. (1975) measured the Type A Behavior Pattern (TABP) which is based on traits of involvement in work, persistence, achievement orientation, a sense of time urgency, being hard-driven, impatient and aggressive. The TABP is considered to be a characteristic style of responding to a person-environment interaction in which a perceived challenging situation induces Type A behaviors in predisposed individuals. The Type B Behavior Pattern is an alternative style of responding to environmental challenges and was originally viewed as the converse or absence of the TABP (Chesney & Rosenman, 1983, p. 24).

Caplan et al. (1975) found significant differences in personality across the 23 occupations they studied. For example, professors with administrative roles had higher TABP scores than did professors in general, while assembly line workers had lower scores. Blood pressure and serum cholesterol levels, two known risk factors in coronary heart disease, were also measured in this study, and Type A personality was found to be a significant predictor of elevated cholesterol levels; however, it was not a significant predictor of high blood pressure.

Other aspects of the person or personality have been studied to determine their further association with stress. Age has been examined along with life stage and career stage (Cooper et al., 1988; Matteson & Ivancevich, 1987; Rush & Peacock, 1984). The effect of life events on stress has been another area of much exploration (for example, see Dohrenwend & Dohrenwend, 1974; Cochrane & Robertson, 1973; Cooper et al., 1988, Holmes & Rahe, 1967). As well, ethnicity and cultural background have been seen as both stressors (Roberts, Steven, &
Breslau, 1981) and moderators of stress (Jamal, 1984). Sex differences have recently become a topic of research with respect to stress-related problems (Cleary & Mechanic, 1983; Jick & Mitz, 1985). Although differences in reactions to stress have been found, many of the researchers question whether they are true differences or variations due to sex-roles and different patterns of experience and coping (Lazarus & Folkman, 1984; Matteson & Ivancevich, 1987; Weisman, 1984).

The Nature of Coping with Stress

Coping Theories

Stress and coping are typically conceptualized as separate, distinct processes (Denner, 1984; Burke & Weir, 1980). Lazarus (1966; Lazarus & Folkman, 1984) is credited with shifting the emphasis in theory development from stress per se to coping. This helped to focus the study of stress on the many factors in the environment and the person that may combine to generate stress and its outcomes.

The person-environment relationship is mediated by the two transactional variables of cognitive appraisal and coping, according to Lazarus and Folkman (1984). Specifically, cognitive appraisal is an evaluative process that determines why and to what extent a transaction or a set of transactions between the person and the environment is stressful (p. 19). The process of cognitive appraisal and the personal and situational factors which influence the process are complex, and the reader is referred to the work of Lazarus and Folkman (1984) for further elucidation of this concept.
Lazarus and Folkman (1984) described coping as the process through which an individual manages the demands and emotions generated by a P-E relationship or transaction that has been appraised as being stressful (p. 19). Coping which is directed at regulating emotional response to a problem is called emotion-focused coping, while problem-focused coping is directed at managing or altering the problem causing the distress (p. 150).

Pearlin and Schooler (1978), Menaghan and Merves (1984), and Latack (1986) add to this dichotomy by asserting that the classification is determined by what is attempted. Thus, coping through efforts to change or control the situation is direct action coping. Interpretive appraisal or cognitive reappraisal occurs when one attempts to control the meaning of the experience after it occurs but before the stress leads to strain, and symptom or emotion management attempts to control the strain or negative consequences of the stress itself after it has emerged.

Although each type of coping may be employed independently, combinations of the categories are often utilized simultaneously and one form may either facilitate or impede the other (Lazarus & Folkman, 1984; Menaghan & Merves, 1984; Pearlin & Schooler, 1978). For example, seriously ill patients may effectively cope with their illness by minimizing the situation (meaning control) and not seeking information regarding the prognosis (a form of direct action through no action) to avoid the realities which could be overwhelming if confronted. However, if the severity of the situation is denied and non-compliance with the treatment regimen occurs, patients may risk their lives
Recent Research Findings

The literature on coping is primarily theoretical or anecdotal in nature; there is minimal empirical research. Pearlin and Schooler (1978), and later Menaghan and Merves (1984) conducted studies which are exceptions to this generalization. As well, Shinn, Rosario, Morch, and Chestnut (1984) investigated the effects of coping on psychological strain among human service workers. The results of these more comprehensive studies are summarized in the remainder of this subsection.

Pearlin and Schooler (1978) evaluated the efficacy of coping behaviors utilized by 2,300 people in an investigation of the social origins of personal stress. In this study, the stressors people encountered in their roles as parents, spouses, job-holders, and breadwinners were examined. The researchers found that attempts to modify the situation, although they seem to be the most direct way to deal with life-strains, are not the types of responses most frequently utilized. For example, the most common type of individual coping was found to be attempts to control the meaning of the problem (p. 6).

These researchers also examined the psychological and social resources available to the people studied. They found that having a reservoir of resources was generally correlated with the degree of stress experienced, as was the number of coping responses employed. That is, emotional stress was found to be less likely to occur when one had a variety of resources and responses one could employ to cope with life-strains (pp. 14-15). The exception to this was in the area of
occupational stress. Overall, coping was found to be least effective in the life area of occupation. Pearlin and Schooler (1978) proposed that this was because the stress-inducing problems were caused by forces beyond personal coping controls (p. 10).

Menaghan and Merves (1984) reported on the effectiveness of coping on occupational problems over time. In a longitudinal study of 1106 respondents across 23 occupations, they examined the extent to which coping efforts reduced distress at the time they were utilized, as well as the extent to which they had reduced distress and occupational problems four years later. The coping strategies of direct action, optimistic comparisons, selective ignoring, and restricted expectations were examined. None of these mechanisms was found to directly affect subsequent occupational problems except for the use of optimistic comparisons, which was associated with reduction in stress, while restriction of expectations about job quality was associated with increases in distress (p. 416).

Shinn et al. (1984) used open-ended questions to attempt to determine what stressors 141 human service providers such as psychologists, social workers, and nurses experienced in their jobs. As well, information was gathered about the strategies they employed at the individual, group, and agency levels to cope with such stressors. The stressors identified were similar to those of most studies on occupational stress: job design, such as excessive workload (47% of respondents mentioned this stressor); agency issues, such as lack of recognition and support (44%); and, interpersonal issues, such as conflicts with other staff (19%) (p. 868). The stressor of the
professional helping role, feeling inadequate relative to one's own expectations, or feeling pressure to cure clients, was mentioned by 34% of the respondents, while 23% mentioned the clients themselves as the stressors (p. 868). The latter two stressors appear to be unique to the helping professions. The respondents suggested a number of coping strategies which agencies could implement; however, the majority reported that no agency strategies were utilized.

Although the results of these studies differ in terms of which coping mechanisms are the most effective in reducing stress, what has been cited is that the coping mechanisms people can and do employ are many and varied. Further, what is attempted and when varies with the situation, and what coping mechanism is effective and when is largely determined by the situation or interaction for which it is being used. As well, these studies revealed that further research linking stress, strain, and coping is required to better understand the interaction of these concepts and to determine what coping mechanisms should be recommended to effectively ameliorate job stress.

Common Coping Mechanisms Recommended to Deal with Stress

Mechanisms for coping with stress are proposed throughout the empirical and theoretical literature on the subject. As previously stated, these strategies may be grouped into organizational and individual strategies. A further delineation may be made into the tri-level structure of coping outlined above. The examination of the research and literature presented here focusses on what is recommended to: 1) modify stressors through direct action, 2) neutralize stressors
through controlling the meaning of the situation, and 3) reduce strain, through controlling the negative consequences of stress. The primary emphasis is on strategies suggested to cope with occupational stress for the prevention and treatment of burnout and other maladaptive responses to the stressors.

**Direct Action to Modify Stressors**

The first step toward modifying a stress-inducing person-environment interaction involves an assessment of what the stressors are, and their amenability to change. Many potential environmental stressors or aspects of organizations have been associated with high levels of stress. These may be grouped into seven major categories: organizational structure, relationship, roles, change processes, physical environment, career development, and intrinsic job qualities (Schuler, 1985, p. 361).

Organizational strategies for stress reduction or prevention are the most often cited and thus appear to be perceived as more appropriate than are strategies by individuals with respect to these stressors. Individual employees are advised to take direct action by acknowledging areas which could be improved and communicating their concerns to the organization’s administration (Bourgault & Meloche, 1982; Bramhall & Ezell, 1981a, 1981b, 1981c; Veninga & Spradley, 1981; Zastrow, 1984). Steps may then be taken together to reduce or eliminate the stress associated with such conditions. Brief, Schuler and Van Sell (1981) detailed how this may be done through such means as: clarification of organizational policies, decentralization and increased participation, change in the communication procedures and
networks in the organization, change in the reward systems, utilization of training and development programs, statement of the performance evaluation system, development and utilization of permanent and temporary work groups, change in shift patterns and job rotation policies.

These recommendations are supported by many researchers who have studied the stress of human service occupations. For example, Daley (1979), and Maslach and Pines (1977) found high client to staff ratios and long hours of work to be positively correlated to stress and burnout, and thus recommended reducing work hours and caseloads to reduce stress. Others advocated improved training and development programs because studies showed that training for human service professionals is usually client-centered with little focus on the effect of ongoing direct contact with clients' problems on the professionals themselves (Bourgault & Meloche, 1982; Maslach & Pines, 1977). Zastrow (1984) recommended direct action strategies at both the organizational and individual level, all of which involve managing work time, workload, or goals. For those events or situations which cannot be changed, he stated that the only constructive alternative is to accept it and adapt to it (p. 151).

Control Meaning of Situation to Neutralize Stressor

One method recommended for adapting to a stressor or stress-inducing situation is to alter the negative self-defeating thought about distressing events, or make optimistic comparisons. Central to this type of coping is the concept of "positive thinking" (Zastrow, 1984, p. 151). This cognitive restructuring involves replacing
negative self-statements that reinforce ineffective coping responses with positive self-statements such as, "I'm not going to give up. I can and will do this," instead of, "I can't handle this." The efficacy of cognitive restructuring as a stress management technique has been empirically verified by Wertkin (1985) among others.

Another proposed method for coping with stress which also demands accurate self-assessment skills is the redefinition or reappraisal of one's goals, values, and beliefs. For example, following appraisal of the situation, a stressor may be neutralized through the establishment of goals which are more appropriate and realistic given the stress-inducing condition (Bourgault & Meloche, 1982; Zastrow, 1984). This may also be accomplished through reducing the threat of the situation by changing what one values or believes about it (Lazarus & Folkman, 1984; Munson, 1983; Walsh, 1987). This latter mechanism may be employed through such strategies as minimization, selective ignoring, or restriction of expectations, which change the meaning or importance of the person-environment interaction.

Bourgault and Meloche (1982) proposed a number of other strategies to neutralize the job-related stress in social work in addition to the establishment of realistic and rational goals and beliefs. These protective strategies included: emotional withdrawal through benevolent neutrality or flexible detachment, intellectualization and interpreting reality so that the therapist may better tolerate the situation without adversely affecting the client, physical withdrawal, development of a sense of humour without negation, defining one's responsibilities and not assuming those of others. These authors note,
however, that these techniques are paradoxical: workers must protect themselves enough to continue working creatively yet have a deep enough emotional commitment to remain useful (p. 112). A fine line exists between successfully reducing stress and the emergence of strain, dependent on whether these strategies are effectively or ineffectively applied" (p. 113).

Control Negative Consequences of Stress

According to the stress theory related to the P-E Fit outlined above, strains such as anxiety, high blood pressure, excessive smoking or consumption of alcohol, and burnout may occur when coping mechanisms to prevent or reduce stress are ineffective. These strains may, in turn, lead to illnesses if not mitigated. The literature is replete with suggestions on how to avoid the strains and illnesses caused by stress, especially stress which is work related.

Most of the strategies recommended for stress and strain management are considered recreation and are generally to be engaged in during one's free time. Ideally, recreation is undertaken for the purpose of the revitalization or re-creation of one's mind, body, or spirit (Farina, 1980, p. 25). The following sub-section of this review will examine the primary coping strategies recommended for this re-creation.

Relaxation or meditation. Selye (1974) proposed that, in response to a stressor, one's body enters the general adaptation syndrome. If the stressor is overcome, the body returns to its normal state or relaxes. When exposed to a chronic stressor, the body does not relax until exhausted (p. 27). However, one may induce the relaxation
response through a number of relaxation techniques (Cooper et al., 1988, p. 207; Veninga & Spradley, 1981, p. 115).

Tubesing and Tubesing (1982) have provided a comprehensive summary of the common relaxation techniques from deep breathing to meditation and hypnosis. There are four basic elements common to these approaches: 1) a quiet environment free from external distractions, 2) a comfortable position, 3) an object to dwell upon such as a word, sound, or an image, and 4) a passive attitude in which one stops thinking about one's day to day concerns. Each tension release method depends on the body-mind connection in a process of "letting-go" (Tubesing & Tubesing, 1982, p. 167).

Relaxation and meditation induce physiological changes within one's body which lead to tension reduction, rapid recovery following a stress-inducing situation, and increased capacity to pay attention (Goleman, 1980). With practice, these techniques may be used to trigger the relaxation response during the day when stress arises as well as for mental and physical revitalization at the end of the work day (Cooper et al., 1988).

Exercise or nutrition. As a stress management technique, exercise helps refresh one's mind and spirit as well as one's body by taking one's mind off stressful situations and improving one's self-image (Zastrow, 1984). Exercise may also enhance skills and relieve tension while building muscle strength and tone, aid in weight loss and maintenance, improve the body's general physiological condition, and moderate the intensity and duration of psychological strains such as depression and anxiety states (Berger, 1986; Brody, 1980; Fort, 1986;
Central to exercise as a coping mechanism is the concept of taking care of one's physical self. In addition to physical activity, obvious benefits accrue from having a nutritional diet, getting sufficient sleep, and taking appropriate medical care (Tubesing & Tubesing, 1982, p. 166; Zastrow, 1984, p. 153).

Outside interests or hobbies. Another mechanism recommended to balance work stress involves the development of outside interests or hobbies. Engagement in activities such as attending movies, concerts, or sporting events is another method of removing one's thoughts from life's stressors (Zastrow, 1984, p. 153). Using free time to do enjoyable things which Zastrow calls "pleasurable goodies" (p. 153), and Tubesing and Tubesing (1982) refer to as "treating yourself kindly" (p. 167) is an important health-promoting behavior for everyone, but especially for those experiencing stress. These "goodies" may include a variety of things such as listening to music, shopping, or travelling, dependent on one's interests.

In this regard, the outcome rather then the activity itself is important. Leisure or re-creation occurs when there are elements of joy, pleasure, freedom, and spontaneity (Howe, 1985, p. 213), or enjoyment (Shaw, 1985, p. 24). Further, utilizing humor, that is, developing the ability to find humor in life's incongruities and to laugh at one's self is also a legitimate and cathartic way of dealing with stress and strain (Moody, 1978).

Hobbies of a creative nature may also help instill a positive sense of self. The sense of mastery or accomplishment acquired through...
this coping mechanism may help to compensate for or counteract
dissatisfaction with the area of one's work life. As with most of
these coping mechanisms, there is little empirical proof to support
this hypothesis of compensation. However, the results of a study by
Steele and Poor (1970) suggested that a shortened work week increased
the opportunity for non-skilled workers to utilize leisure outlets to
obtain achievement and recognition which their work did not give them,
thus justifying their existence and giving meaning to their lives (p.
121).

Leisure. Engagement in recreational activities has many possible
advantages, from relaxation to fitness, enjoyment to accomplishment, as
well as stress or strain management. The main point raised by these
suggestions is that free time should be utilized to create a balance
with work time (Iso-Ahola, 1980; Murphy, 1974; Neulinger, 1981; Parker,
1976). The concept of leisure may be operationalized either as a
qualitative construct -- a state of mind or a feeling (Howe, 1985, p.
213), or as a quantitative construct, that is, an activity or
activities that may be measured in terms of frequency, duration, and
location (Neulinger, 1981; p. 38).

Much of the empirical research on leisure has utilized the
quantitative definition due to the demand for "hard" data to aid in
policy decisions such as public and commercial resource allocation
(Kelly, 1980, p. 300). Some researchers have combined quantitative and
qualitative methodologies and found that both job and leisure
satisfaction affect the perceived quality of life (Flanagan, 1978,
relationship between work and leisure has also been analyzed. For example, Steele and Poor (1970) surveyed employees of firms who had changed from a five-day to a four-day work week. They found that the shortened work week extended free time, allowed for new leisure opportunities, led to a strengthening of family ties, to increased leisure spending, and to increased participation in rather than watching activities (pp. 115-116).

Few studies, however, have examined the association between occupational stress -- a specific component of work -- and leisure or free time. The study by London et al. (1977) addressed this area. They found that, although both job and leisure satisfaction contributed to individuals' assessments of their quality of life, they did so independently: that is, no significant correlations were found between attitudes toward job and attitudes toward leisure (p. 300). Kabanoff and O'Brien (1986) studied the relationship between stress, leisure needs and activities of professional, managerial, clerical, and skilled trades occupational groups. Among professionals, high stress was associated with high leisure needs, a higher frequency of activities of a social and recreational nature, and a lower frequency of hobby and organizational activities (p. 911).

According to Tubesing and Tubesing (1982), the decision of which stress coping technique or techniques to use should be made by matching the strategy to the situation or to the person (pp. 168-169). However, utilizing the P-E Fit model, the strategy should be matched to both the person and the situation or environment. Munson (1983) also concurred with this notion. He suggested that people who are high achievers
often take up highly competitive sports, and that this may, in fact, compound the problem when the activity becomes a source of additional stress rather than relaxation (p. 211). The results of these studies question the prescribing of free time activities as a coping mechanism without studying the stressors and individuals involved. This points to the need for more research on the interrelationships of stress, coping, leisure, and free time.

Social Support as a Modifier of Stress and its Effects

One topic that has been the subject of more recent research is the effects of social support on stress. Some of the studies which indicate that other people may be stressors or cause stress-inducing situations have been discussed in the preceding sections. The view that social support is a moderator of stress and necessary for mental and physical health has also been subject to scrutiny.

These studies have provided discrepant evidence regarding the role of social support in the relationship between stressful life events and mental or physical health. For example, adequate social support may protect people in crises from a variety of pathological states by moderating or buffering the impact of psychosocial stress on physical and mental health (Cobb, 1976; French et al., 1982). Specifically, supervisor support was found to be significantly associated with the reduction of psychological strains such as depersonalization, burnout, and neurosis, and the physiological symptoms of strain such as somatic complaints (House & Wells, 1978; LaRocco, House, & French, 1980; Russell, Altmaier, & Van Velzen, 1987). However, co-worker support was found to have a more significant buffering effect than supervisor or
home support (LaRocco et al., 1980, p. 210).

On the other hand, LaRocco and Jones (1978), Pearlin, Menaghan, Lieberman, and Mullan (1981), Shinn et al. (1984), Turner (1981), and Williams, Ware, and Donald (1981) found indications of direct effects of social support on stress rather than buffering effects on strains. For example, social support was found to have a direct impact on stress by reducing role conflict and ambiguity (LaRocco & Jopes, 1978, p. 633), and by reducing economic stress at times of job disruption rather than buffering the psychological strain of depression (Pearlin et al., 1981, p. 348).

