# INFORMATION TO USERS

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

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

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

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

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

**UMI**

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# A Workshop Intervention Approach to Nursing Stress Management

Anthony Charles Russell ©

Lakehead University

Running Head: NURSING STRESS

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

National Library of Canada
Acquisitions and Bibliographic Services
395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale du Canada
Acquisitions et services bibliographiques
395, rue Wellington
Ottawa ON K1A 0N4
Canada

*Your file Votre référence*

*Our file Notre référence*

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

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

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

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

0-612-33447-3

Canada

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Table of Contents



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table of Contents (continued) Page



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Abstract

This research project presented a total of six twelve-hour stress management workshops to twenty-eight female registered nurses. They were recruited from general hospitals, medical offices, and nursing homes. Topics included identifying environmental stressors and a discussion of possible negative consequences of stress. Personal coping skills and organizational improvement strategies were presented as well. A repeated measures design was utilized and participants were presented the State-Trait Anxiety Inventory (STAI), the Maslach Burnout Inventory (MBI), the Occupational Stress Inventory (OSI), and a demographic questionnaire. Tests were completed prior to attending and at one week, six weeks, and 12 weeks following the workshop. Post testing reflected statistically significant decreases in emotional exhaustion and role overload. An increase was detected in self-care activities. The results tend to support the contention that stress management workshops are of benefit to nursing personnel.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Introduction

The purpose of the present study was to determine whether a 12-hour stress management workshop would reduce occupational stress, burnout, and anxiety in nurses.

A great amount of applied research has been undertaken which has focused on the subject of nursing stress over the past forty years. As the field of professional nursing underwent drastic and rapid change during this time, it became apparent that adapting to the ever expanding role of a nurse posed an onerous challenge to practitioners. Nurses were called upon to work in increasingly specialized departments and community-based services saw the work of nurses moving out of the hospital and into the patient's home. Consequently, researchers sought to determine methods to ease this constant transition thereby instilling nurses with a greater sense of satisfaction and competency. Most recently, investigators have examined specific sources of workplace stress and have offered suggestions to minimize the potentially detrimental effects. Prior to examining several nursing-specific studies, a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

presentation of the general nature of stress shall be offered.

The Evolution of Nursing

Nursing was chosen as the vocation under consideration during this investigation because this occupation has had to adapt recently to a great deal of change recently. In New Brunswick, where this study took place, the modifications have been considerable.

Jackson (1995) notes that New Brunswick Extra-Mural Hospital is the "only province-wide 'hospital in the home' program in Canada" (p.26). The author notes that this initiative provides care to more than 13,000 patients annually. Furthermore, the province replaced 51 hospital boards with eight regional boards in July of 1992 (Jackson, 1995). This change saw the management of hospital resources altered to consider the needs and resources available within a larger area. In some cases, this meant that specific services which may have been available to a small number of patients in many hospitals were moved into larger, specialized units in a few regional centers. This changed the specific nursing roles of persons practicing in these altered workplaces.

Laschinger and McWilliam (1992) point out that such cost-containment strategies in Canada have resulted in a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

movement from delivering "illness care in tertiary settings to health promotion programs and community based health care" (p.205). The consequence of such changes have been the "downsizing of hospitals everywhere and the closure -or conversion to long-term care- of rural hospitals. Numbers of acute care beds continue to decrease" (Jackson, 1995, p.25). An American review of downsizing and decentralizing predicts that such modifications will mean fewer staff will be hired and layoffs will result (Nornhold, 1994).

Brosnan & Johnston (cited in Howard & Szczerbacki, 1988) have noted that American nurses who were involved in employment reorganization experienced a significantly higher amount of stress than nurses not in the midst of such circumstances. The Back In Action (1993) survey of 89 nurses by the New Brunswick Department of Health and Community Services found that physical problems were experienced by a significant number respondents. Neck problems were experienced by 24.7 percent of the sample, shoulder problems by 28.1 percent, back problems by 36 percent, and wrist problems were reported by 5.6 percent of the sample. The presence of such physical problems may make the performing of nursing duties that are more difficult and perhaps more stressful.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Definition of Stress

Hans Selye (1975) defined physiological stress as "a nonspecific response to any type of demand made on the body" (p. 1). Selye also defined stressors as the "stress-producing factors" which lead to stress. Therefore, stressors may be defined as the environmental events which prompt the body to react. The mere act of causing physiological change within the body was considered by Selye to be the cause of stress (Selye, 1993). A distinction is often made between physical stress, such as exercise or a physical threat, and emotional stress, which may be created by such diverse sources as the individual's fears, anxieties, or mood states (Charlesworth & Nathan, 1984). Selye (1975), however, noted that physical and emotional stressors elicit essentially the same biological response to stress. It was this observation that underlies Selye's simple, yet widely encompassing, physiological definition of stress. In its broadest sense, any stimulus which prompts an adaptive change in the individual is deemed to be stressful. It follows, then, that workplace stress stems from the multitude of environmental demands and the resultant biological responses that occur in that setting.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Nursing Specific Stressors

It is not surprising to find that interactions with patients may be sources of stress for nurses. Kansas (1986) found that a sample of psychiatric nurses noted that interacting with difficult or dangerous patients was stressful. When thrust in such situations, nurses must stifle their natural reactions (such as hostility, fear, or anxiety) and perform in as professional a manner as is possible.

A Canadian study by Beszterczey (1977) found that registered nurses (RNs) working within the field of palliative care noted that offering aid to severely afflicted patients sometimes prompted negative affects such as disgust and fear. The author advised that staff may become further disturbed by feelings of guilt and dismay upon the discovery of such "unprofessional" feelings.

The nursing profession plays host to a number of additional stressors. Some research has identified ministering to dying patients and/or their often distraught relatives as one such example (Green, 1984; McNamara, 1976; Oehler & Perault, 1986; Schneider, 1987; Vachon, Lyall, & Freeman, 1978). In such situations, nurses must manage their personal grief over the loss of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the patient and must face the inescapable mortality of themselves, their own families, and their children (Schneider, 1987).

Vachon, Lyall, and Freeman (1978) observed that nurses employed in a cancer hospital found attempting to meet the psychosocial needs of patients to be demanding. The authors reasoned that difficulties may stem from "a natural fear of illness and death, a lack of knowledge and skill in interpersonal relationships, and a lack of communication skills" (p. 367). The authors advised that leaving nurses to solve these problems without the assistance of resource personnel may foster feelings of dissatisfaction. Therefore, it is possible that training aimed at nurturing communication skills may prove useful in reducing feelings of dissatisfaction on the part of nursing personnel.

Other environmental factors, such as staff conflicts (Bailey, Steffen, & Grout, 1980; Eisendrath, 1981; Oehler & Perault, 1986, Sherman, 1980), inadequate staffing (Bailey et al., 1980; Kelly & Cross, 1981), unresponsive leadership (Bailey et al., 1980), staff-patient conflicts (Eisendrath, 1981), high levels of environmental noise (Kelly & Cross, 1985; Topf & Dillion, cited in Topf, 1989), responsibility (Bryant,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

1994; Ullrich, 1978), and feeling ambivalently perceived by other hospital personnel (Beszterczey, 1977) may all contribute to nursing stress. Furthermore, the fear of making mistakes was found to be a constant stressor for medical oncology nurses who administered experimental treatments (Moynihan & Outlaw, 1984).

Some samples of nurses have reported feelings of guilt which resulted from an inability to reduce their patients' suffering or prevent their deaths (Bender, 1981; Beszterczey, 1977; Bryant, 1994; Moynihan et al., 1984; Sherman, 1980).

Other factors, such as whether or not they are working within their specialty of choice (Fawzy, Wellisch, Pasnau, & Leibowitz, 1983), and the continual changing of clients (Bryant, 1994) may also contribute to an individual's level of stress.

A further source of job stress may be role isolation (Beszterczey, 1977). In many instances, nurses work independently and are unable to share their experiences with other nursing professionals. Beszterczey (1977) points to head nurses and permanent night staff as being susceptible to high levels of stress as a result of this factor. Night staff may be deprived of support systems which may be available to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

staff who work shifts during the day (Beszterczey, 1977). With renewed emphasis on developing extramural services, this stressor may, in all probability, affect an increasing number of nursing staff.

Jennings (1990) reported that head nurses in the US Army reported experiencing more psychological symptoms as administrative stress increased. Although patient care duties were lessened as these nurses became involved in a supervisory capacity, the managerial role also imposed a considerable amount of stress upon these professionals. Jennings (1990) noted that head nurses may not receive social support from staff or upper managers and a lack of managerial training may place newly appointed head nurses into a job in which they lack pertinent experience.

Behavioural and Psychological Consequences

Consequences of stress include feelings of anxiety (Campbell, 1985; Packard & Motowidlo, 1987; Sherman, 1980), hostility (Packard & Motowidlo, 1987), depression (Campbell, 1985; Oehler & Perault, 1986; Packard & Motowidlo, 1987; Sherman, 1980), and lowered job satisfaction (Oehler et al., 1986; Packard & Motowidlo, 1987) have been noted. Psychological disturbances such as insomnia (Sherman, 1980) and psychosomatic symptoms

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

such as headaches, upset stomach, or fatigue (Campbell, 1985) have also been identified in some cases.

Nurses tend to use a variety of defense mechanisms to help them cope with both the environmental stressors and the feelings that they create. Bender (1981) found that neonatal intensive care unit nurses sometimes denied their degree of involvement with babies. Others attempted to mask these feelings by means of manic reparations. For example, a nurse who is feeling hostile toward a difficult patient may exaggerate efforts to assist this person.

At the opposite end of the continuum, is the nurse who withdraws in order to avoid a stressful situation. For example, the nursing professional may take longer lunches and/or breaks, become over-involved in paperwork, or refrain from spontaneous communication with patients. Related to physical avoidance is the withdrawal of emotional investment (Bender, 1981).

Oehler and Perault (1986) discovered the use of a defense mechanism termed scapegoating in their sample of neonatal intensive care unit nurses. As the name implies, the nurse may blame others (physicians, the administration, or other nurses) for problems within the work environment. Individuals utilizing this mechanism

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

may be seen as incompetent or uncaring. In such cases, the nurse may be projecting personal fears onto others. Often, the nurse may feel dissatisfied with his or her job performance and it may be easier to utilize projection than to confront these feelings (Oehler et al., 1986).

The troubles resulting from job-related strain may also be extended beyond the boundary of the work environment. Nurses may exhibit problems such as substance abuse. Howard and Szczerbacki (1988) stated that "workplace problems such as substance abuse and stress appear to be magnified in hospitals" (p. 74). Robinson (cited in Howard & Szczerbacki, 1988) estimated that in 1985 at least 40,000 nurses in the United States were alcoholics. Also, the author reported that narcotic addiction in health care professionals is believed to be 30 to 100 times greater than it is within the general population.

Nurses may also be at risk of higher incidences of marital discord. Howard and Szczerbacki (1988) report that this is the number one personal problem for health care workers. The authors note that this is the third-ranked problem for other sectors of U.S. industry.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Burnout imposes negative effects upon the organizations themselves. Staff generally perform less effectively following repeated exposure to a high-stress environment. Packard and Motowidlo (1987) state that stress literature has indicated that hospital nurses who experience high levels of stress are rated lower in work performance by supervisors and colleagues. If staff quit, withdraw physically, or withdraw emotionally, they may no longer be able to empathize with those they serve. Williams (1989) stated that "nurses and other health professionals who must empathize with the dying and with those in severe physical and psychological distress may be at a special risk of a defensive loss of empathy" (p.170). Williams also postulated that depersonalization may be used as a defense against involvement because involvement with others may be emotionally exhausting.

Physical Reactions to Stress

Hanson (1986) has outlined a number of physical responses that may occur when one is exposed to stress. When an organism becomes stressed, cortisone is released from the adrenal glands. This may temporarily benefit an individual by acting as a prophylactic against allergic reactions. However, if cortisone levels remain elevated

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

for prolonged periods of time, the body's immune responses may be detrimentally affected. As a result, the person becomes increasingly vulnerable to disease or to an aggravation of preexisting symptoms. Also, the stomach may become more sensitive to its constituent acid, which may promote the formation of ulcers. The framework of the body, the bones, can become brittle as a consequence of elevated levels of cortisone production over long periods of time. As a result, the probability of fracturing or breaking bones is increased.

The release of thyroid hormones is another physiological response to stress. These hormones serve to speed up the body's metabolic processes thereby providing the individual with additional energy. However, heat intolerance, increased weight loss (if the person's diet remains unchanged), increased levels of nervous arousal, and insomnia may be consequences of unchecked thyroid hormone production.

Additional endorphins are made available to the body when under stress. There may be temporary benefits arising from the presentation of this natural pain killer. However, the overexpenditure of endorphins as the result of stress may mean that the body could possibly have a hard time manufacturing the amount

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

needed to reduce pain should injury or illness befall an individual.

Sex hormone production is retarded when a person is under stress. This may result in a loss of fertility or libedo.

Digestion is interrupted when an individual is exposed to high levels of stress. By retarding digestion, the body is then able to divert the energy previously expended on digestion to the muscles thereby furnishing the person with more energy. However, failing to maintain digestion may result in bloating of the stomach, nausea, cramps, discomfort, or diarrhea. Such symptoms may be caused by the unwillingness of the body to digest food contained within and by the reflexive tendency to eliminate stored material.

The sugar concentration in the blood is increased when an individual is under stress. The physiological response to such an action requires the pancreas to supply the insulin necessary to metabolize this sugar. Diabetes may be created, or exacerbated by, continued demands for large amounts of insulin.

Blood cholesterol levels may also increase significantly when under stress. Although this state may temporarily benefit the person by offering additional

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

energy to the muscles, chronically elevated cholesterol levels are definitely not beneficial. Cholesterol may coagulate in the blood vessels and/or in the coronary arteries. These cholesterol deposits may underlie the development of arteriosclerotic heart disease or heart attacks (Hanson, 1986; Charlesworth & Nathan, 1984).

Blood pressure can also be raised when one is exposed to stress. The heart responds by increasing activity so as to send more blood to the muscles. High blood pressure has been associated with an increased risk of strokes, aneurysms, and heart attacks. Emerson and Bragdon (1959) expand by stating that most cases of chronic arterial hypertension "result from an increase in peripheral resistence due to sustained, generalized arteriolar vasoconstriction throughout the body" (p. 41). Since arteries have become constricted, they are more susceptible to being blocked by cholesterol or other deposits, thereby increasing the risk of damage to the heart or brain.

An increased demand is also placed upon the respiratory system during stress. As a result, breathing becomes deeper and quicker in pace in order to provide the lungs with the oxygen needed to enrich the increased rate of blood flow being routed through the lungs.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The marrow of the bones is also affected by stress. The production of red and white blood cells is increased as stress is experienced. Also, the spleen excretes more blood cells and clotting agents into the bloodstream than it would under less stressful conditions. As a result of these activities, the blood itself becomes. Much like the dangers presented by high levels of cholesterol, blood made thick in this manner can contribute to heart attacks, strokes, or emboli (Hanson, 1986).

The senses of touch, sight, hearing, smell, and taste are all enhanced during stressful periods. As one's exposure to stress is prolonged, however, the senses tend to become increasingly less efficient. Eventually, the senses become less efficacious than they were prior to the onset of the intense stress (Hanson, 1986). It follows that a person performing under extended periods of stress may actually become less able to notice and/or adapt to changes in the environment.

During brief periods of stress, the aforementioned physiological stress responses may well prove beneficial. Each of the adaptations noted serve to prepare the individual with added energy and vigor for a period of time. Many physiological reactions serve to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

increase one's level of alertness, making it easier to recognize environmental dangers. The additional energy provided by other physical changes furnishes the person with an expanded ability to confront a physical or emotional threat or, conversely, to flee a stressful environment. It is only when the person is exposed to persistent, unrelenting stress that the physiological responses prove detrimental.

The preceding discussion noted that, at least in the short-term, stress responses may prove quite beneficial. However, modern society has removed many of the physical threats from our lives. Fortunately, we now are seldom forced to flee from danger or fight for our existence. One could easily postulate that our innate stress responses have become antiquated. Few people continue to physically exert themselves to near exhaustion in order to fulfill the duties required of them for their jobs. Although the environmental stressors that now effect men and women may be less physically threatening than those imposed upon our ancestors, the physiological responses to them are essentially the same. Unfortunately, it is often neither necessary nor is it desirable for one's body to react in such a manner. An anxious public-speaker for example,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

would most likely choose to forego the sweating, pounding heartbeat, heavy-breathing, and pallor that are characteristic stress responses.

## Stress Management Approaches

The preceding review of nursing stressors and their consequent stress reactions highlights many reasons why stress management training may be useful. A number of approaches have been developed in recent years aimed at reducing the degree of stress faced by nursing personnel by acquainting them with more effective coping strategies. An overview of some of these interventions shall be presented below.

### Employee Assistance Programs (EAPs)

Employee Assistance Programs (EAPs) attempt to "identify troubled employees, motivate them to resolve their troubles, and provide access to counseling or treatment as needed" (Howard & Szczerbacki, 1988, p. 73). Such programs would appear to have some utility in hospital settings because workplace problems such as substance abuse and stress tend to be more prevalent in hospitals than in other sectors of the economy (Howard & Szczerbacki, 1988). However, Campbell (1985) and Herlinger and Calkins (cited in Howard & Szczerbacki,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

1988) note that hospitals have been comparably slower to adopt EAPs than have other industries.

In creating EAPs, it is necessary to develop an outline of policies and procedures as well as a description of the role of administration. In so doing, the staff person is able to become informed as to the services available and how to access them. EAPs also offer education and training to employees and inform all personnel of community resources which may be accessed.

Referrals to EAPs may come from supervisors should they feel that an employee may benefit from the program. However, Drucker (cited in Campbell, 1985) noted that the majority of referrals made to an established EAP tend to be self-referrals. Drucker (cited in Campbell, 1985) added that EAPs often offer assistance to employees as well as for their families. The author described that the personal problems dealt with may include depression, anxiety, gambling, and caring for aging parents. However, Howard and Szczerbacki (1988) found that marital discord was the number one problem for health care workers and prompted the greatest number of EAP referrals. Therefore, offering assistance to the employee's family may be beneficial because difficulties at home may well be creating the stress that negatively

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

impacts upon job performance. Consequently, Howard and Szczerbacki (1988) contend that EAPs developed for hospital settings should emphasize prevention and education concerning marital problems.

Akabas and Akabas (cited in Howard & Szczerbacki, 1988) stated that successful EAPs have been associated with reduced rates of staff turnover, lower insurance costs, and a less frequent use of sick time. Akabas and Akabas (cited in Howard & Szczerbacki, 1988) reported that supervisors in one major hospital indicated that "job performance improved 50 percent among those employees counseled through an EAP"(p. 74). McNamara (1976) stated that by providing "supportive services, the institution will give evidence of its interest and participation in the community as a "caring employer" (p.96).

EAPs must contend with an number of limitations. Howard and Szczerbacki (1988) report that EAP's administered within the work setting were perceived by managers as being more successful than programs in which referents made use of external, community-based programs. Smaller organizations may be restricted by the limited variety of staff persons employed which may be able to develop and implement an EAP. Therefore, there

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

may be little choice other than to make use of an external agency or professional.

Benefits derived from EAPs tend to occur over a long-term schedule. Campbell (1985) noted that employees may be reluctant to utilize services initially, but by the second year of operation they are more willing to seek assistance. The very nature of counselling also limits the length of wait required to see tangible results. Assessments must be completed, referrals must be made, therapeutic interventions must be designed, evaluated, and modified. However, Howard and Szczerbacki (1988) suggest that "the cost recovery period of an EAP can be substantially reduced if administrators are able to meet employee needs and problems and configure the EAP to meet them" (p. 79).