House (1981),Thoits (1982), Gottlieb (1983), and Beehr (1985) have suggested that many of the differences in the nature and effects of social support arise out of the actual studies themselves. Inadequate conceptual and operational definitions of social support, stress, and strain are the primary problems, making direct comparisons of the studies difficult. When examining the more global picture of social support and health, however, what becomes apparent is that whether social support has a direct effect on stress or on strain (illness), a buffering effect between the two, or whether the lack of social support is stressful in itself, social support does appear to have an effect. The development of a positive support network can, therefore, be considered a coping mechanism and is, in fact, recommended to manage stress and its effects such as burnout (Albrecht, Ivey, & Mundy, 1982; Brown, 1984; Davidson, Bowen, & Feller, 1981; Shinn et al., 1984; Tolsdorf, 1976). In their book Social Support Networks: Informal Helping in the Human Services, Whittaker and
Garbarino (1983) provide details on the theory, issues, and methods for utilizing social support to ameliorate the effects of stressful life events.

When Coping Mechanisms Fail: Maladaptive Responses

If stress is not ameliorated through one or more of the coping mechanisms discussed above, it may contribute to a number of strains at both the organizational and individual employee levels. Some problems which may arise at the organizational level are complex and beyond the scope of this paper. The following sub-section briefly examines some of the possible behavioral, physical, and psychological consequences for an individual when maladaptive strategies are employed to cope with stress. It is important to note that the consequences discussed are not limited exclusively to the categories under which they are presented in this section.

Behavioral Consequences: Substance, Spousal, and Child Abuse

Use, over-use, or abuse of substances such as cigarettes, caffeine, alcohol, and illegal, over-the-counter, and prescription drugs are commonly believed to be positively associated with stress in a causative way. That is, as stress increases so may the use of these substances, often to the point of addiction.

Research has repeatedly shown the association between substance abuse and illness (e.g., smoking and lung cancer, alcohol and cirrhosis of the liver), while most of the literature linking substance abuse and stress has been anecdotal and not empirically based. However, some recent evidence to support this latter position has been gathered in
empirical studies. For example, Hawkins, White, and Morris (1983) found that smoking, alcohol, and caffeine were the most commonly self-identified methods of coping with stress among a sample of 35,000 nurses (p. 38). Similarly, Conway, Vickers, Rahe and Ward (1981) found that cigarette smoking and coffee drinking increased when the individuals studied were under high stress conditions (p. 160).

Stress is often cited as one reason alcoholics drink and others become addicted to drugs. It has been shown that alcohol is initially used socially and becomes a form of coping mechanism as individuals use in their attempts to deny problems or stress-inducing situations that exist in their lives, and to repress their feelings about these problems (Ackerman, 1982; Perez, 1986; Rudy, 1986; Wegscheider, 1981).

Prescription drugs such as anti-depressants are not often reported as coping mechanisms when individuals respond to questions about their own methods of coping with stress. However, when reporting about the specific coping strategies of co-workers, the use of these drugs has been noted (Shinn et al., 1984, p. 869). Similarly, Zaleznik, Kets de Vries, and Howard (1977) found medication use to be a part of the stress syndrome exhibited in some of the employees surveyed in their study on occupational stress. As well as indicating that individuals may not report behaviors which may be perceived as being socially unaccepted, these results suggested that substance use may, in fact, be a common form of coping.

Other behaviors deemed to be negative by society may also be associated with occupational stress. For example, Straus, Gelles, and
Steinmetz (1981) suggested that work stress may contribute to the incidence of wife abuse, and Justice and Duncan (1978) implicated job stress in the etiology of child abuse. This is a burgeoning field of stress research and, although some support for the hypothesis of association has been found, further study of the issue is required (Barling & Rosenbaum, 1986, p. 347).

**Physical Consequences: Psychosomatic Symptoms and Illness**

Stress has been linked to many diseases and psychosomatic symptoms in addition to hypertension and heart disease which have been discussed previously. Specifically, stomach and intestinal problems such as ulcers have been associated with the increased production of stomach acid when an individual is under stress. Headaches and backaches also appear to be caused by tension related to stress (Cooper et al., 1988, p. 21; Poteliakhoff & Carruthers, 1980, p. 55).

Stress has also been found to have a direct effect in precipitating asthma attacks; emotional factors were found to be present in 70% of asthmatic patients studied by Melhuish (1978). Smoking also affected other lung diseases such as emphysema and lung cancer, thus stress may have an indirect effect on these illnesses when it contributes to an increase in one's smoking.

As well, stress has been studied in relation to cancer in general. (For an extensive look at some of this research, see Cooper, 1984). Cooper, Cooper, and Faragher (1986) studied 2,000 women attending breast screening clinics and found that a greater percentage of the women who developed breast cancer had in the previous two years encountered more stressful life events than those with non-cancerous
breasts (p. 274). Others have proposed a third personality type, Type C, which characterizes people who repress their feelings. This method of attempting to cope with stress for these persons has been associated to some extent with cancer (Locke & Colligan, 1988, p.23).

Other physical ailments which may be related to stress include skin problems such as eczema, hives, and dermatitis (Poteliakhoff & Carruthers, 1980; Quick & Quick, 1984), physical fatigue with little physical exertion (Cedoline, 1982, p. 22), and overall lowered resistance to colds and influenza (Potter, 1980, p. 7).

The association between stress and health has also been studied from other perspectives. For example, Gortmaker, Eikenrode, and Gore (1982) studied 356 women with children and found that the presence of a stressful event on a given day was associated with increased utilization of health services by the family (p. 30). Their results also indicated that prior stressful life events were significantly associated with utilization of health services in addition to, and independently of, the daily stressful events (p. 32). Similarly, Tessler and Mechanic (1978) examined data from four diverse samples and found psychological distress to be a statistically significant correlate of perceived health status in all samples (p. 258). They noted that although the association found did not determine causality, the psychological strains of lack of happiness, nervousness, and negative affect were correlated with lower perceived health status (p. 261).

Some studies have considered health status itself as a possible stressor. For example, Flanagan (1982) investigated the factors that
are related to overall quality of life. He found that "health and personal safety" followed "material comforts" as the most closely associated factors with respect to quality of life. "Interesting, rewarding, and worthwhile work in a job or at home" showed almost as substantial a relationship to quality of life as did health (p. 58).

The effect of stress on health care costs is another aspect which has been investigated. Cooper (1986), and later Cooper et al. (1988) cited statistics of American and British mortality rates and health related expenditures such as disability pensions which suggested a relationship between stress and health care costs. Burke (1987) has provided a similar description of the issues and implications of stress for Canadian health care delivery systems.

**Psychological Consequences: Anxiety, Depression, and Breakdowns**

The literature on health care costs and stress examined the aspect of mental health as well as physical health. Biological and cognitive-behavioral studies stress have correlated stress to anxiety and other forms of psychopathology (Neufeld, 1982, p.241). For example, stressful life events have been shown to impact on one's mental state (Dohrenwend & Dohrenwend, 1974; Foy, Donahoe, Carroll, Gallers, & Reno, 1987). As well, the relationship of stress to depression has been the focus of extensive theoretical and empirical work. (See Shaw, 1982 for a comprehensive overview of this literature.) The mental illness of schizophrenia has also been examined to determine what part stress may play in its etiology (Spring & Coons, 1982).

Despite the extensive research on stress and psychological health, confusion still exists as to whether stress is a precursor and plays a
part in the development of a disposition to psychopathology, a catalyst for mental disorders, or an exacerbator of mental illness. The consensus of the plethora of these studies is, however, that there is some relationship between stress and psychopathology.

**Burnout**

Perlman and Hartman (1982) provided a comprehensive review of the literature on burnout from 1974 to 1981. They examined the definitions employed in the various articles reviewed as to what occupation was studied, whether the studies were descriptive, narrative, or statistical presentations of systematically collected data, and whether the cause and possible solutions discussed were individual or organizational (p. 292). Following this review, they synthesized the definition of burnout as a response to chronic emotional stress with three components labelled emotional and physical exhaustion, lowered job productivity, and overdepersonalization (p. 293).

This definition is consistent with the three factors measured by Maslach and Jackson (1981) with the Maslach Burnout Inventory (MBI). As well, this author has reviewed the more recent literature on burnout and found this to be the most frequently used definition, primarily because most studies use the MBI as the data collection instrument (Beck, 1987; Cherniss, 1988; Fuqua & Couture, 1986; Golembiewski, Munzenrider, & Carter, 1983; Golembiewski, Munzenrider, & Stevenson, 1986; Huberty & Huebner, 1988; Jackson, Schwab, & Schuler, 1986; Jayaratne & Chess, 1984, 1986; Nagy, 1985; Nagy & Davis, 1985; Powers & Gose, 1986; Riggar, Godley, & Hafer, 1984; Rosenthal, Teague, Retish, West, & Vessell, 1983; Whitehead, 1987).
Maslach and associates (e.g., 1976, 1978, 1982a, 1982b; Maslach & Jackson, 1981, 1984; Maslach & Pines, 1977; Pines & Maslach, 1978) developed the definition and the MBI following extensive exploratory studies of what employees in people-work occupations were feeling and doing. This model of burnout as an outcome of situational sources of job-related and interpersonal stress has been the basis for much subsequent empirical research and theoretical development.

The list of authors cited above is evidence of the empirical research generated. An example of theoretical development is the research by Golembiewski et al. (1983) which extended the analysis of burnout, using the MBI, to identify eight progressive stages or phases of burnout. Depersonalization as measured by the MBI sub-scale was proposed as being the initial burnout phase, followed by reductions in personal accomplishment, and emotional exhaustion was considered to occur as a result of the heightening of the first two stages (p. 466). This research provided statistical evidence for viewing burnout as a process rather than a state, which is how much of the narrative and anecdotal literature has portrayed the phenomenon. Alternative stage or phases theories have also been proposed. For example, Edelwich and Brodsky (1980) described four stages in the development of burnout: ideal enthusiasm, stagnation, frustration, and apathy. However, these stages have not been empirically tested.

In addition to Maslach, other researchers also began during the 1970s to study what has become known as burnout. For example, Cherniss (1980) designed a longitudinal study to determine what a new professional working in a large, public, human service agency
experienced, and how that experience affected the new professional. He utilized the term burnout to denote the process whereby the professional's attitudes and behaviors changed in negative ways in response to job strain (p.5). A social ecological perspective was utilized for this study, that is, the interaction between the professional and the social environment was viewed with particular reference to the structure of the job and work setting (p. 12).

Carroll and White (1982) also chose an ecological frame of reference from which to view burnout. Within their proposed framework, burnout was considered to be a form of "ecological dysfunction" in terms of the interaction between person and environment (p. 14). These authors are examples of researchers who have incorporated the P-E Fit model of job stress into the study of this phenomenon. Carroll and White (1982) however, emphasized that ecosystems other than the work environment, such as family, community, and legislators who affect agency operations, are potential contributors to the burnout experience (p. 48).

If one takes this view of burnout as a possible outcome of the interaction(s) of a multitude of possible stressors from individual or personal aspects to work environment to family or community, the study of burnout is directly related to the study of stress. The vast amount of stressors previously identified which may lead to job stress and strain may then be considered as possible antecedents for burnout. This raises the issue of whether burnout is just a cliché to describe strain arising from exposure to any chronic stressor or a syndrome unique to the human service professions.
As with job stress, there is a complex interaction of possible causes for burnout. What appears to be unique to burnout among human service providers as compared to general job stress, however, is the stress generated by the face-to-face human contact. Maslach (1982a) emphasized that it is the frequent and intense personal contact that arises from the social interaction between helper and recipient that is the primary cause of burnout (p. 3). Similarly, Cedoline (1982) listed a number of job stressors as contributors to burnout, including "contact overload" (p. 48).

Working with people may be stress-inducing for a number of reasons, especially in fields such as social work where clients are often non-voluntary. For instance, clients' lack of motivation to change, the chronicity of problems, and negative or no feedback from the recipients are the most often cited stressors (Bourgault & Meloche, 1982; Cherniss, 1980; Eaton, 1980; Maslach, 1982a). Sze and Ivker (1986) reported that 20% of the social workers surveyed in their sample stated that their personal lives were disrupted to some degree by their clients (p. 146), and Shinn et al. (1984) reported that 23% of their respondents viewed their clients as stressors (p. 868). Similarly, Streepy (1981) indicated that the degree of positive feedback received from clients was significantly and negatively related to burnout (p. 356).

Beck (1987) found that the factors most significantly related to high MBI scores of burnout among counsellors in family service agencies were "overall level of job dissatisfaction" and "difficulties in providing clients with as much help as needed" (p. 7). Potter (1980)
referred to this latter factor as the "impossible task"; that is, it is clear what is to be done, but not possible to do it (p. 20). Cherniss (1980) stated that this, in turn, may lead to a "crisis of competence" (p. 21). Human service professionals have the responsibility for others but often not the resources needed to effect positive outcomes (Eaton, 1980, p. 171). This "failure" or "falling short" may have a significant impact on workers' self-confidence and sense of competence because their primary instrument of practice is themselves (Bourgault & Meloche, 1982; Cherniss, 1980; Eaton, 1980). The pressure of utilizing one's self as the "tool" in face-to-face work with clients is unique to the helping professions and further contributes to burnout (Farber, 1983, p. 13). Further, both quantitative and qualitative work overload contribute to burnout, as does insufficient training to deal with the realities of working with people (Bourgault & Meloche, 1982; Daley, 1979; Maslach & Pines, 1977).

Other possible stressors that have been identified as such include malpractice suits, having one's values and beliefs challenged, and no choice of clients (Bourgault & Meloche, 1982; Eaton, 1980). As well, role strain, measured as role conflict or role ambiguity, has been studied as a stressor in various occupations, and has been found to be significantly related to job stress and burnout in the human service professions (Harrison, 1980; Jayaratne & Chess, 1984, 1986; Whitehead, 1987).

This multitude of possible stressors, if not managed, may combine to induce the strain of burnout. Stress management techniques described previously (pp. 21 to 31) have also been widely recommended.
for burnout prevention and treatment (Bourgault & Meloche, 1982; Daley, 1979; Freudenberger, 1974, 1975; Maslach, 1982a; Tubesing & Tubesing, 1983; Zastrow, 1984). However, it is important to note that some of the coping mechanisms, if not utilized effectively, may exacerbate the problem of burnout. For example, the strategy of emotional withdrawal recommended by Bourgault and Meloche (1982) may be over-utilized and lead to depersonalization which has been identified as a central construct or phase of burnout. This reiterates the recommendation that mechanisms chosen to cope with a stressor, whether the stressors are from work or another facet of life, must be selected after an analysis of the person-environment interaction to determine what is the best technique available to ameliorate the stress-inducing situation for people in their own environment.

Summary

The study of stress and stress theory encompasses a broad spectrum of issues. Selye (1956) pioneered the development of the theory of stress from a medical or biological point of view with the presentation of his tri-phasic reaction syndrome. Subsequent conceptual frameworks about stress built on his theory with a psychological emphasis on aspects such as social supports, personality characteristics, and the individual's appraisal of stress. The stress process came to be viewed as a complex interaction of individual intrapsychic functioning, and the individual's physical and social environment.
For example, the study of occupational stress analyzes the interaction between individuals and their work environment. The Person-Environment (P-E) Fit theory is one conceptual framework which has been developed to examine the relationships between the objective, or existing person and environment, and the subjective person and environment, that is, the person's perceptions of self and environment. As well, the model explains stress as an outcome when a subjective or an objective misfit occurs and is not improved through coping strategies. Unmitigated stress is believed to lead to strains such as problems with psychological and physical health.

The P-E Fit Theory had been used as the basis for much research into what aspects of work and the individual interact to cause stress and strain. For example, misfits between the person and the environment in terms of job demands, job complexity, role, workload, and responsibility for other people have been found to be correlated to physiological, psychological, and behavioral strains (Caplan et al., 1975). In addition, aspects of the person such as age, life or career stage, ethnicity and cultural background, gender, and behavior patterns have been studied with respect to their effects on occupational stress.

The study of the factors in the environment and the person also led to a shift in focus from stress to the cognitive appraisal and coping processes. That is, researchers such as Lazarus (1966), Lazarus and Folkman (1984) examined the evaluative process that determines why and to what extent a P-E interaction is stressful, and the processes through which an individual manages or copes with the stressful P-E relationship or transaction. These coping mechanisms may be
categorized into three general classifications of direct action, cognitive reappraisal or meaning control, and symptom or emotion management, all of which may be used simultaneously. Research has shown that the coping strategies people use are many and varied, and what technique is effective is primarily determined by the situation or interaction to which it is applied.

The most often cited occupational techniques are organizational strategies such as clarification of organizational policies, increased staff participation in decisions, or a change in communication procedures, networks, shift patterns, job rotation, or reward systems, which are examples of direct action coping mechanisms that aim to modify work stressors. Individual strategies are used to change the meaning of the stressors through the cognitive appraisal-reappraisal process, such as re-defining one's goals, beliefs, and values about the stress-inducing situation. As well, one may learn to avoid strain and illness caused by stress through use of techniques such as relaxation, meditation, exercise, proper nutrition, and the development of a positive support system, and free time activities such as hobbies.

If stress is not ameliorated through the use of coping mechanisms as described above, it may contribute to a number of strains at the individual or organizational level. Maladaptive individual responses of an individual include behavioral consequences such as substance, spousal, and child abuse, and physical consequences such as gastrointestinal problems, headaches, backaches, asthma, cancer, eczema, and fatigue. Further, psychological consequences such as anxiety, depression, and nervous breakdowns are believed to be related to
chronic stress. However, there is still some confusion as to whether stress is a cause, a catalyst, or an exacerbator of psychopathology.

Another possible consequence of occupational stress, believed to be specific to work in the social service field, and thus central to this study of professional social workers, is burnout. Since the term was used in the mid-1970s to represent emotional and physical exhaustion, lowered job productivity, and overdepersonalization, it has been the topic of much research. What makes burnout unique to the human service professions as compared to the other possible consequences of occupational stress, is that it is primarily caused by the stress which arises from the frequent and intense face-to-face contact with clients. Other factors have been found to be significantly related to burnout in social work such as: overall job dissatisfaction, utilization of one's self as the tool in practice, lack of choice of clients, having one's values and beliefs challenged, role conflict or role ambiguity, qualitative work overload, amount of work hours required per week, and insufficient training for job demands.
RESEARCH QUESTIONS

This quantitative-descriptive study is designed to examine the nature of stress, burnout, coping mechanisms, and free time among a sample of professional social workers. The research intends to answer the following questions:

1. What are the demographic characteristics of the professional social workers surveyed?
2. What is the nature of stress experienced by these professional social workers?
3. What is the nature of occupational stress experienced by these professional social workers?
4. What are the burnout levels of professional social workers among the sample?
5. What is the nature of social support experienced by these professional social workers?
6. What do these professional social workers do in their free time?
7. What specific mechanisms do these professional social workers employ to cope with the stressors in their life and work?
8. Is there a relationship between stress levels and: 1) coping mechanisms, 2) free time usage?
9. Is there a relationship between burnout levels and: 1) coping mechanisms, 2) free time usage?
10. Is there an association between stress and burnout?