Organizations must also be prepared to fund such programs over time. As was noted previously, it does take time for an EAP to become well utilized. The availability of such funding is a realistic concern in times of fiscal restraint and it may be difficult to await the potential benefits of an EAP. Recently however, both larger and smaller hospitals have been recognizing the necessity for, and the long-term benefits of EAPs (Howard & Szczerbacki, 1988).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Support Groups

A second method of reducing work stress has called for the enhancement of social support (Browner, 1987; Davis-Sacks, Jayaratne, & Chess, 1985; Dean & Lin, 1977; Eisendrath, 1981; Kansas, 1986; Moynihan & Outlaw, 1984; Oehler & Perault, 1986; Pines et al., 1981; Richman, 1989; Richman & Rosenfeld, 1987; Weiner, Caldwell, & Tyson, 1983). Groups of this sort attempt to provide a confidential, supportive environment. Such a setting is designed to facilitate the ventilation of concerns and the offering of helpful feedback from peers (Eisendrath, 1981). In addition to providing feedback, support groups provide members with a source of social support. Dean and Lin (1977), in a review of the relevant literature, stated the position that "to the extent that the individual maintains his expressive relations in the face of instrumental changes such as work and income, he may be "protected" from illness-inducing stress" (p. 407). If this is indeed true, the establishment of communicative, supportive groups may serve a prophylactic function. However, as Davis-Sacks et al. (1985) point out, the relationship between burnout and social support is an area which has been inadequately researched. The authors did present

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

correlational data which indicated that high levels of social support were associated with low levels of stress symptoms. Furthermore, Davis-Sacks et al. (1985) reported that child welfare workers who indicated that their spouses were supportive were liable to feel burned out, depressed, or anxious to a lesser degree than were workers involved in nonsupportive relationships. Such data further suggest that assisting staff persons to solve their family problems may be conducive to maintaining employee effectiveness and satisfaction.

The influence of social support found within the workplace has been well examined. Pines et al. (1981) made mention of six types of social support which should be offered to employees. These are: (1) Listening. Others will listen without giving advice or making judgements. (2) Technical Appreciation. Others will acknowledge when the staff member has performed well. (3) Technical Challenge. Other staff members will encourage and challenge the individual to strive for more and to be more creative and involved in his or her work. (4) Emotional Support. Others will give support to the staff person during an emotionally difficult time. Support persons need not agree with the individual. (5) Emotional Challenge. Others will

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

encourage the individual to overcome problems and fulfill his or her goals. (6) Sharing Social Reality. Staff members with similar perspectives will share their perceptions in order to assure the staff person that they are reading social situations correctly. Eisendrath (1981) maintains that support groups should focus upon specific work-related issues. Moynihan & Outlaw (1984) add that a flexible problem-solving approach should be utilized. The authors note that nursing groups often tend to focus upon issues such as professional identity, reactions to pain and suffering, reactions to anticipated events, and countertransference.

Nurses who begin to utilize emotional withdrawal as a method of defense may possess feelings such as resentment, guilt , and/or depression. Staff harboring such feelings typically tend to keep these feelings from other staff persons (Pines et al., 1981). Therefore, although many nursing staff may feel similarly, their assumption of that they are alone in feeling in such a manner may further add to feelings of guilt or distress (Pines et al., 1981). Staff support groups may be useful because they allow for the ventilation of such feelings, allowing staff members to discover that these negative emotions may well be the result of difficult working

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

conditions. By attributing these feelings to situational factors, staff members may attempt to make changes which will make the work environment more tolerable (Pines et al., 1981). Perhaps for this reason Davis-Sacks et al. (1985) suggested that redesigning jobs and increasing the participation of workers in organizational decisions may be more effective in reducing undesirable job reactions than would merely increasing social support.

Support groups, though potentially helpful, also possess a number of limitations. Eisendrath (1981) warned that most staff persons will be unable to attend meetings regularly. It is quite possible, as a result, that developing group cohesion may be difficult. Once established, the group will usually continue to meet for an extended length of time. Resources must be available to allow meetings to continue and deal with issues as they arise. Support groups also must adapt to changes as staff persons leave the hospital and as other nurses become employed by the organization. Some groups may refrain from welcoming new members once a cohesive core group has been established. The ravages of staff attrition and irregular attendance may cause these groups to eventually fail.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Stress Management Workshops

Pines et al. (1981) have presented a number of burnout workshops to employees of differing vocations. The authors define burnout as the state that health care workers achieve when they feel that they can "no longer help people in need, that they have nothing left to give" (p. 15). Pines et al. (1981) developed workshops that contained such content as the definition of burnout, identification of individual workplace stressors and discussion pertaining to these stressors with peers, and the presentation of alternative coping strategies. The authors reported that a workshop designed for social service employees produced greater levels of satisfaction and awareness in participants.

Beszterzcey (1977) reported that in forming a staff stress group, the participants resented sessions that were overly psychologically interpretive. Approaching this group with patient and family oriented discussions initially, laid the ground work to later discussions of emotional topics. This prompted the hypothesis that it took a period of time for members to become comfortable in this setting prior to discussing more personal topics. Therefore, in a time-limited workshop, discussions pertaining to educational and/or

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

professional issues would likely prove more helpful. Self-disclosures would be made at the discretion of each person and would not be solicited.

Amaral, Nehemkis, and Fox, (1981) noted that as an oncology nursing group learned anxiety-reducing strategies, conflict among staff members decreased. Although weekly meetings continued for eight months and served a supportive function, it is uncertain as to what effect a briefer didactic presentation would have provided to those involved.

Campbell (1985) also used a didactic format to teach nursing professionals transactional analysis as a communication skill. Also, assertiveness training and classes on death and dying were offered. The author offered these course as an adjunct to an EAP, therefore the effect that these classes may have had on their own can not be determined. There is a lack of similar studies, therefore the utility of burnout workshops is by no means conclusive.

## The Present Study

The purpose of the present study was to determine whether a 12-hour stress management workshop would reduce occupational stress, burnout, and anxiety in

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

nurses. A listing of the topics covered is presented in Appendix A. Previous research efforts offered suggestions pertaining to effective stress management strategies and methods of presentation. Much of this material was incorporated into the present study.

In preparing a review of the relevant literature, it became clear that few recent studies pertaining to stress management involving nurses were available. It was noted in the introduction of this paper that nurses in New Brunswick have had to adapt to many structural changes. This process was expected to have been quite stressful for those involved. The current study was undertaken in order to assess whether a short-term intervention could be helpful in reducing stress during this time of professional evolution. A discussion of the rationale underlying the current presentation of some specific stress-management methods is presented below.

Pines et al. (1981) provided informative workshops that educated members about tedium and burnout. An examination of the specific stressors that may produce these states was undertaken by participants. These authors indicated that the social service employees involved reported higher levels of satisfaction following this intervention. Their results also found

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that subjects reported a heightened awareness of stress-related material and stress reduction methods. As a result of this posivite finding, the present study explored tedium and burnout as well.

The workshops offered by Pines et al. (1981) also allowed for discussion and brain-storming. Participants in this research project were given the chance to examine their personal stressors and stress reactions. Information was presented in a lecture format and nurses were left to determine which stressors were personally relevant. Explanations of why individuals chose to make use of self-defeating coping methods was not explored in order to avoid psychological interpretation. Personal reflections and disclosures were left up to the individual.

A discussion related to how people increase their levels of stress by adopting critical or unrealistic patterns of thought was undertaken. Cognitive psychology has generated a number of intervention strategies to reduce this. Such techniques consider how a person's expectations of success or failure and the demands they impose on themselves or others may create undesirable emotions such as frustration or hopelessness. Muldary (1983) advised that recognizing personal limitations is

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

helpful if one is to reduce the risk of burnout. Such a person may well be able to predict what (s)he can realistically accomplish based on personal strengths and weaknesses. Knowing this, the individual can approach tasks with confidence and may be in a good position to ask for help when (s)he is unsure. Norris (cited in McConnel, 1982) identified a number of irrational thoughts and beliefs that may heighten levels of stress in caregivers. This material, coupled with cognitive methods of confronting unrealistic expectations was utilized in the current investigation.

Relaxation techniques have been recommended for years as part of stress management training. Maslach (1982) found that persons utilizing relaxation exercises regularly reduced stress symptoms and gained a greater sense of control. A nursing study conducted by Amaral, Nehemkis, and Fox (1981) found that conflict among staff members decreased after study volunteers learned anxiety-reducing strategies. Upon consideration of the potentially helpful effects of relaxation training noted above, these strategies were included in this study.

Campbell (1985) used a didactic format to teach nursing professionals assertiveness techniques, methods of coping with death and dying, and transactional

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

analysis as a communication skill. The author recommended the use of such instruction as a preventative intervention. In choosing to heed this advice, the present study included assertiveness as a topic area. The current presentation of separation and loss issues offered validation of the sense of loss experienced by nurses when relationships end due to patient death or their leaving the hospital ( Oehler & Perault, 1986; Pines et al., 1981; Richman, 1989). A discussion of how peers could offer support as patients leave or die followed.

Continuing to examine the issue of peer support, Cherniss (1980) found that social support and interaction from colleagues may be valuable assets in alleviating stress and burnout. Maslach (1982) advised that the best method of increasing the amount of helpful positive feedback received from others is to offer it to colleagues first. This material was covered in the belief that nurses taking part in the present study might attempt to model and nurture improved peer support.

In a further examination of proactive stress management techniques, McConnel (1982) observed that people who exercise regularly tended to become less

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

fatigued at work. Exercise also promoted a feeling of well-being. This information, along with the physiological benefits of exercise, was reviewed in the current workshops with the hope of encouraging the use of this stress-buffering behaviour.

## Method

### Subjects

A series of burnout workshops were offered to 28 female registered nurses (RN's) and two registered nursing assistants (RNA's). Staff were solicited via postings in nursing stations and through advertisements located in publications produced by the New Brunswick Nurses Union and the Nurses Association of New Brunswick.

The nurses involved were employed within the New Brunswick Region 2 and Region 3 Hospital Corporations. These administrative entities oversee and license hospitals and nursing homes. Nurses working within the New Brunswick Extra-Mural Hospital and in medical offices also volunteered to participate. Test data obtained from the RNAs was not used in the current anaylses.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The mean age of the 28 RN's participating was 39.04 years, with a standard deviation of 8.39 years. The average number of years serving in the nursing profession was 15.95 years, and 56 percent were employed on a full time basis at the time of this study.

No attempt was made to select subjects from a specific work environment (for example, ICU nurses). Participants were solicited from all areas of nursing in order to attract as many subjects as possible.

Materials

Three measures were utilized in this study in order to measure anxiety, occupational stress and burnout. The State Trait Anxiety Inventory (STAI) was chosen because it is widely used as a measure of anxiety. Johnson (1979) used this tool with American nurses and found differences were detectable in state and trait anxiety levels between groups of psychiatric, medical, and surgical nurses. It was deemed worthy of investigating whether the STAI would also detect changes in anxiety within a heterogeneous sample of nurses following stress management training. This instrument takes a relatively short time to complete. The STAI was used in order to determine whether anxiety would decrease following stress management training. If this is indeed the case,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

this test may prove useful as a screening instrument to determine the appropriateness or the effectiveness of stress management training.

The State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) is a 40 item instrument which is designed to measure general as well as situational anxiety. Items presented list anxiety symptoms and raters utilize a four-point Likert scale to describe the degree to which they experience these symptoms (see Appendix B). Raw scores were used to determine mean state and anxiety ratings and in comparing scores over time. When reviewing reliability information the STAI manual suggests considering the Cronbach's alpha coefficients rather than test-retest correlations. The authors suggest that since anxiety states are prone to change, alpha coefficients may give a more meaningful depiction of internal consistency for state anxiety. Therefore, for working females in the norm group aged 19-39, 40-49, and 50-69 respectively, the alpha coefficients reported were .93, .94, and .90. For the Trait anxiety scale the alpha coefficients were .92, .92, and .89 for the aforementioned age groups.

The Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986) measures the degree to which burnout is

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

experienced by a wide range of human service workers. This was chosen as an instrument because it dealt with the emotional aspects involved in doing "people work". Also, it takes a relatively brief period of time to complete. Raters utilize a 7-point Likert scale to describe the degree to which they can identify characteristic descriptions of burnout within themselves (see Appendix C). Three separate scales are obtained from the MBI, they are Emotional Exhaustion, Depersonalization, and Personal Accomplishment. Burnout is associated with high levels of emotional exhaustion and depersonalization and a low level of personal accomplishment. The separate aspects of burnout are not combined into a single overall measure. Scores for each scale are obtained by summing the responses obtained for selected items. Raw scores were used throughout the study when examining the degree of change over time. Cronbach's coefficient alpha results derived from the standardization sample and reported in the MBI manual were .90 for Emotional Exhaustion, .79 for Personal Accomplishment, and .71 for Personal Accomplishment.

The Maslach Burnout Inventory Manual (Maslach & Jackson, 1986) presents scoring criteria for the Emotional Exhaustion, Depersonalization, and Personal

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Accomplishment subscales. For the emotional exhaustion scale levels were categorized as follows for 1104 male and female physicians and nurses : High = 27 or over, Moderate = 19-26, Low = 0-18. For Depersonalization the categories were: High = 10 or over, Moderate = 6-9, Low = 0-5. Lastly, for Personal Accomplishment: High = 0-33, Moderate = 34-39, Low = 40 or over.

The Occupational Stress Inventory (OSI) (Osipow & Spokane, 1987) is a 140 item questionnaire. This test was chosen because it examines stressors related to the work environment, personal perceptions of strain and ways of coping with stress. Therefore, the expected adoption of improved coping skills could be monitored along with any changes in the amount of perceived strain.

Fourteen OSI subscales quantify specific attributes of the environment or individual. These subscales are: Role Overload (describe workloads as becoming heavier and/or unreasonable, being constrained by deadlines, and as feeling unsupported by workplace resources), Role Insufficiency (feel that their training, education, skills, and experience have inadequately prepared her or him to successfully meet the requirements of their job), Role Ambiguity (knowledge of what job functions they are

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

expected to fulfill and in their perceptions of how to achieve greater professional success), Role Boundary (supervisory demands and hierarchical structures remained explicit and consistent), Responsibility (oversee the activities and work performance of subordinates and assist other personnel with their problems), Physical Environment (work schedules, feelings of working in isolation, and levels of noise, odor, humidity, etc.), Vocational Strain (poor attitudes about work, workplace errors, poor quality of work, concentration problems, and absenteeism), Psychological Strain (feelings of depression, unhappiness, irritability, and beliefs that things are not "going well". Behaviours such as complaining, having a lack of humor and behaving badly or inappropriately), Interpersonal Strain (evidenced by quarreling or dependency on others, voluntary withdrawal, or not having sufficient time to be with friends), Physical Strain (physical symptoms, unplanned weight changes, alcohol usage, sleeping difficulties, and feelings of apathy and lethargy), Recreation, Self-Care (regular exercise, getting adequate sleep, sensible diet, utilizing relaxation techniques, and avoiding harmful substances), Social Support (feeling close to another

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

person(s), having help in doing things, and having someone to speak to regarding work-related problems), and Rational/Cognitive Coping (examines problem-solving skills, distractibility, and organizational methods. Also, being able to leave workplace concerns "at the office").

Responses on the OSI are made by utilizing a five-point scale which measures the frequency (rarely or never, occasionally, often, usually, most of the time) with which an item applies to the examinee (see Appendix D). Furthermore,three composite scales are comprised of OSI subscales in order to measure aspects of occupational adjustment. The Occupational Roles Questionnaire is composed of the Role Overload, Role Insufficiency, Role Ambiguity, Role Boundary, Responsibility, and Physical Environment subscales. The Personal Strain Questionnaire is designed to measure psychological strain and consists of the combined Vocational Strain, Psychological Strain, Interpersonal Strain, and Physical Strain subscales. The Personal Resources Questionnaire is intended to measure coping resources. This scale is comprised of the combination of Recreation, Self-care, Social Support, and Rational/Cognitive Coping scales.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Alpha coefficients for OSI scales were compiled by the authors and are summarized as follows: Role Overload .83, Role Insufficiency .90, Role Ambiguity .78, Role Boundary .82, Responsibility .71, Physical Environment .85, Occupational Roles Questionnaire .89, Vocational Strain .71, Psychological Strain .89, Interpersonal Strain .81, Physical Strain .87, Personal Strain Questionnaire .94, Recreation .71, Self-Care .73, Social Support .83, Rational/Cognitive Coping .78, and the Personal Resources Questionnaire .88.

A Demographic Information Sheet was presented as a means of obtaining descriptive information (see Appendix E).

A Workshop Evaluation Form was presented to participants upon the completion of the workshop in order to obtain a reflection of their opinions pertaining to the subject matter and presentation style (see Appendix F). Responses were graded on a five-point Likert-type scale reflecting their impressions of the workshops in terms of utility, content, information, presentation style, and participants' willingness to recommend such workshops to co-workers. Scores for each question ranged from: (1) not at all; (2) mildly; (3) moderately; (4) quite; (5) very. The evaluation form was

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

included as a means of receiving feedback in order to revise workshops which would follow the study. It was an instrument intended to gain subjective impressions from those who participated in the workshop.

Design

The present study utilized a repeated measures design. Under such conditions the same subjects are used in each condition. In this case, each registered nurse completed pretest materials prior to attending the workshop. These same individuals also were asked to complete post-testing materials at one week, six weeks, and twelve weeks following the workshop.

It was deemed desirable to include each person who agreed to participate in the study within the workshops. Post-testing allowed for the measurement of occupational stress, burnout, and anxiety over time. By including all subjects in the experimental group a larger number of persons was available for testing than would have been the case if a considerable number of them had been assigned to a control group.

A repeated measures design also limits error variability due to subject differences. Having the same people completing each post-test package reduces the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

variability that would have resulted if separate groups had been used during each testing period.

Procedure

A series of burnout workshops were offered to 28 female registered nurses (RNs) and two registered nursing assistants (RNAs). Staff were solicited via postings in nursing stations and through advertisements located in publications produced by the New Brunswick Nurses Union and the Nurses Association of New Brunswick.

Prior to their participation, all interested persons were presented with a descriptive covering letter (see Appendix G) and were asked to sign a consent form should they choose to take part in this project (see Appendix H). Numerous workshop presentation dates and times were offered in order to accommodate the variety of work schedules that must be staffed by nursing personnel. A summary of workshop locations and dates is presented in Appendix I.

A request to have a separate training session for administrative personnel was received. However, as the result of staff scheduling difficulties, these persons did not participate in the experimental workshops and a separate session was not arranged.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Pretesting materials were collected upon the commencement of the first session. Copies of the Participant Cover Letter, Participant Consent Form, STAI, MBI, OSI, and the Demographic Information Sheet were distributed prior to the workshop. Topics pertaining to the identification of workplace stressors and their resultant physical, cognitive, and behavioural consequences were highlighted in the presentations. Furthermore, alternative methods of coping were presented during the intervention portion of the workshop (refer to Appendix I).

In order to reduce confounding influences data utilized in this study was restricted to that received from the 28 registered nurses (RNs). It was expected that Registered Nursing Assistants (RNAs) would have different job functions than did Registered Nurses. Differences in the amount of workplace stress experienced by these seperate groups of professionals is possible. The amount of change in levels of stress present following a stress management intervention may be different as well. In order to reduce the risk of contaminating study results, it was decided to restrict analyses to only one study group. However, the Workshop Evaluation Form (Appendix F) was distributed to all

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

participants so the opinions of the two RNA's were also considered. No identifying codes were listed on evaluation forms so it was not possible to identify and exclude the data received from the two RNAs.

Post testing took place one week following the workshops in order to assess their short-term impact. Testing was also undertaken six weeks and twelve weeks following the workshops in order to determine long-term impacts. Materials (STAI, MBI, OSI) were mailed along with a pre-stamped return envelope (with the due date specified) to those who completed a workshop.

Confidentiality was ensured by assigning each participant a code number that identified their testing materials. The experimenter alone had knowledge of the identity of each respondent throughout pre- and post-testing in order to ensure that testing materials, consistently identified by the individual's code number, were successfully distributed to each participant. Following post-testing, the materials identifying the respondent and their assigned code number were destroyed. All materials were consequently identified only by the remaining code numbers.