These questions serve as the basis for the ensuing method and discussion and are constructed in lieu of formal hypotheses.
METHOD

The Setting

This study was conducted in the area of Southwestern Ontario comprised of Essex county which has a population of 316,362 (Statistics Canada, 1987). It consists of the city of Windsor, the towns of Essex, Belle River, Tecumseh, the village of St. Clair Beach, and the townships of Sandwich West, Sandwich South, Maidstone, Colchester North, and Rochester. The county is an fertile agricultural area with the primary rural industry consisting of processing local farm products. (Marsh, 1985).

Windsor, Canada's southern-most city, has a population of 193,111 (Statistics Canada, 1987). Situated on the international border marked by the Detroit River, between Lake Erie and Lake St. Clair of the Great Lakes chain, Windsor is the busiest port of entry between Canada and the United States. The city is Canada's fifth largest manufacturing centre with the automotive industry being the primary employer (Marsh, 1985).

The Population

The population was composed of members of the Ontario Association of Professional Social Workers (OAPSW) residing in the setting. The OAPSW is a voluntary non-profit association which was incorporated in 1961. It is one of the provincial and territorial associations forming the Canadian Association of Social Workers (CASW), which in turn, is
affiliated with the International Federation of Social Workers (IFSW). The Association was established "to assert the role and position of social work in Ontario by promoting high standards of practice, encouraging professional development, informing the public about social work, and taking action on social issues" (OAPSW, no date, p. 1).

There are over 4,000 members of the OAPSW. The majority of these members are professional social workers with doctorate (2.5%), masters (74.1%), or baccalaureate university degrees (23.5%) in social work education programs (Tarasoff, 1986). Approximately 300 students enrolled in the professional year(s) of accredited Ontario social work programs are included in the provincial membership. As well, graduates of non-Canadian social work programs which are deemed equivalent to accredited Canadian programs comprise some of the total membership. These members are eligible for Professional Membership after completing two years of practice in Canada (OAPSW, 1987).

As of December, 1985, two-thirds (67.2%) of the provincial members were female, 32.8% were male. Almost one-quarter (23.6%) were employed in the practice field of children and youth. Mental health (15.4%), health care (13.3%), and family service (10.8%) were the other main areas in which the members were employed. The majority (71.1%) worked full-time. As well, the majority (56.5%) of the members lived outside of Metro Toronto (Tarasoff, 1986).

The population differed with respect to gender. More males than females held M.S.W. degrees (77.9% vs. 68.3%), and a larger proportion of the males were employed full-time (85.1% of men with M.S.W.'s and 81.2% of those with B.S.W.'s vs. 67.1% of the women with M.S.W.'s and
69.0% of those with B.S.W.'s) (Tarasoff, 1986).

The Sample

A sample of 226 active members of the OAPSW was obtained through the Windsor-Essex branch of the association. The executive board of the Windsor-Essex branch provided the researcher with a copy of the membership mailing list for use in the study. The membership consisted of 54 males (23.8%) and 172 females (76.1%).

Data Collection

Data were collected through a mailed questionnaire (see Appendix A). A cover letter (see Appendix B) outlining the study purpose and assuring confidentiality was attached. As well, a human subject consent form was enclosed (see Appendix C). A self-addressed, stamped envelope was provided with the return address of the School of Social Work, University of Windsor. The questionnaires were mailed out to all members of the Windsor-Essex branch of the OAPSW on June 8, 1988. A six week return date was deemed the cut-off date for receipt of responses.

The Pretest

The questionnaire was pretested on eight full-time M.S.W. students enrolled at the University of Windsor. Utilizing colleagues in this manner seemed appropriate because, as fellow students, they had an understanding of the study's purpose. As well, they were similar to the population being surveyed in that they meet the criteria for membership in the OAPSW. The pretest helped determine the length of time the questionnaire took to complete (an average of 24 minutes) and
also helped refine its content and format. A number of constructive suggestions from the pretest were incorporated into the final version of the instrument.

The Questionnaire

The survey instrument consisted of questions derived from four sources. An instrument developed by Maslach and Jackson (1981) through studies on burnout was utilized. Other questions were obtained from research on job stress by Cooper and associates (Cooper et al., 1988; Cooper & McCormick, 1988). Questions to elicit information about social support were derived from research on this issue with respect to burn victims (Cobb, 1976; Davidson et al., 1981). The remainder of the questions were developed by the researcher and her supervisor, Dr. M. Holosko, at the School of Social Work, University of Windsor.

The questionnaire had four sections that contained a total of 93 questions. Most were phrased as closed ended or fixed choice items. These sections were broken down as follows:

The Background Information section included questions on sociodemographics such as gender, age, marital status, educational level, occupational status, and income. Information was sought regarding length of employment within and outside of the social service field as well as the type of employment engaged in.

The second segment, entitled Feelings Survey, consisted of the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981). Respondents were required to use a Likert-type scale to rate themselves according to the frequency and intensity of feelings or attitudes. If the feeling or attitude was never experienced, a space was provided to check
"never". The frequency rating range was from 1 (a few times a year) to 6 (every day). The intensity rating ranged from 1 (very mild, barely noticeable) to 7 (major, very strong).

The inventory consisted of three sub-scales of Emotional Exhaustion, Depersonalization, and Personal Accomplishment, determined from a total of 22 items. Persons with higher scores on Emotional Exhaustion and Depersonalization sub-scales and with lower scores on the Personal Accomplishment sub-scale would be perceiving themselves as becoming or being burned out, according to Maslach and Jackson (1981). The score obtained was used to place the respondent on a continuum from "less burned out" to "more burned out".

Studies showed this instrument to be both reliable and valid in both content and construct (Gold, 1984; Powers & Gose, 1986; Iwanicki & Schwab, 1981). Maslach and Jackson (1981) reported internal consistency reliability coefficients (Cronbach Alpha) of $\alpha = .76$ for frequency and $\alpha = .81$ for intensity, and both are considered acceptable levels. It has been tested and re-tested frequently in studies of burnout by Maslach as well as many others (for example, see Brown, 1984; Fuqua & Couture, 1986; Jackson et al., 1986; Nagy, 1985; Nagy & Davis, 1985; Riggar et al., 1984).

The third part of the survey was comprised of a standardized instrument as well as questions developed by the researcher and her advisor. The Work Stress Questionnaire was obtained from C. L. Cooper (Cooper et al., 1988, pp. 121 - 122). Using a six point scale of "no stress at all" to "a great deal of stress", the sample was asked to indicate the degree to which the items listed were a possible source of...
stress for them at work. These phrases or statements reflected the common stressors identified as contributors to occupational stress through previous research (for example, Cooper et al., 1988; French et al., 1982). Cooper et al. (1988) did not indicate the reliability or validity of the questionnaire in their report.

The final portion of the instrument, Health and Leisure, included five questions regarding the family, friends and peers of the respondents. These questions were obtained from a study on social support and post-burn adjustment by Davidson et al. (1981). A four point scale with the choices of "not at all", "just a little", "some", or "a lot" was utilized to answer the questions:

1. People in the family/ My friends/ My peers; make me feel loved.
2. do things to make me happy.
3. can be relied on no matter what.
4. would see that I would be taken care of if needed.
5. accept me just as I am.

Davidson et al. (1981) found an average internal consistency reliability coefficient of $\alpha = .82$.

The final portion of the instrument asked the respondents to indicate how stressful they found each of eleven facets of their life. The inventory of stressors was compiled following a review of the literature on stress. For example, stressors such as finances, personal health, and the health or welfare of a loved one were included in the list. As well, questions were developed to obtain information regarding the respondents health, free time activities, and coping mechanisms.
RESULTS AND DISCUSSION

The results and discussion of data are presented in the following sub-sections: 1) socio-demographic data, 2) health, leisure, and coping, 3) assessment scales and inventories used, and 4) other statistical analyses.

Socio-Demographic Data

The 122 professional social workers surveyed for this study consisted of 30 (24.6%) males and 92 (75.4%) females. The ages ranged from 22 to 74 years, with a mean of 35.1 years (S.D. = 10.3, n = 115). The median age was 33 years and the sample was bimodal in that there were 8 respondents who were age 24, and 8 who were 26 years of age at the time of the survey. One third were in the 22 - 29 age range, 33.6% were in the 30 - 39 age range, and 27.9% were age 40 years or older.

Further, 60.6% were married or re-married, and of this group 4.9% were living common-law, 7.4% were widowed, separated, or divorced. Thirty-two percent had never been married. With respect to family status, 50% of the respondents reported that they had children. Of the 47.5% who indicated that they had children living with them, 15.6% had only one child, 18.9% had two, 4.1% had three, and 1.6% of the respondents had four children residing with them. The age of the

1. All data were analyzed using a micro computer (AT compatible) at the University of Windsor. The Statistical Package for the Social Sciences/PC+ V2.0 (SPSS Inc., 1988) was used in all analyses, and missing cases were excluded by item.
eldest child living at home ranged from less than 1 to 23 years.

All respondents had completed a university degree in social work (as this was a requirement for membership in OAPSW). For 54.1% of the sample, the most recent degree obtained was a B.S.W. while 38.5% had most recently completed a M.S.W., and 2.5% had obtained a Ph.D or a D.S.W. The remaining 4.9% had completed other degrees, such as M.A.'s, following their undergraduate social work degrees.

There were a total of 158 social work degrees (B.S.W., M.S.W., or Ph.D) for the 122 respondents. Of these, only 5.1% were received with a specialized education in administration and planning or community organization. A further 1.9% of the social work degrees' involved a specialization in research. The area of specialization for the vast majority (93.0%) was direct clinical practice.

Of the 122 respondents, 31.1% were currently employed full-time, and 9.6% were part-time employees. Nine percent of the respondents were unemployed, and 6.6% reported they had not worked for longer than one year. The reasons given for unemployment were: returned to school (3.3%), job or contract expired (1.6%), or just graduated and looking for work (1.6%). As well, 63.7% of the employed professional social workers were front-line workers, 13.3% were managers or directors, 8.0% were supervisors, and 5.3% classified themselves as educators. An additional 9.7% categorized their jobs as consultants or as combinations of the previously mentioned categories.

Thirty-six percent of the sample indicated they were responsible for managing or supervising from 1 to 99 people ($x = 13.1$, S.D. = 21.3). Thirty-one percent of the respondents indicated that
they were directly supervising an average of five people (S.D. = 11.5, range = 1 - 70).

Child Welfare was the most common area of employment for the sample as 24.6% of the employed sample reported that they worked in this field. The areas of social work employment for the 114 employed respondents are presented in Table 1.
Table 1
Areas of Social Work Employment for the Study Sample \((n = 114)\)

<table>
<thead>
<tr>
<th>Fields of Employment</th>
<th>Actual Frequency ((f))</th>
<th>Relative Percent (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Welfare</td>
<td>28</td>
<td>24.6</td>
</tr>
<tr>
<td>Children's Mental Health</td>
<td>12</td>
<td>10.5</td>
</tr>
<tr>
<td>Adult Mental Health</td>
<td>10</td>
<td>8.8</td>
</tr>
<tr>
<td>Family Service Agency</td>
<td>10</td>
<td>8.8</td>
</tr>
<tr>
<td>School Social Work</td>
<td>10</td>
<td>8.8</td>
</tr>
<tr>
<td>Health/Medical</td>
<td>6</td>
<td>5.3</td>
</tr>
<tr>
<td>Corrections</td>
<td>6</td>
<td>5.3</td>
</tr>
<tr>
<td>Education</td>
<td>5</td>
<td>4.4</td>
</tr>
<tr>
<td>Community Organization</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Legal</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Private Practice</td>
<td>3</td>
<td>2.7</td>
</tr>
<tr>
<td>Services for the Aged</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Income Maintenance</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Vocation/Employment</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>1</td>
<td>.9</td>
</tr>
<tr>
<td>Other*</td>
<td>6</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Note. *The Other category includes above category combinations and two respondents who were not employed in social work when surveyed.

The categories in Table 1 are further sub-grouped and displayed with the data provided by the OAPSW statistics for comparison in Table 2. The OAPSW statistics reflect the practice fields of the members at

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the time of membership renewal in 1985 (Tarasoff, 1986).

Table 2

A Comparison of Field of Practice of the Members of the Windsor-Essex Branch (1988) and the Provincial OAPSW Membership (1985)

<table>
<thead>
<tr>
<th>Practice Fields</th>
<th>Total OAPSW Members (n = 4120) (%)</th>
<th>Windsor-Essex Branch (n = 112) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Welfare</td>
<td>23.6</td>
<td>24.6</td>
</tr>
<tr>
<td>Mental Health</td>
<td>15.4</td>
<td>19.3</td>
</tr>
<tr>
<td>Health Care</td>
<td>13.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Family Service</td>
<td>10.8</td>
<td>8.8</td>
</tr>
<tr>
<td>School Social Work</td>
<td>4.2</td>
<td>8.8</td>
</tr>
<tr>
<td>Services to Aged</td>
<td>4.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Developmentally Handicapped</td>
<td>3.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Corrections</td>
<td>2.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Income Maintenance</td>
<td>1.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Other</td>
<td>21.6</td>
<td>17.7</td>
</tr>
</tbody>
</table>

When asked whether they would be working in the same or a similar occupational capacity in the next five years, one respondent indicated that she will be retired, 7.4% responded certainly not, and 5.6% reported probably not. The majority (53.3%) indicated that they would probably be in the same or a similar capacity, while 15.6% indicated that they certainly would.

The hours the professional social workers were required to work...
per week ranged from 6 – 58 hours. The average hourly work week for the sample who worked full-time was 36.8 hours, S.D. = 4.0, while the part-time employees averaged 21.1 hours of work per week (S.D. = 8.2). Seventy-eight percent of the respondents differentiated between weekly hours of work required and the number of hours usually worked per week, and 13.1% indicated that they did not usually work overtime. Further, 64.8% of the sample reported that they did work overtime, with the average hours of overtime work per week equalling 7.2 (S.D. = 5.7, range = 1 to 33, mode = 5).

The length of time the sample had been in their present employment positions ranged from one month to 20 years. The average length of time was 42.7 months (S.D. = 49.5, n = 109), or just over three and one half years. The average length of employment time with their present agencies or employers was 56.0 months (S.D. = 59.8, n = 96), or 4 years and 8 months.

The amount of experience in social work varied widely from new B.S.W. graduates with no paid experience to seasoned employees with 31 years experience as professional social workers. The average length of time employed in the social work field was \( \bar{x} = 101.3 \) months (or approximately 8 years and 5 months), S.D. = 88.1, n = 109. In addition to the experience in the social work field, 61.6% of the respondents indicated that they had worked outside of the field for an average of 63.6 months (5 years, 4 months), S.D. = 79.3.

Eighteen percent of the sample reported that they had another paying job in addition to their social work job. Further examination of these data revealed that 4.1% worked as private practitioners, 3.3%
indicated that they were sessional teachers or instructors, 1.6% indicated that they were consultants, and 2.5% reported that they were employed in other social work jobs. In addition, 6.6% were employed in a second job which was not within the social work field. The hours per week that the "moon-lighters" worked in their second job ranged from 2 to 99 hours, the mean was \( \bar{x} = 13.7 \) hours (median = 8, \( n = 19 \)).

Further, 41.0% of the sample reported that they were involved in volunteer work as well as their paid work. The majority (78%) of this cohort reported that they were board or committee members. On the average, their volunteer positions required them to work 3.1 hours per week (range = 1 to 12, median = 2).

With respect to income, the respondents were requested to indicate both their personal and household incomes on a five-point ordinal scale. Table 3 presents these data.
Table 3

Reported Personal and Household Incomes of the Sample (n = 122)

<table>
<thead>
<tr>
<th>Income Ranges ($)</th>
<th>Personal Income</th>
<th>Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency (f)</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>less than 15,000</td>
<td>11</td>
<td>9.0</td>
</tr>
<tr>
<td>15,000 - 34,999</td>
<td>62</td>
<td>50.8</td>
</tr>
<tr>
<td>35,000 - 54,999</td>
<td>33</td>
<td>27.0</td>
</tr>
<tr>
<td>55,000 - 74,999</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>75,000 or more</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Missing</td>
<td>12</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Further, the sample rated the extent to which their incomes met both their basic needs and their wants or desires, on 5-point Likert-type scales ranging from 1 = not at all to 5 = completely. With respect to their basic needs being met, the highest rating (completely) was indicated by 47.5% of the sample, 21.3% indicated fairly well, 15.6% rated their needs as being met moderately by their income. An additional 4.9% reported that their income only met their needs somewhat, and 2.5% indicated their needs were not met at all by their income.

Finally, in this regard, 9% of the sample reported that their wants or desires were completely met by their income, 17.2% indicated a rating of fairly well. The most frequently reported rating was moderately (41.0%), while 18.9% of the respondents indicated their

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Discussion of Socio-Demographic Data

One hundred and twenty-two members of the Windsor-Essex Branch of the OAPSW completed the questionnaire, yielding a response rate of 54%. Although not identical to the total 1988 branch membership, the response rate was more than adequate and upon inspection of descriptors allows for some comparisons and generalizations. More specifically, and as one would expect, the sample seemed to be more representative of the total branch membership and less representative of the OAPSW members as a whole (when they were last studied).

For instance, the proportion of male versus female study respondents was similar to the branch membership of 23.9% males and 76.1% females, but varied from that of the total OAPSW membership of 32.8% males and 67.2% females (Tarasoff, 1986). Further, the study sample differed somewhat from the total OAPSW membership in that a larger proportion of the total membership had an M.S.W. degree as the highest degree (70.9% vs 39.5%), whereas 22.9% of the population had a B.S.W. degree compared to 54.1% of the sample. Tarasoff (1986) noted that there were more OAPSW members with an M.S.W. degree in Metro Toronto than in the rest of the province, however, the difference was only 5%, not 32.4%.

Although the proportions of the sample with a doctorate, both males and females, was comparable to the total OAPSW membership, the sample differed from this population when the variable gender was considered with other degrees most recently received. For example, 60%
of the males surveyed had obtained an M.S.W. degree, while only 31.5% of the females held graduate degrees. The majority of women (62.0%) reported the B.S.W. as the highest social work degree obtained, as compared to 30.0% of the men. The provincial OAPSW data also indicated that 77.9% of the men held M.S.W. degrees as compared to 68.3% of the women, while 12.4% of the men and 28.4% of the women held only an undergraduate degree (Tarasoff, 1986). Thus, the predominance of females in this study sample may explain some of the variation from the population statistics with respect to these education data.

As no age data regarding the total OAPSW membership were available, no direct comparisons can be made in this regard, however, both the median and the modes were less than the mean indicating that the sample was positively skewed with respect to age. That is, 50% were under the age of 33 years. Further, 90% of those under the age of 30 had only B.S.W. degrees, whereas only 7.5% of that age group had M.S.W. degrees. In a comparable follow-up study of M.S.W. graduates from the University of Windsor, the average age at the time of graduation was 31.2 years (Holosko, 1988). Thus, age may further explain some of the previously noted variation in educational levels when this sample is compared to other populations.

With respect to social work experience, almost half (44.5%) of the sample had worked less than two years in their present position, and one quarter (24.8%) had worked two years or less in the social work field. Combined with the age data, it thus appears with that the professional social workers surveyed were not only relatively young, but many were new to their positions and to the field of social work in
Although the respondents were not requested to report the number of social work positions they had held, or the number of agencies of employers they had worked for in their social work careers, the data obtained suggest some discernible trends. From a comparison of the lengths of time in their current positions, in their present agencies, and in the field of social work, it appears that the respondents have generally worked for two or more employers of agencies, and have held two or more positions within their present agency of employ.