Raw data will be kept locked and stored for a period of five years as suggested by American

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Psychological Association guidelines in the event that a reader desires to challenge the statistical results obtained by the study (American Psychological Association, 1983). After this period of time has elapsed, these materials will be destroyed.

Hypotheses

State and Trait anxiety were expected to alter following a workshop intervention. State anxiety was expected to be more apt to reflect change because it focuses upon feelings at-the-moment and not on how one usually feels. Trait anxiety was not believed to be changeable over a short twelve week period.

Burnout measures were not foreseen to change significantly. Burnout was seen as a more complex problem than could be altered by a stress management workshop. Burnout describes employees who experience emotional exhaustion, feel their jobs offer little personal accomplishment, and depersonalize and lack the ability to empathize with patients in their care. Pretest scores were expected to show relatively high ratings on the depersonalization and emotional exhaustion scales and a low level of personal accomplishment. This was foreseen because feelings contributing to burnout were expected to motivate RNs to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

participate in stress management workshops. However, the effort required to learn and continue the use of stress management methods was predicted to be overly taxing for persons who were feeling exhausted. It was believed that an approach such as an EAP that could offer an individualized program and offer montoring and support would be more helpful.

Measures of strain on the Occupational Stress Inventory were expected to decrease following stress management training. Subscales pertaining to workplace stressors were expected to decrease also. Since much of the material covered pertained to organizational, managerial, and peer-supportive strategies; it was expected that staff would incorporate some of these methods into their individual work environments. Coping skills were expected to increase following the didactic presentation of various alternatives.

Results

Each participant returned the pretest materials upon entering the initial workshop. Percentages of return of the 28 testing post test packages mailed at each time interval were 85.71 percent for the one-week post testing, 89.28 percent at the time of six-week

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

post testing, and 71.43 percent for the twelfth-week follow-up. Since the sample size was small it was determined that it was not possible to exclude test results obtained from subjects that did not return all post tests. A greater proportion of RN's were found to respond at the six-week post test then at the one- and twelve-week periods. A pairwise missing-value approach was utilized (Norusis, 1992).

Analysis of test data were accomplished by performing t-tests that compared means of the scores obtained on the Occupational Stress Inventory, the State Trait anxiety Inventory, and the Maslach Burnout Inventory at each time period. A t-test procedure was used because it allows one to compare across two time periods. Tables are presented which report the results of these calculations. Calculations were completed by using the Statistical Package for the Social Sciences-PC (SPSS-PC) version 5 (Norusis, 1992).

A large number of t-tests were performed in this study. It is likely, therefore, that at least some statistically significant results may occur due to chance. This is an example of a Type I error. For this reason, t-test results will only receive mention when

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the probability of obtaining such a significant result is determined to be less than .01.

Data received from the demographic questionnaire were examined and descriptive calculations were completed. Appendix L presented a complete listing of the demographic information received. Appendix M presents the reasons reported for attending the workshops.

Nurses involved in this study served in a variety of workplace settings. Refer to Appendix N for a listing of this material. Appendix O lists the sources of stress which were reported by participants. Subjects were asked to present their perceptions of how stress has effected them. This material is presented in Appendix P.

Examination of the Maslach Burnout Inventory results obtained at the time of pretesting indicated that moderate levels of emotional exhaustion ($\underline{M}$ = 20.6), depersonalization ($\underline{M}$ = 6.3) and personal accomplishment ($\underline{M}$ = 36.3) were present. MBI scores at the time of one-week posttesting were within the average range for emotional exhaustion ($\underline{M}$ = 19.9), depersonalization ($\underline{M}$ = 6.7) and personal accomplishment ($\underline{M}$ = 37.3).

Table 1 presents a review of comparisons of pretest and one week post test scores. During this period of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

time no significant changes were discovered in levels of State or Trait Anxiety. The three scales included on the Maslach Burnout Inventory also did not differ significantly.

The Occupational Stress Inventory is composed of 17 individual scales. They were designed to give consideration to stressors within the workplace,the personal impact of stress, and how people try to cope with it. On this instrument one scale changed during the one week post testing. The Self-Care subscale targets the frequency that a person takes part in activities

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 1 Pretest vs. 1 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales

| Test | n[a] | Mean pre-test (Std. Dev.) | Mean 1 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Role overload | 22 | 25.77 (7.419) | 25.59 (7.576) | 0.18 |
| (OSI) Role insufficiency | 21 | 20.19 (5.582) | 21.48 6.226 | -1.48 |
| (OSI) Role ambiguity | 21 | 20.24 (4.732) | 18.43 (5.546) | 1.11 |
| (OSI) Role boundary | 21 | 19.43 (7.145) | 20.05 (6.430) | -0.55 |
| (OSI) Responsibility | 22 | 24.73 (7.414) | 25.41 (6.645) | -0.55 |
| (OSI) Physical environment | 22 | 19.41 (7.449) | 21.14 (6.534) | -1.63 |
| (OSI) Vocational strain | 22 | 17.59 (6.724) | 17.14 (8.002) | 0.62 |
| (OSI) Psychological strain | 22 | 23.36 (7.889) | 20.04 (6.083) | 2.40 |
| (OSI) Interpersonal strain | 21 | 21.57 (6.313) | 19.90 (4.582) | 1.35 |
| (OSI) Physical strain | 22 | 22.23 (7.964) | 20.45 (5.730) | 1.25 |

Note. a
Number of subjects returning completed tests for both time periods. **indicates p<.01
(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 1 Pretest vs. 1 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales (continued)

| Test | n[a] | Mean pre-test (Std. Dev.) | Mean 1 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Recreation | 22 | 24.85 (7.184) | 26.85 (6.691) | -2.22 |
| (OSI) Self care | 20 | 25.80 (5.444) | 30.40 (6.419) | -3.81** |
| (OSI) Social support | 22 | 41.23 (5.336) | 41.73 (5.063) | -0.57 |
| (OSI) Rational/cognitive | 22 | 35.27 (5.400) | 35.86 (6.105) | -0.59 |
| (OSI) Occupational roles | 20 | 128.95 (24.86) | 134.65 (26.79) | -1.86 |
| (OSI) Personal strain | 20 | 84.20 (20.48) | 74.80 (17.57) | 2.23 |
| (OSI) Personal resources | 19 | 126.85 (17.19) | 134.95 (17.95) | -2.73 |
| (STAI) State anxiety | 21 | 35.43 (8.02) | 32.43 (9.69) | 1.64 |
| (STAI) Trait anxiety | 17 | 39.24 (7.830) | 37.00 (7.03) | 1.24 |
| (MBI) Emotional exhaustion | 22 | 23.50 (11.16) | 20.73 (10.26) | 1.93 |
| (MBI) Depersonalization | 22 | 6.18 (6.43) | 7.23 (5.67) | -1.84 |
| (MBI) Personal accomplishment | 22 | 37.27 (5.857) | 36.45 (5.697) | 0.91 |

Note. [a] Number of subjects returning completed tests for both time periods. **indicates $p<.01$

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

such as exercising, getting sufficient sleep, eating well, using relaxation techniques, and avoiding eating or drinking harmful substances. The significant increase on the Self-Care instrument indicates that RN's were more prone to take part in activities which would reduce stress and/or make them hardier and better-able to withstand environmental demands ($t(19)=-3.81$, $p<.01$).

Table 2 presents a review of pretest and six week post test scores. This table presents that one t-test achieved statistical significance. Maslach Burnout Inventory the Emotional Exhaustion subscale detected a decrease over time ($t(16)=2.97$, $p<.01$). This test was designed to reflect the degree to which persons feel emotionally overextended by their job. The two remaining subscales did not alter significantly.

Classifying the Maslach Burnout Inventory scores of subjects into categories developed from the standardization sample of physicians and nurses produced a low rating of emotional exhaustion ($\underline{M}$ = 18.2) at the time of the six week posttesting. Average ratings of depersonalization ($\underline{M}$ = 6.8) and personal accomplishment ($\underline{M}$ = 36.8) were obtained. With respect to the State

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 2 Pretest vs. 6 week posttest t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales

| Test | n[a] | Mean pre-test (Std. Dev.) | Mean 1 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Role overload | 19 | 25.89 (7.600) | 23.53 (5.316) | 1.98 |
| (OSI) Role insufficiency | 18 | 19.28 (4.099) | 19.50 (5.371) | -0.18 |
| (OSI) Role ambiguity | 18 | 19.72 (4.860) | 18.67 (5.841) | 1.22 |
| (OSI) Role boundary | 18 | 18.72 (7.347) | 19.17 (6.071) | -0.32 |
| (OSI) Responsibility | 19 | 24.74 (7.894) | 23.42 (6.354) | 0.97 |
| (OSI) Physical environment | 19 | 19.26 (7.738) | 18.63 (6.735) | 0.80 |
| (OSI) Vocational strain | 19 | 17.21 (7.083) | 16.37 (8.757) | 0.84 |
| (OSI) Psychological strain | 19 | 23.37 (8.036) | 19.00 (5.944) | 2.16 |
| (OSI) Interpersonal strain | 19 | 21.10 (6.235) | 18.63 (5.356) | 1.70 |
| (OSI) Physical strain | 19 | 22.00 (8.550) | 17.89 (4.829) | 2.79 |
| (OSI) Recreation | 19 | 24.84 (7.426) | 26.84 (6.64) | -1.35 |

Note. [a] Number of subjects returning completed tests for both time periods.**indicates p<.01

(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 2 Pretest vs. 6 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales (continued)

| Test | n[a] | Mean pre-test (Std. Dev) | Mean 6 week post (Std Dev) | t |
|---|---|---|---|---|
| (OSI) Self care | 19 | 26.47 (5.070) | 30.95 (7.457) | -2.69 |
| (OSI) Social support | 19 | 41.32 (5.558) | 42.37 (5.795) | -0.79 |
| (OSI) Rational/cognitive | 19 | 35.68 (5.677) | 37.47 (7.306) | -1.06 |
| (OSI) Occupational roles | 17 | 126.35 (25.62) | 123.35 (24.64) | 0.85 |
| (OSI) Personal strain | 18 | 82.833 (20.33) | 69.556 (16.25) | 2.61 |
| (OSI) Personal resources | 18 | 129.44 (17.79) | 138.83 (18.53) | -1.85 |
| (STAI) State anxiety | 16 | 35.65 (8.65) | 34.76 (10.98) | 0.26 |
| (STAI) Trait anxiety | 14 | 37.78 (8.09) | 35.64 (8.56) | 0.70 |
| (MBI) Emotional exhaustion | 17 | 24.24 (11.43) | 17.71 (6.72) | 2.97** |
| (MBI) Depersonalization | 17 | 6.35 (7.10) | 7.29 (5.66) | -0.98 |
| (MBI) Personal accomplishment | 17 | 37.70 (5.74) | 36.65 (7.79) | 0.59 |

Note. [a] Number of subjects returning completed tests for both time periods. **indicates $p<.01$

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Trait Anxiety Inventory, no noteworthy changes were found on either anxiety scale.

Table 3 lists comparisons of pretest and 12-week post test scores. The Occupational Stress Inventory is equipped with a measure designed to assess the degree to which an employee feels unsupported at work and describes their workload as increasing and/or unreasonable. This instrument is titled the Role Overload scale and it declined significantly ($t(17)=3.06$, $p<.01$) over the dates considered. The additional measures which make up the Occupational Stress Inventory did not alter substantially.

Table 3 reports that the State Trait Anxiety Inventory detected no significant changes. Also, the Maslach Burnout Inventory detected no notable changes on the Depersonalization ($t(15)=1.21$, pns) or Personal Accomplishment ($t(14)=-0.61$, pns) measures. However, a decrease was found in the amount of Emotional Exhaustion ($t(15)=3.14$, $p<.01$) reported by RN's. The Emotional Exhaustion test focuses upon the extent to which employees feel they have "nothing left to give" to those they serve.

Classifying the twelve week Maslach Burnout Inventory scores of subjects into categories developed

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 3 Pretest vs. 12 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales

| Test | n[a] | Mean pre-test (Std. Dev.) | Mean 1 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Role overload | 18 | 25.78 (7.56) | 22.72 (5.85) | 3.06** |
| (OSI) Role insufficiency | 16 | 19.38 (4.35) | 20.12 (5.58) | -0.53 |
| (OSI) Role ambiguity | 17 | 19.82 (4.94) | 19.18 (6.20) | 0.81 |
| (OSI) Role boundary | 17 | 18.94 (7.68) | 19.70 (6.77) | -0.59 |
| (OSI) Responsibility | 18 | 24.77 (8.08) | 23.28 (6.98) | 1.26 |
| (OSI) Physical environment | 18 | 19.28 (7.96) | 18.28 (7.23) | 1.20 |
| (OSI) Vocational strain | 18 | 17.50 (7.22) | 17.00 (8.82) | 0.54 |
| (OSI) Psychological strain | 18 | 22.89 (7.89) | 21.11 (7.85) | 0.96 |
| (OSI) Interpersonal strain | 17 | 20.76 (5.90) | 19.18 (3.28) | 1.24 |
| (OSI) Physical strain | 19 | 21.26 (7.35) | 19.63 (6.41) | 1.42 |
| (OSI) Recreation | 17 | 25.61 (7.05) | 28.22 (5.56) | -1.96 |

Note. a Number of subjects returning completed tests for both time periods.**indicates $p<.01$

(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 3 Pretest vs. 12 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales (continued)

| Test | n[a] | Mean pre-test (Std. Dev.) | Mean 1 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Self care | 18 | 26.50 (5.37) | 30.28 (6.92) | -2.79 |
| (OSI) Social support | 18 | 41.17 (5.80) | 40.72 (4.25) | 0.35 |
| (OSI) Rational/cognitive | 17 | 36.06 (5.64) | 37.76 (6.07) | -1.10 |
| (OSI) Occupational roles | 15 | 119.4 (40.30) | 117.73 (38.60) | 0.46 |
| (OSI) Personal strain | 16 | 80.06 (19.09) | 74.62 (19.27) | 1.15 |
| (OSI) Personal resources | 16 | 130.0 (18.92) | 139.75 (14.95) | -2.33 |
| (STAI) State anxiety | 17 | 32.65 (11.28) | 34.65 (15.46) | -0.59 |
| (STAI) Trait anxiety | 15 | 39.60 (8.23) | 36.53 (8.03) | 1.27 |
| (MBI) Emotional exhaustion | 16 | 25.56 (11.10) | 18.94 (11.05) | 3.14** |
| (MBI) Depersonalization | 16 | 6.81 (7.32) | 4.69 (4.95) | 1.21 |
| (MBI) Personal accomplishment | 15 | 38.67 (4.25) | 39.67 (4.17) | -0.61 |

Note. [a] Number of subjects returning completed tests for both time periods.**indicates $p<.01$

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

from the standardization sample of physicians and nurses produced low rankings of emotional exhaustion ($\underline{M}$ = 18.3) and depersonalization ($\underline{M}$ = 4.6) and an average rating of personal accomplishment ($\underline{M}$ = 36.9).

Table 4 presents an examination of test scores received at the first week contrasted against results obtained at the six-week post testing. T-tests found no significant changes.

Table 5 illustrates comparisons between one week post-test and twelfth week post-test materials. It shows that t-tests detected no significant differences.

Table 6 lists the results of comparisons between the sixth- and the twelfth week of post tests. No significant differences were identified at the .01 level.

Subjects were asked to complete a five-point Workshop Evaluation Form. Scores were assigned to the following categories: 1 = not at all, 2 = mildly, 3 = moderately, 4 = quite, 5 = very. When asked how informative they found the workshops subjects provided a mean rating of 4.50 (N = 24, SD = 0.590). In terms of how well the material was presented, a mean score of 4.57 was obtained (N = 30, SD = 0.679). When asked to describe how useful they found the material a mean score

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 4 1 week post test vs. 6 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales

| Test | n[a] | Mean 1 week post (Std. Dev.) | Mean 6 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Role overload | 22 | 26.09 (7.091) | 24.50 (5.544) | 1.45 |
| (OSI) Role insufficiency | 21 | 20.48 (4.895) | 20.00 5.404 | 0.52 |
| (OSI) Role ambiguity | 21 | 18.86 (5.730) | 19.00 (6.557) | -0.20 |
| (OSI) Role boundary | 21 | 19.67 (6.529) | 19.33 (5.978) | 0.44 |
| (OSI) Responsibility | 22 | 25.09 (6.279) | 24.04 (6.153) | 1.40 |
| (OSI) Physical environment | 22 | 20.54 (5.934) | 18.95 (6.651) | 2.08 |
| (OSI) Vocational strain | 22 | 16.14 (7.772) | 16.14 (8.161) | 0.00 |
| (OSI) Psychological strain | 22 | 19.73 (5.435) | 19.18 (6.215) | 0.55 |
| (OSI) Interpersonal strain | 21 | 19.95 (5.133) | 19.24 (5.467) | 0.80 |
| (OSI) Physical strain | 21 | 19.67 (5.517) | 17.86 (4.607) | 1.79 |

Note. [a] Number of subjects returning completed tests for both time periods. **indicates $p<.01$

(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 4 1 week post vs. 6 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales (continued)

| Test | n[a] | Mean 1 week post (Std. Dev.) | Mean 6 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Recreation | 21 | 26.71 (6.627) | 29.81 (6.153) | -1.84 |
| (OSI) Self care | 21 | 30.33 (6.406) | 30.24 (7.422) | 0.11 |
| (OSI) Social support | 22 | 42.14 (5.017) | 42.59 (5.509) | -0.58 |
| (OSI) Rational/cognitive | 22 | 38.36 (7.512) | 38.91 (6.654) | -0.53 |
| (OSI) Occupational roles | 20 | 131.55 (25.34) | 126.0 (26.22) | 1.74 |
| (OSI) Personal strain | 20 | 73.05 (15.19) | 70.75 (15.87) | 0.87 |
| (OSI) Personal resources | 20 | 136.50 (16.92) | 137.45 (18.04) | -0.35 |
| (STAI) State anxiety | 20 | 31.75 (9.35) | 33.15 (10.87) | -0.57 |
| (STAI) Trait anxiety | 17 | 33.70 (5.977) | 33.35 (8.18) | 0.19 |
| (MBI) Emotional exhaustion | 19 | 20.74 (10.41) | 18.10 (6.47) | 1.69 |
| (MBI) Depersonalization | 19 | 6.63 (5.96) | 6.84 (5.55) | -0.32 |
| (MBI) Personal accomplishment | 19 | 38.00 (5.56) | 37.05 (7.66) | 0.71 |

Note. [a] Number of subjects returning completed tests for both time periods. **indicates $p<.01$

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 5 1 week post test vs. 12 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales

| Test | n[a] | Mean 1 week post (Std. Dev.) | Mean 12 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Role overload | 20 | 25.45 (6.653) | 23.20 (5.782) | 2.20 |
| (OSI) Role insufficiency | 19 | 20.16 (5.014) | 20.95 (5.759) | -0.83 |
| (OSI) Role ambiguity | 19 | 19.05 (5.632) | 19.26 (6.090) | -0.26 |
| (OSI) Role boundary | 19 | 19.68 (6.464) | 20.16 (6.661) | -0.70 |
| (OSI) Responsibility | 20 | 24.10 (6.365) | 23.10 (6.625) | 1.71 |
| (OSI) Physical environment | 20 | 20.10 (5.495) | 18.45 (6.894) | 1.95 |
| (OSI) Vocational strain | 20 | 16.55 (8.140) | 16.75 (8.385) | -0.26 |
| (OSI) Psychological strain | 20 | 19.70 (5.704) | 20.95 (7.736) | -1.03 |
| (OSI) Interpersonal strain | 19 | 19.53 (5.221) | 19.37 (3.166) | 0.18 |
| (OSI) Physical strain | 20 | 19.75 (5.630) | 19.90 (6.357) | -0.14 |

Note. [a] Number of subjects returning completed tests for both time periods. **indicates $p<.01$