However, the overall average length of time the sample had been in their present employment, over three and one half years, suggests a low turnover rate in this profession. For example, Maslach (1982a) stated that there was a relationship between burnout and turnover, with two years as the first critical point at which burnout leads people to quit and get out. Thus, this finding, although only one descriptive indicator, may reveal a low burnout rate among the professional social workers surveyed. Certainly, subsequent analyses will test this assumption out more thoroughly. Further, almost 70% of the respondents indicated that they would probably or certainly would be working in the same or a similar capacity in five years, supporting the perception of low turnover and low burnout, but it may also be an artifact of age and experience.

A somewhat larger proportion of the sample were employed full-time in comparison to the 1985 population statistics (81.1% vs 71.1%). Further, the 1985 study of the total OAPSW membership indicated that 8% of the members were students, while only 1.6% of this sample indicated
that they were students at the time of the survey. One possible reason for the latter finding is that there is only one school of social work in the geographical area from which this sample was drawn, whereas there are a number of social work programs province-wide.

The sample was more similar to the provincial population with respect to fields of employment as indicated by Table 2 (p. 56). However, there were over twice the number of the total membership employed in the areas of health care and services to the aged than were indicated by these data. The former finding may be attributed to the fact that the Windsor-Essex area does not have major medical teaching centres which traditionally have large social work departments. The latter finding may also be indicative of the fact that services to the aged is a burgeoning field, and it is acknowledged that it is not as developed in the Windsor area as elsewhere in the province.

Another difference in the employment fields occurred in the areas of corrections and school social work. Specifically, the data revealed two times more correctional and school social workers proportionately than did the population in Table 2. As the Windsor-Essex area does not have a major correctional centre, the former finding was surprising. For instance, most of these services are provided through small community-based programs, such as New Beginnings. Although speculative, possibly the social workers employed in these smaller correctional agencies are more likely to join the OAPSW for professional identity than are social workers in larger institutions who have built in peer support in their agencies. One could further speculate as to why school social workers may be more prevalent in the
sample data than in the population, however, no explanation is evident from the data. Despite these variations, the data indicates that the sample is more similar than different from the population.

The hours of work required per week seemed to reflect the reality in our societal norms. However, when combined with the average hours of overtime, the work week consisted of over 42 hours for almost two-thirds of the sample. Further, one-fifth of the sample worked an average of 13.7 additional hours in their second jobs, and over four-fifths of the sample volunteered for an average of 3.1 additional hours per week. A comparison of the socio-demographic data of these two cohorts to that of the sample showed only two notable patterns:

1) those who worked either a second job or a volunteer position worked less hours of overtime than the rest of the sample ($\bar{x} = 8.4$, S.D. = 9.5, and $\bar{x} = 7.9$, S.D. = 7.4, respectively), and 2) those who held a second job reported an average of 2 hours less of free time per week than the overall average.

It was of interest to note that 5.7% of the sample held both a second job and a volunteer position as well as their primary social work job. For this sub-group, the work week consisted of an average of 35.6 hours in their primary jobs (S.D. = 2.6), $\bar{x} = 18.3$ hours of overtime (S.D. = 11.3), $\bar{x} = 8.4$ hours in their second jobs (S.D. = 5.1), and $\bar{x} = 4.4$ hours volunteering (S.D. = 3.6). By totalling these means, the average work week equalled 66.7 hours. That is, this cohort worked more overtime and volunteer hours but less hours of work in their second jobs than other respondents.

In addition to their work week, this cohort reported an average
of 31.5 hours of free time (S.D. = 15.8), which is slightly more free time than was reported by the respondents as a whole and suggests that this sub-group safeguards their free time although they work a lot.

The socio-demographic data on this sub-group was similar to the remainder of the sample with the exception of: 1) marital status (42.9% of the sub-group were married, re-married or living common-law versus 60.7% of the sample), and 2) personal annual income (four-fifths of this sub-group earned between $35,00 and $54,999 annually, as compared to three-fifths of the total sample).

Some inferential tests of these demographics were computed and one variable which sifted out as affecting a number of others was gender. More specifically, the males and females of the sample differed with respect to degrees obtained as discussed previously. As well, they varied with respect to age, length of employment with their present employers or agencies and in employment fields of social work, personal annual income, and job category. For instance, the men were generally older than the women (t = 2.87, p < .006, n = 115), had worked longer for their present agencies or employers (t = 3.48, p < .002, n = 96), and had more experience in social work (t = 3.72, p < .001, n = 109).

As well, when gender and income were cross-tabulated, a Chi-Square statistic of \( \chi^2 = 18.73, p < .0003, \text{d.f.} = 3, n = 113 \), was determined, suggesting that the males had higher personal incomes than the females. Further, when gender and job category were cross-tabulated, the \( \chi^2 \) obtained equalled 8.36 (p < .08, d.f. = 4, n = 110). An examination of these results further indicated that proportionately more females than males reported that they were front-line workers,
whereas twice the proportion of males versus females reported that they were supervisors, managers, directors, or educators. This finding is only significant at the $p < .08$ level, and thus indicated only some association between the two variables, however, it does explain some of the variation between the incomes of the males and of the females.

An additional cross-tabulation between gender and personal annual income was computed, controlling for job category. The $X^2$ determined was 12.26, ($p < .002$, d.f. = 2, $n = 70$) for front-line workers, indicating that men working at the front-line earn more than the front-line women. The results for the other job categories were non-significant, possibly due to the small proportion of the sample employed in each of these categories. These inferential tests indicated that males are more likely to be educators, supervisors, and managers or directors than are females, and suggested that men typically make more money than females regardless of their job categories. However, education, age and experience were also found to affect income.

**Health, Leisure, and Coping**

The professional social workers surveyed were requested to rate their own health status on an interval scale of $1 = $very poor health to $10 = $excellent health. Only 4.9% of the sample rated their own health as 5 or less, a very poor to fair rating, while 5.7% indicated a score of 6, and 10.7% rated their health as 7. One-third of the sample indicated their health status was good (a rating of 8), and 23.8% rated their health as 9. A score of $10 = $excellent health was
indicated by 19.7% of the sample. The mean score was $\bar{x} = 8.2$, S.D. = 1.5, $n = 120$.

With respect to personal health care, 31.1% of the sample reported they do not have an annual medical check-up (67.2% said they do, 1.6% did not answer the question). Twenty-four percent of the respondents indicated that they were taking prescription medicines (excluding birth control pills). Fourteen percent stated that their medication was for a minor health problem, and 5.7% indicated it was because of a major health problem. Five percent of the sample who indicated that they took medication did not indicate the severity of the health problem. As well, when asked if medication was for preventative or curative reasons, 9.0% did not respond. A further 8.2% indicated that the medication was being used as a preventative measure, and 7.4% reported it was curative.

Further, 7.4% indicated they had been hospitalized within the past year. The number of days of hospitalization ranged from 1 to 21. Four percent of the respondents had been hospitalized for four days or less. Two percent of the sample stated that their hospitalization was due to pregnancy and giving birth, not because of a personal health problem. The mean number of days in hospital in the past year for the sample was $\bar{x} = 6.1$, S.D. = 2.9, $n = 119$.

Sixty-two percent of the sample reported that they had not made any out-patient visits to a hospital within the year prior to completing the survey. Twenty percent indicated that they had one out-patient visit, 8.2% reported two visits, 2.5% went three times to a hospital, and 3.3% of the sample utilized a hospital on an out-patient
basis four times in the past year. Further, 1.6% of the respondents went five times, and 0.8% reported six out-patient visits to a hospital within the past year. The average number of visits was $\bar{x} = .71$, S.D. = 1.24, n = 119.

One quarter of the sample reportedly did not miss any work days in the past year due to illness. One respondent reported that she had been on sick leave for the past year and thus indicated that 365 days of work were missed. Of the remaining sample, 13.1% indicated they missed one day of work due to illness, 16.4% reported two days of sick leave, 11.5% were off work three days, 10.7% missed four days of work, and 6.6% missed the equivalent of one full work week due to illness within the year prior to completing the questionnaire. The remainder (13.1%) reportedly missed from 6 to 60 days of work because of illness. The average annual number of sick days was $\bar{x} = 6.4$, S.D. = 33.9, n = 118. This distribution was negatively skewed because of the one respondent who reported 365 days of illness. If she is not considered in this statistic, the annual average drops to 3.3 days, S.D. = 6.4.

As well 27% of the sample indicated that they smoked. More specifically, 13% rated themselves as regular, but not heavy smokers, 7.4% indicated they were occasional or recreational smokers, and 6.6% reported that they were heavy smokers.

Further, 86.1% of the respondents reported that they consumed alcoholic beverages. Forty-two percent indicated that they usually drank wine, 23.8% preferred beer, and 20.5% stated that liquor was their choice of alcoholic beverage. The number of alcoholic beverages the respondents had consumed in the week prior to completing the survey...
The sample estimated that they had on the average 30.8 hours per week deemed as free time (S.D. = 18.1, range = 0 - 99, n = 112), or time remaining after taking care of the necessities of life such as working, eating, and sleeping. The 63.9% of the respondents who engaged in some form of active exercise -- exercise which increased their cardiovascular and pulmonary rates significantly -- indicated that they did so for an average of 3.7 hours per week (S.D. = 3.7, range = 1 - 21, n = 102). The types of exercise they were involved in were: swimming (13.1%), team sports such as baseball and volleyball (5.7%), aerobics (4.1%), and running or jogging (1.6%). Other activities or sports such as racquetball, martial arts, and dancing were reported by 7.4% of the sample. As well, 27.9% of the total sample indicated that they participated in two or more of these forms of exercise. Twenty-four percent did not respond to this question, and 16.4% indicated that they did not actively exercise.

Involvement in passive exercise took up from 1 to 64 hours of free time per week for the sample, with the mean equalling 5.4 hours per week, S.D. = 7.0, n = 110. The most frequently reported single form of passive exercise was walking (13.1%), followed by bicycling (5.7%). Five percent of the sample indicated that playing golf was their way of passively exercising, and 4.9% did gardening or yard-work. A further 5.7% listed other forms of passive activity that they engaged in during their free time, such as household work, yoga or stretching, and scuba diving. Thirty-six percent of the respondents reported two or more types of passive exercise, 4.1% indicated that they did not engage in
any passive exercise, and 25.4% failed to respond to or missed this question.

Twenty-seven percent of the sample did not indicate any type of hobbies or free time activities other than the forms of exercise discussed previously. The remainder of the sample reported a variety of hobbies such as reading, needlework, music, photography, and theater, movies or television. Of those who indicated involvement in hobbies, the majority (59.6%) stated that they had two or more hobbies. Involvement in these hobbies and other free time activities filled an average of 7.9 hours per week, S.D. = 6.6, range = 1 - 35, n = 109.

As well as answering questions about their free time activities, the professional social workers were asked to rate the overall perceived level of stress of their jobs on an interval scale of 1 = not at all to 5 = very much. The most frequent response cited was 2 = somewhat (35.2%), followed by 28.7% who rated their job as moderately stressful, and 16.4% indicated a fairly stressful rating. Only 6.6% rated the overall level of stress in their job as very much, while 3.3% indicated their job was not at all stressful. The mean was \( \bar{x} = 2.86 \) (S.D. = 1.0, \( n = 110 \)), a score revealing a perception of moderate stress for their occupations.

A similar 5-point scale was utilized by the respondents to rate the extent to which they felt that their training and education prepared them to deal with the stressors encountered in their social work employment. All measures of central tendency and frequency data (mean, median, mode) equalled 3, or moderately prepared (S.D. = 1.08, \( n = 112 \)).
In addition to rating the effectiveness of their training or education in preparing them for work in the human service profession, the respondents were asked to comment about their training or education. Thirteen percent indicated that they were unprepared for the stress of social work employment, or that their formal education did not involve any training about stress and stress management. Further, 11.5% indicated that they were not totally prepared, while another 11.5% reported that they were prepared to deal with the stressors of their jobs. Other comments included "the practicum helped prepare me for the realities of work" (8.2%), and "courses after graduation have helped with stress management" (9.8%). Thirty-six percent of the sample did not comment at all, where as 7.4% stated that they were unprepared academically for work, and another 2.5% stated such issues as "it is a learning process through life", "I learned as I went along", and "maturity helped", which really did not pertain directly to the question asked.

The sample were further asked about their responses to stressors, and about the mechanisms they had developed to cope with stress in their lives. The number of stress symptoms or strains reported ranged from 1 to 7 with a mean number of $\bar{x} = 2.4$ (S.D. = 1.2, n = 117). That is, the sample indicated that they were generally aware of stress affecting them in two or three different ways. Thirty-seven percent reported only one type of strain, 49.2% listed two types, and 19.8% stated three or more stress responses. Four percent did not complete this question.

Emotional stress responses such as depression, tearful, moody, or
anxiety were reported by 56.6% of the sample, 54.1% reported physical strains such as fatigue, headaches, gastric distress, or tension, and 54.1% reacted to stress behaviorally. For example, the latter cohort indicated that they knew they were under stress when they smoked, ate, or yelled too much, or when their productivity or concentration decreased, or when they had trouble sleeping.

With respect to coping mechanisms, the sample reported an average of 3.4 strategies which they typically utilized to deal with stress (range = 0 - 9, S.D. = 1.9, n = 122). The first four coping mechanisms listed by each respondent were coded for analyses. This meant that 14.8% of these strategies reported were not incorporated into the subsequent analyses. However, those strategies which were analyzed were deemed representative of the total list. The reported mechanisms are presented rank ordered in Table 4.
Table 4

The Most Frequently Reported Coping Mechanisms for Stress for the Study Sample (n = 122)

<table>
<thead>
<tr>
<th>Coping Mechanisms</th>
<th>Frequency (f)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise/Diet</td>
<td>68</td>
<td>19.0</td>
</tr>
<tr>
<td>Seek support of friends/Social contact</td>
<td>49</td>
<td>13.7</td>
</tr>
<tr>
<td>Change activity/ &quot;Get-aways&quot;</td>
<td>36</td>
<td>10.1</td>
</tr>
<tr>
<td>Relaxation/Meditation/Prayer</td>
<td>28</td>
<td>7.8</td>
</tr>
<tr>
<td>Seek support of family</td>
<td>26</td>
<td>7.3</td>
</tr>
<tr>
<td>Hobbies</td>
<td>24</td>
<td>6.7</td>
</tr>
<tr>
<td>Resolve issue/Change stressor</td>
<td>23</td>
<td>6.4</td>
</tr>
<tr>
<td>Treat self/&quot;Goodies&quot;</td>
<td>14</td>
<td>3.9</td>
</tr>
<tr>
<td>Organize/Priorize/Time management</td>
<td>12</td>
<td>3.4</td>
</tr>
<tr>
<td>Rest/Sleep</td>
<td>11</td>
<td>3.1</td>
</tr>
<tr>
<td>Seek help of those involved</td>
<td>9</td>
<td>2.5</td>
</tr>
<tr>
<td>Self talk</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>Humor</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>Seek support of peers</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>Rationalization</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>Seek support of supervisor</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>Set realistic goals</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>357</strong></td>
<td><strong>99.8</strong></td>
</tr>
</tbody>
</table>

Note. *Percent total does not equal 100% due to rounding of figures.
Finally in this regard, the respondents were asked if they thought they needed to know more about stress and stress management in their lives. Only one person did not answer the question, leaving 58.2% of the sample who indicated No and 42.0% who responded Yes.

Discussion of Health, Leisure, and Coping Data

Generally, the professional social workers surveyed reported healthy lifestyles involving little or no cigarette smoking, mild to moderate consumption of alcohol, and both active and passive exercise. Over half of their weekly free time was spent in specific activities such as their hobbies or exercising ($\bar{x} = 16.8$ hours of activity time per week, S.D. = 13.3).

When compared to the data obtained in a study of other adults in the general population of Windsor and Essex County (Holosko, 1986), the study sample spent the same amount of time on hobbies, but more time exercising than did those in the general population study. As well, less smoking and less weekly consumption of alcohol was reported in this study than was found in the Holosko (1986) survey. The weekly average was $\bar{x} = 2.7$ drinks, S.D. = 3.3, $n = 121$, which is between the safe and caution levels of consumption (Addictions Research Foundation, 1978). However, a somewhat larger proportion (86.8% versus 79.7%) of this sample reported that they did, on occasion, drink alcoholic beverages. In addition, wine rather than beer was the preferred beverage of this study sample (41.8% preferred wine, 23.8% preferred beer, and 20.5% preferred liquor versus 21.5%, 34.5%, and 21.6% respectively in the Holosko (1988) study). The predominance of women in this sample affected the latter finding; when gender and preferred...
type of drink were cross-tabulated, a Chi-Square of 9.15 (p < .05, d.f. = 3, n = 121) was obtained. That is, women preferred wine while men preferred beer.

Overall, the sample reported their health status as being good to excellent (87.8% rated their health as 7 or higher on a ten point scale). This self-perception was corroborated by the average number of days of work missed due to illness, the average number of visits to a hospital as an out-patient, and the average number of days spent in hospital within the past year. This average health rating was slightly higher for this sample than for other adults in Windsor and Essex County (Holosko, 1986). Further, the professional social workers surveyed in this study reported less days spent in hospital and less usage of medication other than birth control pills than did the general population study sample.

As indicated by Gortmaker et al. (1982) and Tessler and Mechanic (1978), exposure to stressors may increase the frequency of visits to hospital or clinics and decrease one's health status rating. Therefore, the statistics obtained by the measures of health in the study suggest exposure to low perceived stress levels. Further, the subjective rating of the overall level of job stress obtained from 110 of the respondents lends credence to this as only one quarter (25.5%) reported a rating higher than 3 on a 5-point scale.

The respondents also appeared to be aware of their own stress responses and to have developed a variety of ways to cope with stress and its effects. The results of this study are similar to those of Shinn et al. (1984), in that the majority of the coping mechanisms
reported were activities directed at controlling the consequences of stress. That is, exercise or diet, get-aways or goodies, rest or sleep, relaxation or meditation or prayer, and hobbies totalled 50.6% of the strategies reported. Utilization of one’s social support system comprised 23.5% of the coping mechanisms listed, activities directed at modifying the stressor made up 12.3% of the mechanisms described, while 4.4% of the strategies used by the sample involved controlling the meaning of the stressor. Overall, the respondents were fairly evenly split as to whether or not they thought they needed to know more about stress and stress management in their lives.

The sample indicated that, as a result of their education or training, they were moderately prepared for the stressors of social work employment. When further grouped into three categories of prepared, not totally prepared, or unprepared, there was approximately one third of the comments in each category. Thus, the responses to this open-ended question reiterated the previous rating obtained on the interval scale. As well, the comments were consistent with those of a recent follow-up study of M.S.W. graduates of the University of Windsor School of Social Work (Holosko, 1988) who indicated that the practicum or field practice was one of the more relevant components of the education process, consistent with what the literature suggests in surveys of this nature (O’Flaherty, 1983).

The overall rating of the levels of the adequacy of preparation for social work employment provided in education or training programs differed between this study and that of Holosko (1988). This study included professional social workers with B.S.W. degrees who had
received less education than those with an M.S.W. degree who were exclusively surveyed in the study by Holosko (1988). This sample indicated that they were moderately prepared as compared to the more than adequate preparation rating obtained in the aforementioned study. This could be explained by the contention that those with B.S.W. degrees would tend to rate their level of preparation as less than those with M.S.W. degrees because they have less education, and therefore less preparation. However, a Chi-square test of association was computed between amount of education and the rating of the education or training, and the result indicated that there was no significant association between these two variables for this sample. This suggests the results obtained by Holosko (1988) may be affected by the subjects' expectations.

Measurement Indices and Scales

These were four main standardized and non-standardized indices or scales used in this study. These were: 1) the Maslach Burnout Inventory (MBI), 2) the Work Stress Questionnaire (WORKSTRESS), 3) the Social Support Inventory (SSI) and its three sub-scales of Family (FAMILY), Friend (FRIEND), and Peer (PEER) support, and 4) the Life Stress Inventory (LIFESTRESS).

The Maslach Burnout Inventory (MBI)

The 22-item MBI required respondents to indicate both the frequency and intensity of experienced feelings on seven point interval rating scales ranging from never to very often, and very mild to very strong. The internal consistency reliability coefficients were
computed as $\alpha = +.77$ for both the frequency ($n = 104$) and intensity ($n = 95$) scales. The Spearman-Brown split-half reliability coefficients were $r = +.72$ for both scales, respectively.

Mean scores on the frequency scale ($n = 104$) ranged from $\bar{x} = 5.4$ (more than a few times a week but less than every day), S.D. = .89, for "I deal very effectively with the problems of my clients", to $\bar{x} = .38$ (almost never), S.D. = 0.73, for "I don't really care what happens to some clients". On the intensity scale ($n = 95$), the mean scores ranged from $\bar{x} = 5.6$ (a strong rating), S.D. = 1.22, for "I can easily create a relaxed atmosphere with my clients", to $\bar{x} = .59$ (a very mild, barely noticeable score, almost non-existent feeling), S.D. = 1.02, for "I don't really care what happens to some clients".

Each of the frequency and intensity scales consisted of three sub-scales: emotional exhaustion frequency (EEF), emotional exhaustion intensity (EEI), depersonalization frequency (DPF), depersonalization intensity (DPI), personal accomplishment frequency (PAF), and personal accomplishment intensity (PAI). The summary statistics of these sub-scales are presented in Table 5.
Table 5

Maslach Burnout Inventory Sub-scale Statistics (n = 103 - 112)

<table>
<thead>
<tr>
<th>Summary Statistics</th>
<th>EEF</th>
<th>EEI</th>
<th>DPF</th>
<th>DPI</th>
<th>PAF</th>
<th>PAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of valid cases (n)</td>
<td>110</td>
<td>104</td>
<td>112</td>
<td>109</td>
<td>106</td>
<td>103</td>
</tr>
<tr>
<td>Number of items</td>
<td>9</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Score range</td>
<td>0-54</td>
<td>0-63</td>
<td>0-30</td>
<td>0-35</td>
<td>0-48</td>
<td>0-56</td>
</tr>
<tr>
<td>Published scale norms (item x)</td>
<td>2.71</td>
<td>3.33</td>
<td>1.57</td>
<td>2.13</td>
<td>4.23</td>
<td>5.02</td>
</tr>
<tr>
<td>Item means (x)</td>
<td>1.86</td>
<td>2.53</td>
<td>.99</td>
<td>1.29</td>
<td>4.92</td>
<td>5.29</td>
</tr>
<tr>
<td>Sub-scale means (x)</td>
<td>16.72</td>
<td>22.75</td>
<td>4.94</td>
<td>6.43</td>
<td>39.39</td>
<td>42.29</td>
</tr>
<tr>
<td>Standard deviation of sub-scale mean (S.D.)</td>
<td>8.64</td>
<td>11.05</td>
<td>3.96</td>
<td>5.12</td>
<td>5.06</td>
<td>5.51</td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha (α)</td>
<td>+.87</td>
<td>.85</td>
<td>+.65</td>
<td>+.64</td>
<td>+.71</td>
<td>+.71</td>
</tr>
<tr>
<td>Spearman-Brown split-half coefficients (r)</td>
<td>+.86</td>
<td>+.78</td>
<td>+.53</td>
<td>+.51</td>
<td>+.70</td>
<td>+.73</td>
</tr>
</tbody>
</table>

Note. As EEF, EEI, DPF, and DPI scores increase and PAF and PAI scores decrease, the higher the experienced level of burnout.

"Published norms were obtained from Maslach and Jackson (1981)."

The EEF and EEI had high internal consistency reliability as indicated by the reliability coefficients for these sub-scales. The reliability coefficients computed for the PAF and PAI sub-scales reflect a moderate to high internal consistency reliability, while the DPF and DPI sub-scale reliability summary statistics indicate a low to moderate internal consistency reliability.

The Work Stress Questionnaire (WORKSTRESS)

This measure of the level of work stress had a possible score range of 0 - 180 on 36 items. The overall mean was $\bar{x} = 51.62$. 

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S.D. = 22.71, n = 95. The item scores ranged from 0 (no stress at all) to 5 (a great deal of stress). The ranked mean scores of this sample ranged from $\bar{x} = 2.78$, S.D. = 1.20 (some stress) for the item time pressures and deadlines, to $\bar{x} = .24$, S.D. = .72 (no stress at all) for the item dealing with shareholders. The overall item-mean score was $\bar{x} = 1.43$, S.D. = .60. Table 6 reports the ten most stressful aspects of work as perceived by the sample on the WORKSTRESS.

Table 6

The Ranked Mean Scores of the 10 Work Components Perceived as Most Stressful on the WORKSTRESS Scale (n=95)

<table>
<thead>
<tr>
<th>Work Component</th>
<th>Mean Score ($\bar{x}$)</th>
<th>Standard Deviation (S.D.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time pressures and deadlines</td>
<td>2.78</td>
<td>1.20</td>
</tr>
<tr>
<td>Work overload</td>
<td>2.75</td>
<td>1.19</td>
</tr>
<tr>
<td>Office politics</td>
<td>2.28</td>
<td>1.57</td>
</tr>
<tr>
<td>Lack of consultation and communication in organization</td>
<td>2.18</td>
<td>1.49</td>
</tr>
<tr>
<td>Lack of power and influence</td>
<td>2.05</td>
<td>1.39</td>
</tr>
<tr>
<td>Long working hours</td>
<td>1.96</td>
<td>1.47</td>
</tr>
<tr>
<td>Making mistakes</td>
<td>1.94</td>
<td>1.17</td>
</tr>
<tr>
<td>Rate of pay</td>
<td>1.91</td>
<td>1.46</td>
</tr>
<tr>
<td>Demands of work on private and social life</td>
<td>1.87</td>
<td>1.40</td>
</tr>
<tr>
<td>Personal beliefs conflicting with those of the organization</td>
<td>1.82</td>
<td>1.39</td>
</tr>
</tbody>
</table>
The facets of work listed on the inventory which were rated as least stressful were (in ascending order): 1) dealing with shareholders ($\bar{x} = .24$, S.D. = .72), 2) work underload ($\bar{x} = .63$, S.D. = 1.09), 3) competition of promotion ($\bar{x} = .65$, S.D. = .95), 4) threat of job loss ($\bar{x} = .67$, S.D. = .98), and 5) having to move with my job in order to progress in my career ($\bar{x} = .77$, S.D. = 1.22).

The inter-item correlations for the WORKSTRESS ranged from -.23 to +.78, reflecting a generally positive association between items. That is, when an individual cited one work stressor, they usually cited others. Statistically, the most significant association was between the items demands of work on my relationship with my family and demands of work on private and social life ($r = +.78$, $p < .001$). Unsympathetic boss and incompetent boss were also significantly correlated with an $r = +.72$, $p < .001$. That is, those who reported they had an unsympathetic boss who created work stress also had an incompetent boss who created work stress. There was a total of 126 correlations significant in this matrix at the $p < .001$ level.

The items attending meetings, unsympathetic boss, unrealistic objectives, and feeling undervalued were each significantly correlated with 20 other items on the WORKSTRESS at $p < .01$ for a two-tailed test. The item work underload had only one statistically significant correlation, with doing a job below the level of my competence ($r = +.33$, $p < .01$), and was thus the item least correlated with others on the scale.

The item threat of job loss was negatively correlated with 16 other items on the inventory. As expected, the most negative

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correlations were with the items time pressures and deadlines (r = -.23), and work overload (r = -.15), however, neither of these correlation coefficients were significant at p < .01.

By treating the inventory as if it were a 36-item scale, a Cronbach's alpha of \( \alpha = .90, n = 95, \) was obtained. Normally, an internal consistency reliability coefficient of this magnitude reflects a reliable measure, with a high degree of commonality between the items. Further, the Spearman-Brown split-half coefficient of \( r = .91 \) supported this contention of high internal consistency reliability.

The WORKSTRESS had face validity upon inspection of all 36 items. Convergent validity was determined by correlating the total score obtained on the inventory with the sub-scale scores of the MBI, with the score of the item your job from the LIFESTRESS, and with the sample's subjective rating of the overall stress level of their jobs. The Pearson's product-moment correlation coefficients ranged from \( r = -.28 \) to \( r = +.59, n = 82. \) All of these coefficients were significant at the p < .001 level for a two-tailed test, except for the correlations between WORKSTRESS and the personal accomplishment sub-scales of the MBI. When correlated with the PAF, a non-significant correlation coefficient of \( r = -.28 \) was obtained, while a Pearson's \( r = -.29 \) (significant at p < .01) resulted from the correlation of WORKSTRESS and PAI. Thus, the WORKSTRESS converged on the same constructs as other measures of job stress in this questionnaire.

The Social Support Inventory (SSI)

The responses to this scale indicated how the study respondents perceived the social support they were receiving from their family,

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friends, and peers. This perceived support was rated on a scale from 1 (not at all) to 4 (a lot). A Cronbach reliability coefficient of  \( \alpha = .86, n = 119 \), was obtained for the total scale, indicating a high degree of internal consistency. The results of analyses of the SSI as well as those of its sub-scales, Family (FAMILY), Friends (FRIEND), and Peers (PEER), are presented in Table 7.

Table 7

Social Support Inventory Summary Statistics for the Sample

\( n = 119 - 121 \)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cases (n)</td>
<td>121</td>
<td>120</td>
<td>120</td>
<td>119</td>
</tr>
<tr>
<td>Item mean (( \bar{x} ))</td>
<td>3.64</td>
<td>3.38</td>
<td>2.80</td>
<td>3.28</td>
</tr>
<tr>
<td>Scale mean (( \bar{x} ))^a</td>
<td>18.22</td>
<td>16.88</td>
<td>14.02</td>
<td>49.25</td>
</tr>
<tr>
<td>Standard deviation of scale mean (S.D.)</td>
<td>2.12</td>
<td>2.71</td>
<td>3.20</td>
<td>5.91</td>
</tr>
<tr>
<td>Inter-item correlation range</td>
<td>+.25 to +.69</td>
<td>+.43 to +.72</td>
<td>+.54 to +.77</td>
<td>-.04 to +.75</td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cronbach's alpha (( \alpha ))</td>
<td>+.80</td>
<td>+.86</td>
<td>+.89</td>
<td>+.86</td>
</tr>
<tr>
<td>Spearman-Brown split-half (( r ))</td>
<td>+.80</td>
<td>+.85</td>
<td>+.90</td>
<td>+.68</td>
</tr>
</tbody>
</table>

Note. ^aHighest possible score on each sub-scale equalled 20, on the overall scale it equalled 60.

Convergent validity was tested using the Pearson product-moment correlation coefficient of \( r = -.37, n = 121 \), which was obtained between the FAMILY sub-scale and the item your family/home life of the

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life stress inventory. This significant inverse relationship
(p < .001 for a two-tailed test) was found to exist between family
support and the level of stress experienced with respect to family and
home life. That is, those who indicated that the level of support from
their family was high also perceived their family or home life stress
levels to be low.

The inter-item correlation coefficients of the SSI were generally
positive, and specifically those for each of the sub-scales were all
positive. This indicated a generally positive association between all
items on the scale, and a positive association between the items on each
of the sub-scales. All of the associations were statistically
significant at p < .001 for FRIEND and PEER. That is, when individuals
rated their friends or peers high on one item, they usually rated them
high on the others.

With respect to the sub-scale FAMILY, the item "People in my
family accept me just as I am" was significantly correlated at p < .01
to "People in my family can be relied on no matter what" (r = +.27,
n = 121), and to "People in my family would see that I would be taken
care of no matter what" (r = +.25, n = 121). All other inter-item
correlations on FAMILY were statistically significant at p < .001. The
SSI was negatively correlated, at the p < .001 level for a two-tailed
test, with LIFESTRESS (r = -.40) and with WORKSTRESS (r = -.38). In
addition, Pearson product-moment correlation coefficients significant
at the p < .01 level were obtained between SSI and the DPF sub-scale of
the MBI (r = -.31), and between FAMILY and the DPF (r = -.29). The
sub-scales FAMILY, FRIEND, and PEER, were also significantly correlated

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with LIFESTRESS at the $p < .01$ level ($r = -.32, -.31, \text{ and } -.29$, respectively). Further, PEER was significantly correlated with WORKSTRESS ($r = -.42, p < .001$). Although somewhat less positive about the support which they received from their peers, the respondents generally indicated positive feelings (some support) about all three levels or types of social support.

**Life Stress Inventory (LIFESTRESS)**

The 11-item LIFESTRESS inventory required respondents to rate the perceived levels of stress each item caused for them in their lives. The overall item mean was $\bar{x} = 2.3$, S.D. = 0.4, $n = 119$. The item scores ranged from 1 (not at all stressful) to 5 (very stressful). Table 8 indicates the ranked mean scores of the LIFESTRESS items.
Table 8  
The Ranked Mean Scores of the 11 Items of the Life Stress Inventory  
(n = 119)  

<table>
<thead>
<tr>
<th>Life Stressors</th>
<th>Mean Score (x)</th>
<th>Standard Deviation (S.D.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not enough time to accomplish tasks</td>
<td>2.97</td>
<td>1.23</td>
</tr>
<tr>
<td>Job</td>
<td>2.87</td>
<td>1.11</td>
</tr>
<tr>
<td>Finances</td>
<td>2.61</td>
<td>1.26</td>
</tr>
<tr>
<td>Health or welfare of a loved one</td>
<td>2.55</td>
<td>1.18</td>
</tr>
<tr>
<td>Family/home life</td>
<td>2.31</td>
<td>.95</td>
</tr>
<tr>
<td>Intimate relationships</td>
<td>2.26</td>
<td>1.09</td>
</tr>
<tr>
<td>Emotional health</td>
<td>2.20</td>
<td>.95</td>
</tr>
<tr>
<td>Personal appearance</td>
<td>2.13</td>
<td>.97</td>
</tr>
<tr>
<td>Social life</td>
<td>1.90</td>
<td>.88</td>
</tr>
<tr>
<td>Physical health</td>
<td>1.87</td>
<td>.89</td>
</tr>
<tr>
<td>Recreational activities</td>
<td>1.66</td>
<td>.83</td>
</tr>
</tbody>
</table>

Note. Possible scores ranged from 1 = not at all stressful to 5 = very stressful.

The inter-item correlations were all positive and ranged from $r = 0$ to $+.54$. Thus, when respondents cited one stressor, they tended to cite others. The highest correlation was between the items social life and intimate relationships ($r = .54$, $p < .001$). The lowest association, a non-significant one, was found between social life and job, and between personal appearance and health or welfare of a loved one ($r = .00$). Table 9 shows the inter-item correlation matrix of the 11 items of the LIFESTRESS.
Table 9
Inter-Item Correlations for the Stressors of LIFESTRESS (n = 119)

<table>
<thead>
<tr>
<th>Stressor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.00</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.54** 1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>.11 1.00</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.26* .06 16</td>
<td>1.00</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.45** .43** .28* .42** 1.00</td>
<td>--</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.16 .16 .03 .42** .30** 1.00</td>
<td>--</td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>.22 .40** 16 .22 .49** .26* 1.00</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>.13 .11 .34** .34** .33** .23 .38** 1.00</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.44** .33** 16 .18 .34** .15 .35** .34** 1.00</td>
<td>--</td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>10</td>
<td>.10 .07 .30* .23 .22 .17 .31** .33** .28* 1.00</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.23 .12 .12 .25* .19 0 .18 .19 .15 .15 1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. 1 = Social life
2 = Intimate relationships
3 = Job
4 = Physical health
5 = Emotional health
6 = Personal appearance
7 = Family/home life
8 = Finances
9 = Recreational activities
10 = Not enough time to accomplish tasks
11 = Health or welfare of a loved one

* p < .01  ** p < .001 for a two-tailed test of significance.

It was interesting to note that the item emotional health was significantly correlated with 7 other items at the p < .001 level, and an additional one (physical health) at p < .01. It was not associated with either the health or welfare of a loved one or with not enough.
time to accomplish tasks, but was the item most often associated with other items on LIFESTRESS. The item health or welfare of a loved one was the item least associated with others on the inventory. The only significant correlation of this item was with physical health ($r = +.25, p < .01$).

The coefficient alpha for the entire scale was $\alpha = +.77$, which indicated a moderate to high degree of internal consistency among the items of the LIFESTRESS. A moderate degree of internal consistency was further indicated by the unequal length Spearman-Brown reliability coefficient of $r = +.72$.

As well, the LIFESTRESS had face validity upon inspection of all 11 items. To determine convergent validity, each item and the total score were correlated with the 10 items of the WORKSTRESS identified as the most stressful aspects of work, with the total WORKSTRESS score, and with the overall job stress rating. A total of 93 cases were used for this analysis, as those with missing values for any of the items were excluded.

The total LIFESTRESS score was significantly correlated, at the $p < .001$ level for a two-tailed test, with WORKSTRESS ($r = +.50$), rate of pay ($r = +.42$), demands of work on private and social life ($r = +.41$), lack of consultation and communication in organization ($r = +.41$), and lack of power and influence ($r = +.34$). As well, the LIFESTRESS score was significantly correlated at the $p < .01$ level with making mistakes ($r = +.32$) and long working hours ($r = +.27$).

Pearson product-moment correlation coefficients which were significant at the $p < .001$ level were found between the item your job
of the LIFESTRESS and the overall job stress rating, the total
WORKSTRESS score, and with 5 of the WORKSTRESS items: lack of
consultation and communication in organization, work overload, long
working hours, time pressures and deadlines, and demands of work on
private and social life. The correlation coefficients obtained were
+.80, +.50, +.54, +.48, +.48, +.45, and +.40, respectively. Your job
was also significantly correlated with office politics (r = +.30) and
lack of power and influence (r = +.30) at the p < .01 level for a two-
tailed test, but not with the items: making mistakes, rate of pay, or
my beliefs conflicting with those of the organization.

Other significant (p < .001) correlations were also found on the
LIFESTRESS items not enough time to accomplish tasks was correlated
with WORKSTRESS (r = +.53), demands of work on private and social life
(r = +.49), lack of power and influence (r = +.41, work overload
(r = +.36), and lack of consultation (r = +.34). As well, the
LIFESTRESS item finances was significantly correlated with rate of pay
(r = +.49), and with WORKSTRESS (r = +.36). Thus, the LIFESTRESS was
found to have acceptable convergent validity in that those items of the
inventory which appeared to measure constructs related to work were, in
fact, significantly correlated with corresponding measures on the
WORKSTRESS.