(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 5 1 week post test vs. 12 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales (continued)

| Test | n[a] | Mean 1 week post (Std. Dev.) | Mean 12 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Recreation | 20 | 27.4 (6.176) | 27.85 (5.38) | -0.38 |
| (OSI) Self care | 19 | 30.58 (6.518) | 29.68 (7.150) | 0.65 |
| (OSI) Social support | 20 | 41.35 (5.537) | 40.75 (4.038) | 0.71 |
| (OSI) Rational/cognitive | 19 | 36.68 (5.963) | 37.16 (6.085) | -0.44 |
| (OSI) Occupational roles | 19 | 131.2 (24.48) | 128.6 (27.48) | 0.90 |
| (OSI) Personal strain | 18 | 72.17 (15.76) | 74.72 (18.39) | -0.88 |
| (OSI) Personal resources | 19 | 135.9 (18.17) | 136.3 (16.06) | -0.11 |
| (STAI) State anxiety | 21 | 31.10 (9.038) | 35.28 (13.05) | -1.49 |
| (STAI) Trait anxiety | 16 | 35.19 (6.911) | 35.94 (8.39) | -0.39 |
| (MBI) Emotional exhaustion | 18 | 20.44 (10.63) | 18.33 (11.24) | 1.12 |
| (MBI) Depersonalization | 18 | 6.83 (6.129) | 4.61 (4.767) | 1.58 |
| (MBI) Personal accomplishment | 17 | 38.94 (3.418) | 36.94 (10.41) | 0.70 |

Note. [a] Number of subjects returning completed tests for both time periods. **indicates p<.01 * indicates p<.05

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 6 6 week post test vs. 12 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales

| Test | n[a] | Mean 6 week post (Std. Dev.) | Mean 12 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Role overload | 19 | 24.05 (5.701) | 23.26 (5.933) | 0.97 |
| (OSI) Role insufficiency | 18 | 19.72 (5.497) | 20.94 (5.926) | -2.26 |
| (OSI) Role ambiguity | 18 | 19.28 (6.815) | 19.44 (6.214) | -0.19 |
| (OSI) Role boundary | 18 | 19.61 (6.156) | 20.28 (6.832) | -0.84 |
| (OSI) Responsibility | 19 | 23.68 (6.386) | 23.26 (6.765) | 0.42 |
| (OSI) Physical environment | 19 | 19.00 (6.856) | 18.63 (7.033) | 0.49 |
| (OSI) Vocational strain | 19 | 16.68 (8.622) | 16.89 (8.589) | -0.26 |
| (OSI) Psychological strain | 19 | 19.68 (6.507) | 21.00 (7.944) | -1.08 |
| (OSI) Interpersonal strain | 19 | 18.63 (5.134) | 19.37 (3.166) | -0.84 |
| (OSI) Physical strain | 19 | 17.53 (4.623) | 19.79 (6.451) | -2.57 |

Note. a Number of subjects returning completed tests for both time periods. **indicates p<.01
(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 6 6 week post test vs. 12 week post test t-test comparisons with Occupational Stress Inventory (OSI) State Trait Anxiety Inventory (STAI) and Maslach Burnout Inventory (MBI) scales (continued)

| Test | n[a] | Mean 6 week post (Std. Dev.) | Mean 12 week post (Std. Dev.) | t |
|---|---|---|---|---|
| (OSI) Recreation | 19 | 27.42 (6.292) | 26.63 (5.584) | -0.44 |
| (OSI) Self care | 19 | 30.32 (7.739) | 29.47 (7.168) | 0.66 |
| (OSI) Social support | 19 | 42.10 (5.744) | 41.05 (3.908) | 0.96 |
| (OSI) Rational/cognitive | 18 | 38.00 (6.704) | 37.17 (6.261) | 0.66 |
| (OSI) Occupational roles | 17 | 126.35 (27.35) | 118.00 (29.22) | -0.32 |
| (OSI) Personal strain | 18 | 70.22 (16.67) | 74.72 (18.39) | -1.44 |
| (OSI) Personal resources | 17 | 138.65 (19.05) | 137.88 (15.90) | 0.27 |
| (STAI) State anxiety | 18 | 33.61 (11.03) | 35.39 (14.02) | -0.59 |
| (STAI) Trait anxiety | 14 | 34.71 (9.177) | 35.28 (7.680) | -0.35 |
| (MBI) Emotional exhaustion | 16 | 17.81 (6.988) | 19.62 (11.06) | -0.95 |
| (MBI) Depersonalization | 16 | 7.44 (5.773) | 4.81 (4.983) | 1.49 |
| (MBI) Personal accomplishment | 15 | 37.27 (7.035) | 39.13 (4.486) | -1.38 |

Note. [a] Number of subjects returning completed tests for both time periods. **indicates $p<.01$ * indicates $p<.05$

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of 4.50 (N = 30, SD = 0.63) was received. An average score of 4.57 resulted when participants were asked how well the workshops addressed nursing concerns (N = 30, SD = 0.63). And a mean rating of 4.67 was produced when asked whether they would recommend these workshops to co-workers (N = 30, SD = 0.61). Table 7 and Table 8 presents the remainder of the workshop evaluation information. Suggestions and a listing of aspects of the workshops they perceived as being helpful are offered.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 7
Workshop aspects perceived as being helpful

| Aspect | Total number of citations |
|---|---|
| Stress management techniques | 6 |
| Realize how common stressful situations are | 2 |
| Assertiveness | 4 |
| Encouraged to voice feelings and opinions | 4 |
| Recognizing symptoms | 4 |
| Cognitive techniques | 7 |
| Co-workers/Social strategies | 2 |
| Input from other nurses | 5 |
| Reinforced previously-learned material | 3 |
| Lists of stress-reducing suggestions | 2 |
| Specific scenarios/suggestions | 1 |
| Small group size | 2 |
| Specific to nursing | 1 |
| Managerial/organizational strategies | 3 |
| Adding eustress | 1 |
| Frustration | 1 |
| Relaxation techniques | 12 |

Number of RN's and RNA's responding = 30.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 8

Suggestions offered following participation in workshops

| Suggestions | Total number of citations |
|---|---|
| Advertise more | 1 |
| Gear less for hospital nurses | 1 |
| Include more on social strategies | 1 |
| Shorten the orientation phase | 1 |
| Coworker management | 2 |
| Keep groups small | 1 |
| Hold more discussions | 5 |
| Present to all staff, not only RN's | 1 |
| Hold more "exercises" | 2 |
| Distribute handouts | 1 |
| Distribute agendas | 1 |
| Have people facing each other | 1 |
| Less repetition | 1 |
| Hold more workshops | 1 |
| Present workshops more often | 1 |
| Use additional teaching methods (eg. video) | 1 |
| Hold 1 more relaxation exercise per day | 1 |
| More info on recognizing symptoms | 1 |

Number of RN's and RNA's responding = 30.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Discussion

The introduction to this paper outlined a number of specific results which were expected. One of these hypotheses pertained to the use of the State Trait Anxiety Inventory (STAI). Johnson (1979) found that this tool was useful in detecting differing levels of anxiety in nurses working on psychiatric, medical, and surgical units. The results of this experiment found that no statistically significant differences were detected. It would appear that anxiety, as measured by the STAI, did not change significantly when a hetereogeneous sample of nurses took part in a stress management workshop. It is possible that nurses working in units which are associated with higher levels of stress may benefit from stress management training. However, if a sample is comprised of nurses from different units, such as was the case presently, reductions in anxiety which may occur for nurses working in high-anxiety units may not be detected when averaged in with the results of participants working in areas associated with lower levels of anxiety. It would be useful to ascertain whether stress workshops would prove helpful to a sample of registered nurses which do rate highly on measures of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

state and trait anxiety. The present sample was not large enough to analyze the effects of the stress workshops on a high-anxiety group.

Howard and Szczerbacki (1988) reported that marital discord was the number one personal problem for health care workers in an American study. Therefore, in this study, such concerns were expected to rate at the top of reported sources of stress. This was not found to be the case. In the present study, the source of stress most often reported on the demographic questionnaire were 'financial concerns'. This was followed by 'shift schedules'. 'Relationship and/or marital concerns' equaled 'work' as the third most often cited source of stress.

It would be beneficial to extend this study over a longer period of post-testing. The reasons for this suggestion are outlined as follows.

Comparisons of pretest scores and twelfth week post-test scores noted some beneficial changes. Occupational Stress Inventory's (OSI) Role Overload scale decreased significantly. It was designed to measure how often a person is likely to describe their workload as increasing and/or becoming unreasonable, that they are constrained by deadlines, and feel that

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

they are not supported by workplace resources. The Maslach Burnout Inventory's subscale which examines emotional exhaustion considers the extent to which a person feels drained by the emotional involvement required when helping others. Results indicated that participants reported less emotional exhaustion at the 12-week follow-up. Lower levels of emotional exhaustion are associated with a decreased risk of burnout.

An extended study would be useful because if stress levels are found to increase over a gradual, predictable period of time it may be useful to offer booster sessions on a regular basis. This could be done as a means preventing stress levels from returning to, or reaching undesirable levels.

It is worthy noting that throughout the course of this experiment the Occupational Roles Questionnaire (ORQ) of the Occupational Stress Inventory did not alter throughout the posttesting. This scale is designed to be an overall measure of occupational stress. It is a combined scale which is composed of the Role Overload, Role Insufficiency, Role Ambiguity, Role Boundary, Physical Environment, and Responsibility subtests. Of these, only role overload changed significantly when comparing 12-week results to pretest scores. Role

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Overload did decrease significantly, which suggests that the nurses involved rated themselves higher in their ability to meet the demands of the workplace. The remaining scales detected no measurable differences in ratings of the demands inherent in the physical workplaces in which the nurses did their jobs, their understanding of their professional roles, the amount of responsibility inherent in the job, and in their perceptions of how well their training prepared them to meet the demands at hand. This suggests that no dramatic changes were made to the physical work environments in which nurses functioned, or in the expectations related to their particular jobs. This is not surprising when one considers that a stress management workshop did not alter specific aspects of their job or change the work environments in which these nurses were employeed. In order to directly target these aspects, one may have to change the job descriptions of nurses and modify their physical work settings. This was not within the mandate of the current investigation.