Discussion of the Measurement Indices and Scales

The measurement indices and scales used in this study all had
moderate to high internal consistency reliability coefficients. As
well, the WORKSTRESS and the LIFESTRESS were both found to have face
validity. Convergent validity was also established between WORKSTRESS
and other measures of job stress, and between LIFESTRESS and various items of the WORKSTRESS. These findings encouraged the researcher to pursue subsequent analyses, and the psychometric properties obtained by these measures as a group appear to be both reliable and valid.

By comparing the item means obtained for this sample to the published norms for the sub-scales of the MBI, the professional social workers surveyed appear to be less burnt-out than other human service providers studied by Maslach and Jackson (1981). As well, the overall item mean of the WORKSTRESS indicated a low stress level in general for those surveyed, as did the overall item mean of the LIFESTRESS.

It was not surprising that the two work components rated as the most stressful were time pressures and deadlines and work overload. Studies of social workers have previously shown that these factors contribute significantly to stress and burnout (Bourgault & Meloche, 1982; Cooper et al., 1988; Daley, 1979; French et al., 1982; Maslach, 1982a; Maslach & Pines, 1977).

Two of the three LIFESTRESS items perceived as the most stressful pertained directly to work: job, and finances. Not enough time to accomplish tasks, the most stressful aspect of the LIFESTRESS, is also related to work stress as shown by the significant correlations with the overall WORKSTRESS score and a number of the WORKSTRESS items. Thus work and its various aspects appear to be the most stressful part of life for the professional social workers surveyed.

When one examines the correlations within and between WORKSTRESS and LIFESTRESS as a whole, they are generally positive. That is, those who indicated the existence of stress in some areas of work were also

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experiencing some stress in other areas of work and life as indicated by the two independent measures. The opposite is true as well: those with low work stress levels tended to report similarly low levels with respect to most areas of their life and work.

Further, the negative correlation coefficients found between SSI and the measures of LIFESTRESS and WORKSTRESS, as well as between the PEER sub-scale of the SSI and WORKSTRESS, provided evidence of significant associations between these constructs as expected. That is, as social support levels increase, the levels of work stress and life stress decrease. Co-worker support was found to have a more significant effect on work stress than friend or home support, similar to the study by LaRocco et al. (1980).

These findings parallel and corroborate the previous findings discussed in the socio-demographic and the health, leisure and coping sub-sections. The sample presented as an "aware" group of people who exhibit a pattern of recognizing the causes and effects of stress in their lives. As well, they appeared to work to eliminate the stressors or to ameliorate the effects of stress through the strategies they developed such as exercise or diet, social support, and other activities such as their hobbies, and thus reported low stress and burnout levels.

Other Statistical Analyses

The trends found in the previous analyses of the descriptive data were used to determine combinations of variables which were statistically tested to determine relationships among them. Three
types of inferential tests were used: 1) the Chi-Square statistic ($X^2$), 2) the $F$-test (ANOVA), and 3) the Student’s $t$-test (un-paired). Non-directional (two-tailed) tests of significance were performed with the data, and the frequency distribution statistics were used to subgroup various variables which were tested.

The study’s main measures of burnout, work stress, life stress, social support, and coping mechanisms were considered as dependent variables, and the inferential tests were used with respect to these constructs and other variables, as well as for tests among themselves. The results and discussion of these analyses are presented in this final sub-section of this chapter as: 1) factors related to burnout, 2) factors related to work stress, 3) factors related to life stress, 4) factors related to social support, and 5) factors related to coping mechanisms.

Factors Related to Burnout

Burnout frequency (BOFREQ) and intensity (BOINTEN) scores were obtained by adding the scores of emotional exhaustion and depersonalization sub-scales, then subtracting the personal accomplishment sub-scale score ($BOFREQ = EEF + DPF - PAF$, $BOINTEN = EEI + DPI - PAI$). This computation was performed because the literature suggests that as personal accomplishment scores decrease, burnout scores increase (Maslach & Jackson, 1981).

Each of the burnout scores was grouped into high, medium, and low categories. One-way analysis of variance tests (ANOVAs) were then performed, comparing the within and between group means and variances with respect to the other main dependent variables WORKSTRESS,
LIFESTRESS, SSI and its sub-scales, and the MBI sub-scales.

As expected, the mean scores obtained on each of the MBI sub-scales varied significantly \((p < .0001)\) between the sample sub-groups of BOFREQ and BOINTEN. Specifically, those respondents who had low burnout frequency or intensity scores had lower EEF, EEI, DPF, and DPI scores, and higher PAF and PAI scores than did those with medium or high BOFREQ or BOINTEN. As well, the higher the BOFREQ score, the higher the BOINTEN score, and vice versa.

The total WORKSTRESS and LIFESTRESS scores also varied significantly between the respondents who had high, medium, and low burnout scores \((F = 20.53, p < .0001, n = 89, \text{ and } F = 10.63, p < .0001, n = 101, \text{ respectively})\). That is, as job stress, WORKSTRESS, and LIFESTRESS increased, BOFREQ and BOINTEN increased. This same relationship existed, as expected, with the MBI sub-scales, EEF, EEI, DPF, and DPI, and WORKSTRESS and LIFESTRESS \((p < .001)\). As well, an inverse relationship existed between WORKSTRESS and the PAF and PAI sub-scales \((p < .01)\), and between LIFESTRESS and PAF \((F = 3.36, p < .05, n = 103)\), but not between LIFESTRESS and PAI.

Non-significant \(F\)-scores were obtained when those in the three groups of burnout levels were compared with respect to their ratings of social supports. Thus, no significant association was found between either the overall intensity or frequency of experienced burnout and the social support of peers, friends, or family. Some statistical relationships were found between individual sub-scales of the MBI and the SSI. These are presented later on and discussed as factors related to social support. Further, no significant associations were found.
between levels of burnout and the number of strains or stress responses reported, or the number of coping mechanisms the respondents indicated they used.

In addition, t-tests or ANOVAs were computed to determine if relationships existed between burnout scores and other selected variables. The variable gender, found previously to have significant relationships with other demographic variables, had no significant association with either the BOFREQ, BOINTEN, or any of the MBI subscales. As well, age, education, experience, and hours of work or overtime were not significantly related to the two main burnout scores.

Some significant relationships occurred with some of the subscales and the variables education, amount of experience in the field of social work, and experience in their present position. Specifically, respondents who had completed a post-graduate degree reported higher EEI scores than did those with only undergraduate degrees ($t = -2.59, p < .01, n = 104$). A similar but less significant association was found between level of education and EEF ($t = -1.94, p < .06, n = 11$). As well, the sub-group who had been employed in social work for more than three years scored higher on the EEF ($F = 4.47, p < .05, n = 105$), and on the EEI ($F = 8.7, p < .01, n = 99$), than did those with three or less years experience in social work. With respect to length of time worked in their present positions, those respondents with two or more years experience reported more incidences of personal accomplishment (PAF) than did those with less than two years experience ($F = 5.53, p < .05, n = 101$).
Both BOFREQ and BOINTEN were found to be significantly related to the overall global work stress rating, and with the similar rating of the education or training's adequacy of preparation to deal with the stress of social work. That is, those who indicated that their jobs were stressful also reported higher scores of burnout frequency and intensity than did the social workers who reported that they worked in low-stress jobs ($F = 13.8, p < .0001, n= 100$, and $F = 11.46, p < .0001, n = 91$, respectively).

The relationship between BOINTEN and the education or training level ($F = 4.41, p < .05, n = 93$) was also as expected: those who indicated that their training or education had prepared them to deal with stressors had lower burnout intensity scores than those who indicated a rating of moderate preparation who, in turn, reported that their training or education had not prepared them at well. However, the association found between levels of adequacy of training or education and burnout frequency ($F = 3.21, p < .05, n = 102$) was not as expected. Although the lowest BOFREQ mean score was reported by those who rated their training or education adequacy the highest, the next lowest BOFREQ mean score occurred with the sub-group who indicated that they were not at all prepared, and the highest BOFREQ mean score was recorded by those who rated their levels of preparation as moderate.

Further, present job category was associated with BOFREQ ($F = 2.5, p < .05, n = 102$) and BOINTEN ($F = 2.4, p < .06, n = 93$), but not as the literature suggested. The highest level of burnout on either scale was reported by the managers and directors, followed by the front-line workers who had been expected to rate highest on these measures. Those
who categorized their job as other, such as consultants or combination positions, had the lowest burnout scores. Supervisors and educators reported lower burnout scores than either managers and directors or front-line workers, with the educators indicating slightly lower BOFREQ scores but somewhat higher BOINTEN scores than the supervisors.

In addition, personal income was significantly associated with BOINTEN ($F = 4.63, p < .005, n = 93$) as was expected, in that as income increased, the BOINTEN score decreased, with the exception of the lowest paid group. More specifically, those who earned less than $15,000 per year had the lowest burnout intensity score. Although only significant at the $p < .09$ level, and, therefore, not statistically significant, the relationship between personal annual income and BOFREQ ($F = 2.25, n = 102$) showed a similar pattern.

BOFREQ was significantly related to what the respondents had indicated with respect to occupational plans in five years ($F = 2.92, p < .05, n = 103$). For example, those respondents who planned to retire within five years scored the lowest on BOFREQ, and those who replied they would certainly or would certainly not be in the same or a similar job in five years scored the next highest on BOFREQ. The highest mean scores on BOFREQ were reported by the portion of the sample who stated they would probably or would probably not be in the same or a similar job in five years. Again, although not a statistically significant association, the same pattern was reflected with respect to BOINTEN ($F = 2.04, p < .1, n = 94$).

Discussion of Factors Related to Burnout

The levels of statistical significance between the overall job
stress rating, WORKSTRESS, LIFESTRESS, and burnout scores suggests a strong relationship existing between burnout and both work and life stress. Life stress was not initially expected to have as strong a relationship with burnout as work stress, however, this result was not unexpected following the previous finding that work was the most stressful aspect in the lives of the respondents as discussed in the measurement scales and indices sub-section (pp. 77 to 91).

The lack of significance between social support and the overall burnout measures, and, specifically between peer support and burnout, were similar to the findings of LaRocco and Jones (1978), Pearlin et al. (1981), and Williams et al. (1981). That is, no evidence was found to support the contention that social support buffers psychological strains in this regard.

The finding of non-significant relationships between burnout and most of the demographic variables supports the notion that the phenomenon of burnout among this sample was not due to factors or aspects of the individual person but rather was due to aspects related to their job or occupation. The relationship found between job category, adequacy of training or education, income, experience, and respondents' future plans about their jobs also appears to support this contention.

Contrary to the literature, managers and directors were found to have higher burnout scores than did the respondents in any other job category. This finding may indicate that there are specific features of these types of jobs which contribute to burnout. The data suggests no reasons, but one might speculate that the high level of
responsibility or accountability for the agency, the staff, and ultimately for the clients is one possible cause for the higher burnout scores. In fact, Dobrowolsky (1986) found the demands for accountability to be a stressful job factor for upper level managers in human service organizations located in the same geographical area from which the sample for this study was drawn. Another possible explanation is that managers and directors were front-line workers who were promoted and given responsibilities which compounded the residual effects of burnout from when they were front-line workers.

Interestingly, those respondents with the lowest scores worked in the other job category, most of whom worked a combination of positions. Their low burnout scores may have been affected by their abilities to exchange one task or type of task for another, or to delegate tasks to others, thus preventing or reducing emotional exhaustion, burnout, or chronic stress.

Further speculation may be made as to why relationships between burnout scores and the global education or training ratings, income, and future plans varied as they did. These data suggest no possible reasons why the relationship between BOFREQ and the education or training ratings were not like those between this variable and BOINTEN. One may speculate that the lowest income group reporting the lowest burnout scores is that group which consists primarily of part-time workers and, therefore, were not exposed to work stressors as much as were the others in the sample. The relationship between burnout scores and future occupational plans may be explained by suggesting that those who reported a rating of probably rather than certainly were
indicating a degree of uncertainty about their plans. Dissatisfaction with, and stress from their jobs may be contributing to their uncertainty and to burnout.

Factors Related to Work Stress

The overall LIFESTRESS score was positively related to categories of WORKSTRESS \((F = 9.8, p < .0001, n = 92)\), whereas the overall SSI score was negatively associated with the work stress measure \((F = 6.58, p < .005, n = 93)\). That is, as life stress increased, work stress increased, but as social support increased, the WORKSTRESS score decreased. The social support sub-scale PEER also had a significant inverse association with WORKSTRESS \((F = 9.18, p < .0005, n = 93)\), while tests (ANOVAs) performed with the FAMILY and FRIEND sub-scales showed similar, but non-significant relationships with work stress.

When ANOVAs were performed between WORKSTRESS and the demographic variables, a number of significant relationships were found. As expected, as the global rating of overall job stress increased, the WORKSTRESS score increased \((F = 8.32, p < .0001, n = 92)\). Similarly, as the global rating of the level of preparation through education or training decreased, the WORKSTRESS score increased \((F = 2.88, p < .05, n = 93)\).

Further, a significant relationship was found between WORKSTRESS and future job plans \((F = 3.25, p < .05, n = 94)\). Respondents who indicated that they would probably not be employed in the same or a similar position in five years reported the highest WORKSTRESS scores, followed by the group who replied probably, and those who indicated that they certainly would be in a similar occupational position in
five years had only slightly less stress than the probably group. The mean WORKSTRESS scores reported by those who would certainly not be in the same or a similar position in five years was almost half that of the probably not group, and those who would be retired within five years reported the lowest WORKSTRESS.

As with the finding previously reported on burnout, the lowest WORKSTRESS mean score was reported by the respondents who earned less than $15,000 per year. Those who earned over $55,000 per year also reported low WORKSTRESS levels. The sample in the remaining two income groups ($15,000 - $34,999, and $35,000 - $54,999) were similar in their WORKSTRESS scores with the higher income group having slightly higher WORKSTRESS scores, but the significant differences between the four groups is reflected in the F-value of 2.9 (p < .05, n = 92).

As well, the WORKSTRESS scores varied significantly by age (F = 3.27, p < .05, n = 89). Those age 40 years or older reported the lowest WORKSTRESS scores, followed by those respondents under 30 years of age. The highest WORKSTRESS scores reported by the sample sub-group who were from 30 to 39 years old.

The number of strains or stress responses reported by the sample varied significantly with their levels of work stress (F = 3.29, p < .05, n = 92). As expected, respondents who reported higher work stress levels also reported more stress responses than did their less stressed colleagues. Interestingly, the number of coping mechanisms reported by the respondents showed no association with the WORKSTRESS scores.

When the sample was sub-divided into two groups of those who
reported that they worked overtime (64.8%) versus those who reported no
overtime hours (35.2%), these groups varied with respect to WORKSTRESS
\(F = 6.92, p < .01, n = 94\). Significantly higher WORKSTRESS scores
were reported by those who worked overtime.

Other demographic variables such as hours of work required,
education, experience, and hours of free time were found to have no
relationship with work stress beyond \(p < .1\), except job category.
Although only significant at the \(p < .07\) level \((F = 2.29, n = 93)\), a
pattern of variation in WORKSTRESS scores was found. As with the
previous burnout finding, managers and directors reported the highest
WORKSTRESS scores. Supervisors were the next highest stressed group,
followed by the front-line workers, then the educators. Those who work
in other positions perceived themselves to be exposed to the least
amount of occupational stress.

Discussion of Factors Related to Work Stress

The direct effect of work stress on life stress discussed earlier
was reiterated by the significant association between these two
measurement indices. The finding that social support (SSI), and
specifically peer support, affected levels of work stress but not
burnout lends credence to the view that social support directly affects
stress but not strains. That is, subjective perceptions of positive
social supports reduced the experienced levels of work stress. Thus,
because work stress was significantly associated with burnout, social
support may have an indirect effect of reducing or preventing burnout,
but not a direct effect on burnout.

Because there was no significant variance in the mean WORKSTRESS
scores between the sub-groups who indicated they were moderately or somewhat prepared for the stressors of work, the relationship between WORKSTRESS and the rating of adequacy of preparation for social work jobs provided by the education or training programs attended was similar to the relationship between this variable and burnout. These findings suggest that education or training programs help reduce or prevent job stress and burnout within the social work profession by adequately preparing students for the realities of work.

With respect to future job plans and WORKSTRESS, this finding was also similar to the findings of the burnout scores. Specifically, those respondents who were most uncertain about their future plans reported the most work stress. On the other hand, as with burnout, it is possibly because of the stressful aspects of their jobs that they were uncertain if they would remain in the type of job in which they were currently employed. This lends some support to other findings which suggested that burnout and work stress may influence workers to leave their jobs and the human service profession entirely. (Daley, 1979; Maslach & Pines, 1977). However, the low WORKSTRESS mean score of the group who would certainly not be in the same or a similar job in five years disputes this claim. One may speculate that possibly this cohort consisted of social workers who planned to move to higher administrative or supervisory positions because they found their current position were not challenging enough.

Personal annual income (different from total household income) was also found to be associated with WORKSTRESS in a pattern similar to the findings on burnout. This was expected, not only because income may be
viewed as an intrinsic reward for work, but also because those with higher paying jobs are generally older, and, as was noted, age was significantly associated with low work stress for this sample. However, the finding related to job categories, although not statistically significant, contradicts this notion as managers and directors and supervisors are generally higher paid than front-line workers but scored higher on the WORKSTRESS in this study. As with the burnout findings, the data suggest no reasons for this association between job category and WORKSTRESS scores, and one can only speculate about it.

The fact that the number of coping mechanisms used by individuals to cope with stress was not associated with levels of WORKSTRESS supports the findings by Adams (1980) and Pearl in and Schooler (1978). Specifically, coping mechanisms employed by individuals generally do not affect levels of occupational stress because work stress is intrinsic to the job or agency, and not directly employee-related. Organizational techniques were found to be the most effective methods of eliminating or altering stressors in the work environment. This was also supported by the non-significant associations found between WORKSTRESS and education, experience, hours of free time, and the associations between WORKSTRESS and overtime, income, and job category.

Factors Related to Life Stress

In addition to the variables or scale scores associated with LIFESTRESS which were previously discussed, the overall social support index (SSI) and its sub-scales showed significant relationships with the total LIFESTRESS scores. The most statistically significant
association was between FAMILY and LIFESTRESS ($F = 11.72$, $p < .0001$, $n = 117$), followed by the SSI ($F = 9.11$, $p < .001$, $n = 115$), the PEER score ($F = 5.38$, $p < .01$, $n = 116$), and FRIEND score and the LIFESTRESS score ($F = 2.99$, $p < .05$, $n = 116$). As was expected, all of these social support scores had an inverse relationship with LIFESTRESS. That is, those who reported high levels of life stress also reported the lowest social supports from family, friends, and peers.

The only demographic variables found to be significantly associated with LIFESTRESS scores were the overall global rating of job stress ($F = 7.22$, $p < .0001$, $n = 107$), hours of overtime worked per week ($F = 5.72$, $p < .05$, $n = 99$), future job plans ($F = 2.76$, $p < .05$, $n = 110$), and family status ($F = 6.61$, $p < .01$, $n = 118$). That is, as the overall rating of job stress and the number of overtime hours worked increased, the LIFESTRESS score increased. The relationship between future job plans and the LIFESTRESS scores showed a pattern similar to the relationship between this variable and WORKSTRESS as discussed previously; the respondents most uncertain about whether they would be in the same or a similar job in five years scored the highest on LIFESTRESS. Interestingly, those respondents who indicated that they had children reported higher LIFESTRESS scores than the sub-group without children.

Level of education was also associated with the LIFESTRESS, but only at the $p < .06$ level ($t = -1.89$, $n = 119$), as was the number of hours spent in active exercise per week ($F = 3.63$, $n = 99$). Lower LIFESTRESS scores were reported by those respondents who participated in more active exercise than their colleagues, and by those who had
bachelor's degrees rather than post-graduate degrees. Other variables such as age, marital status, annual income, personal health rating, hours of weekly free time, and number of coping mechanisms or strains had no statistically significant relationships with life stress.

Discussion of Factors Related to Life Stress

Support from family appears to have the most significant impact on life stress as compared to support from friends or peers. This corroborates the previous finding that the individual LIFESTRESS items of family/home life and intimate relationships were generally rated as more stressful than social life (see Table 8, p. 86). As well, when considered with the finding that perceived level of family support does not affect WORKSTRESS, it appears as if LIFESTRESS and WORKSTRESS did measure two separate constructs, as was intended by the researcher.

The finding that peer support influences life stress more than the social support provided by friends reflects the relationship between peer support and the level work stress. Through a number of inferential tests, work stress was shown to have a significant effect on life stress. Thus, it is understandable that peer support affects life stress as well.

The relationships of future job plans and the number of hours of overtime worked weekly with the LIFESTRESS also reflects the influence of work and work stress on life stress. The latter finding is not surprising given that not enough time to accomplish tasks was found to be the single most stressful facet of life reported by this sample on the LIFESTRESS (see Table 8, p. 86).

The association between educational levels and LIFESTRESS scores
was unexpected, but may be explained by the influences of other variables which, although not directly related to life stress, affected work stress. The sub-group who held post-graduate degrees were shown to be older than those with bachelor degrees. As well, the majority of jobs such as managerial and supervisory positions in human service organization were held by people with master's degrees rather than bachelor degrees (Dobrowolsky, 1986). The data revealed that managers, directors, and supervisors reported higher work stress levels than those who worked in other job categories, possibly because of the levels of responsibility these positions entailed. Further, age and job category were related to education levels and, because of their concurrent association to work stress, may affect the association between the level of education and the LIFESTRESS scores.

The association between family status (whether or not respondents had children) and LIFESTRESS scores also suggested that responsibility for others may contribute to increased stress levels. This was similar to the results of studies of work stress conducted by Crump et al. (1980), MacBride (1984), and MacBride et al. (1981).

Active exercise appeared to decrease stress levels, while other methods of coping such as passive exercise, hobbies, and the number of coping mechanisms utilized had no significant effects on life stress. Exercise/Diet was found to be the most often reported coping mechanism (Table 4, p. 73). The notion that exercise appeared to be effective in stress reduction reinforces the fact that the sample appeared to be an aware group of people who had found strategies to cope with the stress in their lives, and that coping mechanisms are less effective...
Factors Related to Social Support

All sub-scales of the SSI were significantly associated with the total scale scores as expected ($p < .0001$). As well, the sub-scales were found to have significant positive relationships with each other, with the exception of the FAMILY and FRIEND sub-scales. Although respondents who reported high FRIEND scores also reported high FAMILY scores ($F = 6.25$, $p < .01$, $n = 120$), there was no significant variance in the FRIEND scores between the groups of high and low family support.

Further, although the overall burnout frequency and intensity scores were not associated with social support, some of the MBI sub-scales were. With respect to the depersonalization frequency score (DPF) and the SSI scores, the FAMILY scores, and the PEER scores, significant inverse associations were found ($F = 12.32$, $p < .001$, $n = 110$, and $F = 4.62$, $p < .05$, $n = 111$, and $F = 4.59$, $p < .05$, $n = 110$, respectively). That is, the sub-group who scored low on either the SSI, the FAMILY, or the PEER scales reported significantly higher DPF scores than did the sub-group who perceived themselves to have high, or positive social supports from their families, peers, or their social support system as a whole. Similar relationships were also found between DPI and SSI ($F = 10.19$, $p < .005$, $n = 108$), and PEER ($F = 5.08$, $p < .05$, $n = 108$).

The MBI sub-scale EEF was also found to have a significant inverse association with PEER ($F = 5.8$, $p < .05$, $n = 108$), while PAI was positively associated with FRIEND ($F = 5.95$, $p < .05$, $n = 102$). That is, as EEF increased, the ratings of peer support decreased, and as PAI
increased the ratings of the support of friends increased as well.

Some significant relationships were also found between social support and some of the demographic variables. Specifically, the overall global job stress rating and the PEER score were statistically related to each other ($F = 3.97, p < .05, n = 109$), as was expected. In addition, males and females differed significantly on their mean PEER scores ($F = 3.96, p < .05, n = 108$), with women reporting higher peer support than men. Similar, but non-significant, trends were shown with respect to the FRIEND and FAMILY scores.

Single respondents (never married, separated, divorced, or widowed) reported a higher level of support from friends than did those who were married, re-married, or living common-law ($t = 2.9, p < .005, n = 120$). As well, FRIEND scores varied inversely with age ($F = 3.01, p < .05, n = 114$).

Further, the number of hours spent weekly on hobbies or other free time activities varied with respect to the SSI score ($F = 4.27, p < .05, n = 105$), and the PEER score ($F = 5.72, p < .05, n = 106$). Those respondents who scored low on either the SSI or the PEER scales reported more hours spent on free time activities than did their fellow OAPSW branch members who reported high peer or overall support. The variable number of months worked in the field of social work also had statistically significant inverse relationships with the SSI ($F = 3.99, p < .05, n = 106$), and the FRIEND scores ($F = 5.6, p < .05, n = 107$). Thus, the sample who scored low on either the SSI or the FRIEND scale also had more work experience than did the group that reported high support from their friends and from their total support network.
Discussion of Factors Related to Social Support

It was expected that the sub-scale scores of FAMILY, FRIEND, and PEER would be associated with the overall ratings of social supports as the sub-scale scores were added to obtain the overall score. The significant relationships among the sub-scale scores were not initially expected however, as they measured three separate dimensions of social support. The fact that they were found to be associated may mean that the constructs were related, or that the social workers surveyed had positive support networks which consisted of family, friends, and peers. The latter seems the most likely reason due to the lack of variance in the rating of support of friend found between the two groups who had high and low family support.

The relationships between the MBI sub-scales and the measures of social support suggested that a perception of a lack of peer support may lead to increased EEF, DPF, and DPI, and that a lack of family support similarly affects DPF. If so, social support appears to directly affect burnout levels. On the other hand, one may view these findings as suggesting that elevated levels of burnout, and specifically an increase in depersonalization may lead to a less positive perception of one's social supports. That is, if a social worker exhibits burnout through depersonalization from clients, they may also be emotionally withdrawing from the other relationships in their lives. One may further speculate as to why the level of support from friends was related to the intensity of personal accomplishment, however, these data suggested no further reasons.

Socialization may be one reason that women rated their social
support system as being more positive than men (Lazarus & Folkman, 1984; Matteson & Ivancevich, 1987; Weisman, 1984). For instance, it is more socially acceptable for women to receive support from peers, friends, and family; thus, the results of these tests may reflect that it is also more acceptable for women to acknowledge the receipt of support. The relationship between gender and job category may also help explain the significant difference in peer support as rated by males and females in the sample. One may speculate that males are less likely to have a large support network of peers because they generally hold supervisory or management positions, whereas females generally have a number of co-workers at the front-line level from which they may draw support.

The finding that marital status was associated with perceived levels of support from friends suggests that friends of married people were less supportive than were friends of single people. However, the result most likely reflects the fact that the support of friends is more important to those who are single than it is to married people. The relationship between age and the FRIEND score also suggested the latter reason as the youngest age group consisted of the members of the OAPSW branch who were least likely to be married.

Factors Related to Coping Mechanisms

Although the number of coping mechanisms utilized by the respondents showed no significant effects on the main dependent variables as measured by the scales and indices, this variable was significantly associated with respect to the variables of gender, job category, and overtime. Specifically, females reported more coping
mechanisms than did the males in the sample ($F = 4.15, p < .05, n = 122$), and those who worked front-line jobs reported using more coping mechanisms than did social workers in other job categories ($t = 2.21, p < .05, n = 113$). As well, those who reported that they worked overtime also reported more coping mechanisms than did their colleagues who reported no overtime hours ($F = 4.01, p < .05, n = 122$).

Discussion of Factors Related to Coping Mechanisms

This researcher could not identify a good reason for the relationship found between overtime hours and the number of coping mechanisms. Presumably, it is because of jobs which require overtime that the respondents have developed their repertoire of coping mechanisms.

The previously discussed finding that women were more likely to be front-line workers than were men suggested that the relationships between gender and coping mechanisms, and between job category and coping mechanisms were related. As well, these relationships provide some insight to the association between job categories and both burnout and WORKSTRESS. Finally, data in this study suggested that women had a more extensive repertoire of coping mechanisms than men. As Pearlin and Schooler (1978) reported, those with a reservoir of resources such as social support and coping strategies exhibited less stress or consequences of stress such as burnout. The previously discussed finding that front-line workers, who were primarily female, reported less work stress than social workers in other job categories may reflect the association between gender and the number of coping mechanisms reported.
CONCLUSIONS

The final section is presented in terms of: 1) conclusions arising from the literature, 2) conclusions arising from the data, 3) limitations of the study, and 4) recommendations.

Conclusions Related to the Literature Review

This study reviewed the nature of stress and coping with a primary focus on the occupational stress of social workers. The literature indicated that burnout is a consequence of stress which arises from work in human service professions. It is unique to occupations such as social work, which entail intense social interaction between helper and client. This phenomenon is also affected by factors such as qualitative and quantitative work overload, insufficient training for the demands of "people" work, and the utilization of one's self as the "tool" in social work.

Other consequences or strains may arise from exposure to the chronic stress of misfits between the environment and the individual in the areas of one's work and life. That is, when perceptions of self and the physical or social environment differ from the reality of the environment, the interaction between individuals and their environment may be stressful. In turn, this stress may lead to maladaptive psychological, physiological, or behavioral responses such as anxiety, depression, illness, or substance abuse.

Stressors, or factors of the environment which may be stress inducing, include those which may lead to burnout as well as role
conflict or role ambiguity, job complexity, overtime, income, and a lack of social support. Aspects of the individual such as age, education, experience, and gender also affect the fit or misfit between person and environment, and, therefore, may contribute to stress and strains.

Taking direct action to modify stressors theoretically appears to be the most effective way to prevent stress. However, with respect to occupational stress this is often difficult as the stressors are inherent to the job. Organizations, rather than individuals, generally have the power to alter these stressors through a variety of methods such as a reduction in workload, and change or clarification of expectations, policies, communication processes, and reward systems.

As well, a variety of strategies are available to the individual to aid in coping with stress and strain. Most of these coping mechanisms involve use of free time and social support. That is, people may prevent burnout and other effects of stress through such things as exercise, proper nutrition, participating in activities which provide intrinsic rewards such as hobbies, relaxation or meditation, and developing a positive support network of friends, family, and peers.

Conclusions Related to the Research Questions

The survey response rate was encouraging and more adequate (54% replied) than was suggested in the literature (Mindel & McDonald, 1988). The sample data was similar to that of the Windsor-Essex Branch of the OAPSW, and was somewhat similar to the population of provincial
OAPSW members. Thus, parametric statistical tests were used in subsequent analyses, and comparisons and generalizations were made from the findings with some degree of confidence. The following is a presentation of the major findings which provide answers to the research questions previously posed (p. 46).

1. From a demographic perspective, the professional social workers surveyed in this study were predominantly young females with undergraduate degrees, who had minimal experience in their current positions, and in the field of social work in general.

2. The males and females surveyed differed with respect to their personal annual incomes as well as the demographics of age, education, and experience, all of which affected rates of pay for this sample.

3. The majority of the sample appeared to have held at least two different positions within their agency of employment, or have worked for a minimum of two different employers over the course of eight years.

4. The data indicated that by both self-report and more standardized empirical assessment, the sample perceived of themselves as physically and emotionally healthy, were aware of their stress responses, and coped with stress in a variety of ways. Specifically, the low number of hospital visits per year was, by any measure, indicative of this. As well, the majority reported two or more ways in which stress affected them such as moodiness, fatigue, or decreased productivity, and three or more ways which they used to cope with stress, such as exercise or diet, the support of friends, or a change of activity.
They also indicated that they spent over half of their free time exercising or in a variety of other activities for the purpose of recreation of mind, body, or spirit.

5. The analyses of the scales and indices used in the survey indicated that these measures were reliable and valid, which set the stage for the subsequent analyses.

6. The results of further analyses indicated that the professional social workers surveyed had: low burnout levels, low work stress levels, low life stress levels, and high amounts of perceived social supports from family, friends, and peers.

7. Specifically, the most stressful aspect of their lives was work and their work related issues of finances and not enough time to accomplish tasks. The most stressful aspects of work were time pressures and deadlines, work overload, and office politics.

8. Subjective perceptions of life and work stress were also significantly related to burnout as increased WORKSTRESS and LIFESTRESS levels appeared to lead to increased levels of burnout.

9. Burnout and work stress were associated with facets of work such as job category, income, and overtime, rather than aspects of the individual such as gender, level of education, or experience.

10. Specifically, managers and directors reported higher burnout and work stress levels than did front-line workers, supervisors, or educators, while supervisors indicated that they had higher levels of work stress than those respondents who reported that they worked in the remaining job categories.

11. As well, as personal annual income increased, work stress and
burnout levels decreased with one exception. Those who reported an income of less than $15,000 per year also reported the least work stress and burnout.

12. Those who indicated that they worked overtime reported higher work stress levels than those who indicated no weekly overtime hours. Further, although there was no relationship between burnout or work stress levels and the amount of overtime worked, reported life stress levels increased as the number of hours of overtime worked weekly increased.

13. It was also found that education or training programs may play a part in reducing or preventing both work stress and burnout by providing adequate preparation for dealing with the stressors of employment in the social work profession.

14. Social supports did not directly affect overall burnout levels but directly affected work stress which, in turn, were related to burnout. Therefore, social support and specifically peer support may indirectly reduce or prevent burnout by reducing or preventing work stress. As well, the depersonalization aspect of burnout appeared to lead to a more negative perception of the respondent’s social support system.

15. Further, with respect to social supports, the perception of positive family support was found to be the dimension of support most significantly related to low levels of life stress.

16. Responsibility for others appeared to be a stressful aspect of life, as indicated by the relationship between family status and life stress levels. Interestingly, marital status was not significantly related to life stress.
17. The number of coping mechanisms utilized by respondents did not directly affect life stress, work stress, or burnout. However, the number of coping mechanisms reported varied between males and females and between the workers in the various job categories. Both of these variables were significantly related to each other, and the latter was related to work stress, suggesting that there may be an indirect association between coping and work stress.

18. No relationship was found between the amount of free time and life stress, work stress, or burnout. However, the amount of time spent in active exercise was found to be significantly associated to life stress, suggesting that the coping mechanism of exercise may directly affect life stress, but not have much effect on work stress.

19. The global interval scale used for rating overall job stress was significantly correlated with the total WORKSTRESS scores. Thus, this simple measure of the subjective perception of work stress may be used as an alternate measure of work stress rather than the complete Work Stress Questionnaire.

20. Many variables were found to be related to work stress, life stress and burnout. However, others were found to be associated with only one of the major dependent variables. For example, family support was related to life stress but not to work stress or burnout, indicating that three different constructs were being measured by LIFESTRESS, WORKSTRESS, and the MBI scales as planned by the researcher.
Limitations

Although a more than adequate response rate resulted in a large sample (n = 122) which appeared to be representative of the population, an increased sample size would have enhanced the study's findings and subsequent generalizability. Further, the use of a mailed survey questionnaire had the disadvantage of the researcher not being able to determine why some questionnaires were not returned. The results regarding burnout and work stress may have been skewed if only those professional social workers who were not experiencing stress or burnout were motivated to respond. Conversely, only those who were burnt out or tending toward burnout may have responded because of their personal concerns regarding the topic. Due to the low burnout levels, as compared to the published norms, the former type of skewing seems to be the more likely with this sample.

Further, all pencil and paper research studies have inherent problems some of which have implications for this study. One such problem relates to recall information and the accuracy of reported data. Thus, perceptions of time and experiences from over 10 years ago may have been distorted, affecting the accuracy of long term information. As well, short term information may have been distorted by recent experiences. For example, the measures of burnout and work stress may have been affected by recent contacts with clients, and thus did not reflect the overall state or general perceptions of the respondents. As well, the amount of time available for leisure or the time spent doing activities such as exercising or hobbies may have been affected by the season. For example, the data for this study was
collected in June and July when people were generally planning vacations and, thus, were more focused on recreational activities.

Another problem related to the accuracy of the information obtained involves the subject matter. There has been much popularizing about stress and burnout in the social work profession in recent years, which may have led respondents to believe they should be burned out or stressed and, therefore, they exaggerated their responses on these measures. Conversely, fear that they might be identified or a desire to look good, professional, or in control may have influenced the respondents to minimize the problems or stressors they encountered (halo effect). However, awareness of the possibility of burning out in their profession may have led the respondents to develop prevention techniques. Therefore, the findings on the MBI and WORKSTRESS may have reflected the actuality of their experienced stress and burnout.

Substantiating these data with other data collection techniques such as diaries, qualitative one-to-one interviews, or concurrently obtaining information from the supervisors, peers, spouses, or families of the professional social workers might have provided a more solid empirical base that would lend more credence to the data collected in this study, and from which more specific recommendations could be made.

In addition, the absence of a comparison group such as employees of a corporation which is not involved in human service provision, or nurses, a human service profession which is primarily populated by females as is social work, reduced the capability of making direct inferences from the study data. For example, a comparison group such as the previously mentioned may have substantiated the supposition that
burnout is inherent among human service professionals. Similarly, a longitudinal study may have gathered additional data from which trends or patterns of stress, burnout, and coping could have been discerned. The feasibility of using these alternative methodological strategies was limited by time and resources.

Another limitation of this study was with the particular concepts that were associated with questionnaire items. For example, the number of missing responses obtained for the variables number of people: 1) directly responsible for, and 2) directly supervising suggests that respondents were confused about the intent of the question. As well, the WORKSTRESS item work overload might have interpreted as a quantitative overload by some, and a qualitative overload by others. Further, the WORKSTRESS had no item for respondents to indicate to what degree responsibility for persons or face-to-face contact with clients were a source of stress for them at work.

In general, all of the measurement indices and scales used in this study had acceptable internal consistency reliability coefficients as well as face and convergent validity. However, to further test the reliability and validity of these measures, other forms of reliability, such as test-retest, and validity, such as construct or criterion, should be determined.

Recommendations

Future research should be undertaken to substantiate the findings of this study and build on the data base. In particular, comparison studies should be undertaken, and other data techniques should be
utilized such as interviews, and obtaining information from peers, spouses, and families of professional social workers. As well, longitudinal studies could be implemented to gather additional data from which patterns of burnout, stress and coping could be discerned. As an alternative to a more expensive and time-consuming longitudinal study, the Survey of Professional Social Workers used in this study could be altered to acquire information on trends. For example, the sample might be asked if their self-perception of life stress, work stress, and burnout has increased, decreased, or stayed the same over the past year. In addition, possible reasons for the changes should be solicited from the respondents.

As well, the Work Stress Questionnaire (Cooper et al., 1988) should be adapted to more closely reflect the stressors of social work as identified in the literature. That is, facets of social work such as responsibility for persons and face-to-face contact with clients should be added to the questionnaire to further determine the nature of the stressors for this population.

Overall, the findings of this study indicated that the professional social workers in the Windsor-Essex Branch of the OAPSW perceived of themselves as having low burnout, work stress, and life stress levels, and positive social supports. To maintain these levels, the social workers should continue using their current coping mechanisms. However, a further reduction of stress and burnout could be obtained by individuals through the implementation and development of specific coping mechanisms. For example, the amount of time spent weekly in active exercise should be increased, and peer support should
be developed.

Employers, and agency management should also aid in stress reduction and burnout prevention by developing opportunities for increased peer interaction. This could be achieved through increasing peer supervision, staff retreats, and by encouraging staff to take their allotted coffee and lunch breaks. As well, other organizational strategies should be implemented at the agency level, such as workload or caseload reduction, clarification of organizational policies, communication procedures, and networks, and increased staff participation in agency decisions.

Finally, education about stress and stress management should be provided as the level of preparation for stressors in employment was significantly related to the levels of burnout and occupational stress experienced. As well, almost half of the sample reported that they needed to know more about stress and stress management in their lives. The School of Social Work at the University of Windsor, as the only school of social work in this region, should introduce stress education by acquainting students with the potential stressors of the social work profession as well as possible stress responses and appropriate coping mechanisms. This education should be provided in the classroom as well as in the practicums. In this regard, agencies or employers should also provide opportunities, such as seminars or workshops, to aid staff in the development of personal stress management skills. Stress management is important not only to the individuals, but to the organization and the clients. Less-stressed, healthier staff can only result in better service for the recipients.
A PENDIX A

Survey of Professional Social Workers

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SURVEY OF PROFESSIONAL SOCIAL WORKERS

Background Information

1. Your sex is:  (1) male ______  (2) female ______

2. Your year of birth is 19____

3. Your marital status is: (1) never married ______ (4) separated ______
   (2) married/remarried ______ (5) divorced ______
   (3) common-law ______ (6) widowed ______

4. Do you have children?  (1) No ______  (2) Yes ______
   If 'YES'; What are their ages? _____________________________
   How many of them live with you? ___________________________

5. What is the highest grade you have completed in school?
   (Check one only.)
   (1) some high school ______
   (2) completed high school ______
   (3) some community college ______
   (4) completed community college ______
   (5) some university ______
   (6) completed university ______
   (7) some post-graduate work or degree ______
   (8) other (Please specify) _____________________________

6. Please list your educational degrees/diplomas, starting with the
   most recent.

<table>
<thead>
<tr>
<th>Degree/ Diploma</th>
<th>Discipline (e.g. Psychology, Social Work, etc.)</th>
<th>Specialization (e.g. Clinical, Administration, etc.)</th>
<th>Year Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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7. Do you work: (1) Full-time ____ (2) Part-time ____ or (3) Neither ____
   NOTE: If you have not worked within the last year, please go to Page 8.

8. Are you presently employed in the social work field?
   Yes ____   No ____
   If 'NO', how long has it been since you left the field?
   ____ _______ (number of years/number of months)
   For what reason(s)? ________________________________

9. In what field of social work are (or were) you employed? (Check one):
   (1) Child Welfare ____ (2) Health Services/Medical ____
   (3) Community Organization ____ (4) Corrections ____
   (5) Children's Mental Health ____ (6) Adult Mental Health ____
   (7) Family Service Agency ____ (8) Vocational/Employment ____
   (9) Mental Retardation ____ (10) Services for the Aged ____
   (11) Rehabilitation ____ (12) Income Maintenance ____
   (13) Legal ____ (14) School Social Work ____
   (15) Private Practice ____ (16) Education ____
   (17) Not Applicable ____ (18) Other (Please specify) ______________________

10. Which category would your present/most recent job title fall under?
   (1) Front-line worker ____ (2) Supervisor ____ (3) Educator ____
   (4) Manager/Director ____ (5) Other (Please specify) ____________________

11. In your employment capacity, how many people are (or were) you;
   a) directly responsible for? ____  b) directly supervising? ____

12. Do you have;
   a) another paying job besides your social work job? Yes____ No____
   If 'YES', What is your second job? ______________________________
   How many hours per week does it involve? ______________
   b) a volunteer position (board, community service, etc.) Y____ N____
   If 'YES', What is your position? ______________________________
   How many hours per week does it involve, on the
   average? _______ (# of hours/week)
13. Please state the number of hours per week that you:
   a) are required to work in your main employment capacity _______
   b) usually work (i.e. overtime, paper work at home, etc.) _______

14. Please state how long you have worked:
   a) in your present/most recent position _______ _______
   b) for your present/most recent employer/agency _______ _______
   c) in the field of social work _______ _______
   d) outside of the social work field _______ _______

15. What is (a) your annual income? and (b) your household annual income? Check one in each column. (Please include income from salaries, wages, interest, dividends, rents, pensions, etc.)

<table>
<thead>
<tr>
<th>Yearly Income</th>
<th>Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) less than $15,000</td>
<td></td>
</tr>
<tr>
<td>(2) $15,000 - $34,999</td>
<td></td>
</tr>
<tr>
<td>(3) $35,000 - $54,999</td>
<td></td>
</tr>
<tr>
<td>(4) $55,000 - $74,999</td>
<td></td>
</tr>
<tr>
<td>(5) $75,000 or more</td>
<td></td>
</tr>
</tbody>
</table>

16. To what extent does your income: (Circle one number for each)
   a) meet your basic needs? (e.g. food, shelter, clothing)
      1 ------- 2 ------- 3 ------- 4 ------- 5
      Not at all Moderately Completely
   b) meet your wants or desires (e.g. luxuries, those things that you feel would make your life comfortable)
      1 ------- 2 ------- 3 ------- 4 ------- 5
      Not at all Moderately Completely

17. Do you think that you will be working in the same or a similar occupational capacity five years from now?
   (1) Certainly _____ (2) Probably _____ (3) Probably not _____
   (4) Certainly not _____ (5) Will be retired _____
Feelings Survey

The following are several statements of job-related feelings you might have. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, circle the 'N' and go on to the next statement without circling any number. However, if you have experienced this feeling, indicate HOW OFTEN you feel it by circling the appropriate number on the 6-point scale. Then, decide HOW STRONG the feeling is when you experience it by circling the appropriate number on the 7-point scale. An example is shown below.

Frequency of feeling: HOW OFTEN:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEVER</td>
<td>NEVER</td>
<td>A few times</td>
<td>Once a month</td>
<td>A few times a week</td>
<td>Once</td>
<td>A few times a week</td>
</tr>
<tr>
<td></td>
<td>A year or less</td>
<td>or less</td>
<td>or less</td>
<td>or less</td>
<td>or less</td>
<td>or less</td>
</tr>
</tbody>
</table>

Intensity of feeling: HOW STRONG:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very mild, barely noticeable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Moderate</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Major, very strong</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Example:

00. I feel depressed at work.  

If you occasionally feel depressed at work (for example, a few times a month) you would circle the number 3. If, when you feel depressed, it is a fairly strong feeling, but not as strong as you can imagine, you would circle a 6.

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>NEVER</th>
<th>HOW OFTEN</th>
<th>HOW STRONG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel emotionally drained from my work.</td>
<td>N</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>2. I feel used up at the end of the workday.</td>
<td>N</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>3. I feel fatigued when I get up in the morning and have to face another day on the job.</td>
<td>N</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>4. I can easily understand how my clients feel about things.</td>
<td>N</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>5. I feel I treat some clients as if they were impersonal &quot;objects&quot;.</td>
<td>N</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
HOW OFTEN: NEVER  1  2 3  4  5  6
   A few times Once a A few Once A few Every
   a year or times a times a week day
   a month or less month

HOW STRONG: 1  2  3  4  5  6  7
   Very mild, barely noticeable
   Moderate
   Major, very strong

6. Working with people all day is a strain for me. N 1 2 3 4 5 6 1 2 3 4 5 6 7
7. I deal very effectively with the problems of my clients. N 1 2 3 4 5 6 1 2 3 4 5 6 7
8. I feel burned out from my work. N 1 2 3 4 5 6 1 2 3 4 5 6 7
9. I feel I'm positively influencing other people's lives through my work. N 1 2 3 4 5 6 1 2 3 4 5 6 7
10. I've become more callous toward people since I took this job. N 1 2 3 4 5 6 1 2 3 4 5 6 7
11. I worry that this job is hardening me emotionally. N 1 2 3 4 5 6 1 2 3 4 5 6 7
12. I feel very energetic. N 1 2 3 4 5 6 1 2 3 4 5 6 7
13. I feel frustrated by my job. N 1 2 3 4 5 6 1 2 3 4 5 6 7
14. I feel I'm working too hard on my job. N 1 2 3 4 5 6 1 2 3 4 5 6 7
15. I don't really care what happens to some clients. N 1 2 3 4 5 6 1 2 3 4 5 6 7
16. Working directly with people puts too much stress on me. N 1 2 3 4 5 6 1 2 3 4 5 6 7
17. I can easily create a relaxed atmosphere with my clients. N 1 2 3 4 5 6 1 2 3 4 5 6 7
18. I feel exhilarated after working closely with my clients. N 1 2 3 4 5 6 1 2 3 4 5 6 7
19. I have accomplished many worthwhile things in this job. N 1 2 3 4 5 6 1 2 3 4 5 6 7
20. I feel like I'm at the end of my rope. N 1 2 3 4 5 6 1 2 3 4 5 6 7
21. In my work, I deal with emotional problems very calmly. N 1 2 3 4 5 6 1 2 3 4 5 6 7
22. I feel clients blame me for some of their problems. N 1 2 3 4 5 6 1 2 3 4 5 6 7

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Work Stress Questionnaire

Please circle the number that best reflects the degree to which the particular phrase or statement is a source of stress for you at work.

<table>
<thead>
<tr>
<th>Statement</th>
<th>No stress at all</th>
<th>Some stress</th>
<th>A great deal of stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work overload</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>2. Work underload</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>3. Time pressures and deadlines</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>4. The amount of travel required</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>5. Long working hours</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>6. Taking my work home</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>7. Lack of power and influence</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>8. Attending meetings</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>9. My beliefs conflicting with those of the organization</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>10. Keeping up with new technology</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>11. Threat of job loss</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>12. Competition of promotion</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>13. Having to move with my job in order to progress my career</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>14. Doing a job beyond the level of my competence</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>15. Doing a job below the level of my competence</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>16. Inadequately trained subordinates</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>17. Interpersonal relationships</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>18. Hiring and firing personnel</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>19. Unsympathetic boss</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>20. Incompetent boss</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td>21. Performance-related compensation</td>
<td>0 1</td>
<td>2 3</td>
<td>4 5</td>
</tr>
<tr>
<td></td>
<td>No stress at all</td>
<td>Some stress</td>
<td>A great deal of stress</td>
</tr>
<tr>
<td>---</td>
<td>-----------------</td>
<td>-------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>22. Unrealistic objectives</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>23. Dealing with shareholders</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>24. Dealing with unions</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>25. My spouse's/partner's attitude towards my career</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>26. Demands of work on my relationship with my family</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>27. Demands of work on private and social life</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>28. My relationship with my colleagues</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>29. My relationships with my subordinates</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>30. Making mistakes</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>31. Feeling undervalued</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>32. Promotion prospects</td>
<td>0</td>
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<td>2 3 4 5</td>
</tr>
<tr>
<td>33. Rate of pay</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>34. Managing people</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>35. Office politics</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>36. Lack of consultation and communication in my organization</td>
<td>0</td>
<td>1</td>
<td>2 3 4 5</td>
</tr>
</tbody>
</table>

37. Overall, how stressful do you find your job? (Please circle number)

1 ------- 2 ------- 3 ------- 4 ------- 5
Not at all  Moderately  Very much

38. To what extent do you feel that your training/education has sufficiently prepared you to deal with the stressors that you encounter in your employment? (Please circle number)

1 ------- 2 ------- 3 ------- 4 ------- 5
Not at all  Moderately  Very much

Please explain: ________________________________
Health/Leisure

1. Do you usually have an annual medical check-up?  
   (1) Yes ____ (2) No ____

2. Are you currently taking prescription medicine, excluding birth control pills?  
   (1) Yes ____ (2) No ____
   If 'YES', is it for:  
   a) a Minor ____ or Major health problem ____  
   b) Preventative ____ or Curative reasons ____

3. In the past year, how many days did you spend in the hospital due to illness, not counting cosmetic surgery?  
   ___________ (number of days)

4. In the past year, how many days of work did you miss due to illness, not counting cosmetic surgery?  
   ___________ (number of days)

5. In the past year, how many times did you go to a hospital for a medical reason as an out-patient? (e.g. prescription, minor ailment)  
   ___________ (number of times)

6. On a 10 point scale, where 1 means 'very poor health' and 10 means 'excellent health', please rate your own health status.  
   (very poor) 1 2 3 4 5 6 7 8 9 10 (excellent)

7. Do you smoke?  
   (1) Yes ____ (2) No ____
   If 'YES', are you:  
   (1) an occasional/recreational smoker ____  
   (2) a regular but not heavy smoker ____  
   (3) a heavy smoker ____

8. Do you ever drink alcoholic beverages?  
   (1) Yes ____ (2) No ____
   If 'YES', during the past week, how many drinks (either beer, wine or liquor) did you drink? ___________ (total # of drinks)
   What do you drink most often? (Please check one only)  
   (1) wine ____ (2) beer ____ (3) liquor ____
9. Please estimate the amount of free time you have weekly, that is the number of hours per week that are available after the necessities of life (i.e. employment, eating, sleeping) are taken care of:     (number of hours/week)

10. Please estimate how many hours per week, on the average, that you are involved in:

   a) Active exercise (swimming, aerobics, etc.)

   b) Passive exercise (walking, gardening, etc.)

   c) Hobbies or other leisure activities

11. Please specify what types of exercise/hobbies you are involved in:

12. Please circle the appropriate number regarding the items below:

   NOT AT JUST A SOME A LOT
   ALL LITTLE

   a) People in my family:

   1. make me feel loved ......... 1  2  3  4
   2. do things to make me happy ......... 1  2  3  4
   3. can be relied on no matter what ......... 1  2  3  4
   4. would see that I would be taken care of if needed ......... 1  2  3  4
   5. accept me just as I am ......... 1  2  3  4

   b) My friends:

   1. make me feel loved ......... 1  2  3  4
   2. do things to make me happy ......... 1  2  3  4
   3. can be relied on no matter what ......... 1  2  3  4
   4. would see that I would be taken care of if needed ......... 1  2  3  4
   5. accept me just as I am ......... 1  2  3  4

   c) My peers (schoolmates, co-workers):

   1. make me feel loved ......... 1  2  3  4
   2. do things to make me happy ......... 1  2  3  4
   3. can be relied on no matter what ......... 1  2  3  4
   4. would see that I would be taken care of if needed ......... 1  2  3  4
   5. accept me just as I am ......... 1  2  3  4
13. People release their stress and tension in many different ways. First of all, how stressful do you find each of the following aspects of your personal life?

1 = not at all stressful
2 = somewhat stressful
3 = moderately stressful
4 = fairly stressful
5 = very stressful

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Not</th>
<th>Moderate</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Your social life</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) Your intimate relationships</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) Your job</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) Your physical health</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) Your emotional health</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) Your personal appearance</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) Your family/home life</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) Your finances</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) Your recreational activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j) Not enough time to accomplish tasks</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>k) The health or welfare of a loved one</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

14. When any of these issues create stress in your life, how does it usually affect you? ____________________________________________

15. If you are aware of such stressors affecting you, what mechanisms have you developed to cope with them? That is, how do you reduce stress in your life? ____________________________________________

16. Do you think that you need to know more about stress and stress management in your life? Yes ______ No ______

Thank you very much for your cooperation. If you would like to make any further comments about this questionnaire or anything else, please do so below or attach another page. When you have finished, please return the questionnaire in the enclosed envelope.
APPENDIX B

Cover Letter
Dear Professional Social Worker:

I am a graduate student at the University of Windsor conducting a Master's thesis at the School of Social Work. The purpose of this study is to assess the characteristics of professional social workers in Southwest Ontario. The major issues being studied are: 1) general background, 2) employment information, 3) leisure time activities, and 4) stress related issues. The study will contribute to a distinct void in this area.

Your participation is requested because of the experience, knowledge and expertise you possess in the social work field. Could you please help in this matter by completing the enclosed questionnaire, which takes approximately 20 minutes, and forwarding it to me in the enclosed stamped, return envelope.

Although it may be possible to identify individuals from these data, I assure you that all information will be treated in the strictest confidence in accordance with the protocols safeguarding human subject research. No individual will be singularly identified in the reporting of the findings. All information will be analyzed in group data form only.

Thank you for your consideration in this matter. If you have any questions or concerns, please do not hesitate to contact me through the School of Social Work at the University of Windsor at (519) 253-4232.

Your anticipated cooperation is greatly appreciated.

Sincerely,

Kristine L. Towers,
M.S.W. Student

June 6, 1988
APPENDIX C

Informed Consent for Respondents
INFORMED CONSENT FOR RESPONDENTS

SURVEY OF PROFESSIONAL SOCIAL WORKERS

I, the undersigned, understand that the purpose of this research being conducted is to collect data and information about the characteristics of professional social workers, their jobs, their leisure time activities and stress.

I understand that the information collected from me will only be used as a part of a large amount of similar information provided by equally anonymous individuals and reported in group numerical or statistical form only. Thus, confidentiality will be safeguarded.

I agree to voluntarily participate in this study by completing the attached questionnaire and returning it to the investigator no later than 3 weeks after receiving it.

I understand that the survey is a research undertaking being supervised through the School of Social Work and the School of Graduate Studies at the University of Windsor.

Date___________________ Signature___________________

(Print) Name__________________

*Please note that this sheet will be detached from the rest of the questionnaire upon receipt of the information.
References


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VITA AUCTORIS

Kristine Louise Towers was born June 26, 1959 in Olds, Alberta. She attended McNiven and McVeety Elementary Schools in Regina, Saskatchewan for her primary education. Her high school education was started at Campbell Collegiate High School in Regina, and completed at McNally Composite High School in Edmonton, Alberta in 1977.

Following completion of a B.Sc. at the University of Alberta in 1980, Miss Towers secured a social work position with Alberta Social Services and Community Health. Initially employed in the Assured Income for Severely Handicapped program, she transferred to Income Security and then to Foster Care Support.

Concurrent with this employment Miss Towers was enrolled in the bachelor program of the Faculty of Social Welfare, University of Calgary, Edmonton Division on a part-time basis. She transferred to full-time status in 1984 and graduated with a B.S.W. in 1985. She then returned to work for Alberta Social Services and Community Health as a Child Welfare Worker.

Miss Towers moved to Windsor, Ontario to further her education at the University of Windsor, School of Social Work. She plans to complete the requirements for the degree of M.S.W. in the fall of 1988.