It is desirable to utilize a control group in additional studies. Obtaining a sample from a single work environment would be preferable as well. It is a limitation of the current study that the small sample

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

size obtained did not permit the participation of a control group. The testing of a control group at the same time as the experimental group would have reduced the influence of events which might have taken place between pre- and post-testing. The demographic data (Appendix L) noted that considerable service reductions and workplace lay offs had occurred during the six months prior to the study. It is quite possible that further modifications took place during he course of the study which may have influenced results. Utilizing a control group would allow one to contrast the post-workshop group against a sample which also had to contend with workplace changes without the expected benefit of stress management training.

The use of control groups could also determine the utility of the didactic presentation. Facilitating a meeting of nurses in which they were permitted to voice personal and professional concerns may be very useful. Receiving "input from other nurses" and feeling "encouraged to voice feelings and opinions" were listed as workshop aspects which were perceived as being helpful. It is possible that this social support was very beneficial to those involved. Allowing for such a control group could allow for the contrasting of stress

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

levels in this group against a sample which had been exposed to stress management training.

Furthermore, exposing a control group to a didactic presentation of material which is not stress management related would be beneficial. This would allow for the comparison of whether the stress management material was itself valuable.

Utilizing a control group would also reduce the likelihood of incorrectly finding that there is no change as the result of experimental manipulation (Type II error). Regression toward the mean refers to the tendency for subjects who have pre-test scores which are either very high or very low tend to have results which are closer to the mean when retested. Therefore, although an experimental intervention may indeed have a very real effect, it is less likely to be found to produce a statistical difference.

If a control group were to be solicited in a replication of the current study it would be useful to examine the aspect of burnout. The Emotional Exhaustion scale of the Maslach Burnout Inventory decreased at six weeks and at twelve weeks posttesting when each was compared to the pretest score. It would be intriguing to compare the results of a control group with the post-

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

workshop group in order to determine whether the controls would be more apt to experience burnout as measured by the scale. Emotional exhaustion is one of three factors identified with the development of burnout. Should the decreases found within he stress management group be maintained, they may present a reduced risk of burning out.

Should adequate numbers of participants be available for a replication study, it would be good to isolate participants to specific workplaces. Kelly and Cross (1985) found that American ICU and ward nurses reported differing levels of stress. In the present study, nurses were involved from varied work environments and were consequently exposed to differing stressors. Results of the present study indicate that this heterogeneous group of nurses achieved potentially positive results following the stress workshop. It may be useful to examine whether nurses from different units would benefit to a similar degree.

Including a sample which was employed within a single work environment could reduce confounding changes during the course of experimentation. It was noted in the demographic information questionnaire that bed closures and hospital reorganization was quite common

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

during the present study. Therefore, a variety of confounding influences were likely presented throughout the various workplaces. Although the current results are promising, the degree to which these influences impacted upon the registered nurses involved was not determinable.

The frequent use t-tests in this study increased the liklihood that statistically significant results could be obtained from chance alone (Type I Error). In this study, results were only deemed significant if differences were found at the .01 probability level. This was done in order to increase confidence that the differences found were less likely to be due to chance. Efforts to compensate for t-test error rates should be incorporated into replication studies. A within-subjects MANOVA would have been a more valuable statistical tool.

There were no scales on the Maslach Burnout Inventory which were placed in the high level of categorization. This is consistent with study results Sullivan (1993) which found that British psychiatric nurses obtained moderate ratings on each of the three burnout measures when compared to the standardization sample of medical workers. The low levels of risk of burnout presently found suggest that feelings of burnout

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

likely did not act as an impetus to participate in these stress management workshops. It would be worthy to investigate whether individuals who do report high scores on the burnout scales would be more or less apt to seek out stress management interventions.

O'Brien and Page (1994) reported in a study of Canadian nurses that their attitudes and beliefs about the expectations of others (socially-prescribed perfectionism) was a significant predictor of life, and of job satisfaction. They also found that high levels of nursing stress were not significantly associated with low levels of overall life satisfaction. This study also identified a group of nurses who rated themselves as being high in their ability motivate themselves and utilize the cognitive resources and behaviours necessary to meet situational demands (self-efficacy). This group of nurses was found to indicate that they experienced more job and life satisfaction. The materials presented in the current workshops were designed to teach coping skills that included cognitive strategies. If self-efficacy increased as a result of workshop interventions, it is possible that job satisfaction may increase. It would be valuable to utilize measures of perfectionism, life satisfaction, job satisfaction and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

self-efficacy in subsequent outcome studies of workshops.

The current investigation was undertaken in order to determine whether stress management workshops would prove useful in the midst of considerable professional evolution. The results of this study suggest that such interventions may well be valuable. Further research should be focused in this area. Should such short-term efforts prove consistently beneficial, staff education departments may well be interested. Outcome studies including staff performance evaluations, rates of absenteeism, and patients' perceived levels of satisfaction could be undertaken. Such indirect indicators could further detect changes which may result if staff members experience lower levels of stress.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix A

## Workshop Presentation Topics

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## OUTLINE OF WORKSHOP TOPICS

Module 1:
- Definition of stress
- Definition of tedium and burnout
- Physical symptoms of stress
- Psychological symptoms of stress
- Behavioural consequences of stress
- Identifying specific workplace stressors which affect nurses

Module 2:
- Definition of "role conflict"
- Identifying and accepting personal limitations
- Defining loci of control
- Reducing feelings of helplessness
- Reducing frustration
- Stress-producing beliefs and cognitive therapy techniques
- Stress-reducing methods:
  - Relaxation techniques - demonstration:
    - autogenic
    - progressive-muscle
    - biofeedback

Module 3:
- Exercise and decompression
- Diet
- Self-reinforcement
- Physical escape and avoidance
- Developing "detached concern"
- Humor
- Time management

Module 4:
- Assertiveness: confronting the source of stress
- Social strategies (co-workers helping one another)
- Organizational strategies (developing a less-stressful workplace)
- Managerial approaches of reducing/preventing stress

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix B

## State-Trait Anxiety Inventory

## (Spielberger, Gorsch, & Lushene, 1970)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# SELF-EVALUATION QUESTIONNAIRE

Developed by Charles D. Spielberger
in collaboration with
R. L. Gorsuch, R. Lushene, P. R. Vagg, and G. A. Jacobs

**STAI Form Y-1**

Name _____ Date _____ S ___

Age _____ Sex: M ___ F ___ T ___

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you feel *right* now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

| | NOT AT ALL | SOMEWHAT | MODERATELY SO | VERY MUCH SO |
|---|---|---|---|---|
| 1. I feel calm | ① | ② | ③ | ④ |
| 2. I feel secure | ① | ② | ③ | ④ |
| 3. I am tense | ① | ② | ③ | ④ |
| 4. I feel strained | ① | ② | ③ | ④ |
| 5. I feel at ease | ① | ② | ③ | ④ |
| 6. I feel upset | ① | ② | ③ | ④ |
| 7. I am presently worrying over possible misfortunes | ① | ② | ③ | ④ |
| 8. I feel satisfied | ① | ② | ③ | ④ |
| 9. I feel frightened | ① | ② | ③ | ④ |
| 10. I feel comfortable | ① | ② | ③ | ④ |
| 11. I feel self-confident | ① | ② | ③ | ④ |
| 12. I feel nervous | ① | ② | ③ | ④ |
| 13. I am jittery | ① | ② | ③ | ④ |
| 14. I feel indecisive | ① | ② | ③ | ④ |
| 15. I am relaxed | ① | ② | ③ | ④ |
| 16. I feel content | ① | ② | ③ | ④ |
| 17. I am worried | ① | ② | ③ | ④ |
| 18. I feel confused | ① | ② | ③ | ④ |
| 19. I feel steady | ① | ② | ③ | ④ |
| 20. I feel pleasant | ① | ② | ③ | ④ |

**Consulting Psychologists Press, Inc.**
**3803 E. Bayshore Road • Palo Alto, CA 94303**

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# SELF-EVALUATION QUESTIONNAIRE

**STAI Form Y-2**

Name _____ Date _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

| | ALMOST NEVER | SOMETIMES | OFTEN | ALMOST ALWAYS |
|---|---|---|---|---|
| 21. I feel pleasant | ① | ② | ③ | ④ |
| 22. I feel nervous and restless | ① | ② | ③ | ④ |
| 23. I feel satisfied with myself | ① | ② | ③ | ④ |
| 24. I wish I could be as happy as others seem to be | ① | ② | ③ | ④ |
| 25. I feel like a failure | ① | ② | ③ | ④ |
| 26. I feel rested | ① | ② | ③ | ④ |
| 27. I am "calm, cool, and collected" | ① | ② | ③ | ④ |
| 28. I feel that difficulties are piling up so that I cannot overcome them | ① | ② | ③ | ④ |
| 29. I worry too much over something that really doesn't matter | ① | ② | ③ | ④ |
| 30. I am happy | ① | ② | ③ | ④ |
| 31. I have disturbing thoughts | ① | ② | ③ | ④ |
| 32. I lack self-confidence | ① | ② | ③ | ④ |
| 33. I feel secure | ① | ② | ③ | ④ |
| 34. I make decisions easily | ① | ② | ③ | ④ |
| 35. I feel inadequate | ① | ② | ③ | ④ |
| 36. I am content | ① | ② | ③ | ④ |
| 37. Some unimportant thought runs through my mind and bothers me | ① | ② | ③ | ④ |
| 38. I take disappointments so keenly that I can't put them out of my mind | ① | ② | ③ | ④ |
| 39. I am a steady person | ① | ② | ③ | ④ |
| 40. I get in a state of tension or turmoil as I think over my recent concerns and interests | ① | ② | ③ | ④ |

*Copyright 1968, 1977 by Charles D. Spielberger. Reproduction of this test or any portion thereof by any process without written permission of the Publisher is prohibited.*

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# SELF-EVALUATION QUESTIONNAIRE

**STAI Form Y-2**

Name _____ Date _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

| | ALMOST NEVER | SOMETIMES | OFTEN | ALMOST ALWAYS |
|---|---|---|---|---|
| 21. I feel pleasant | ① | ② | ③ | ④ |
| 22. I feel nervous and restless | ① | ② | ③ | ④ |
| 23. I feel satisfied with myself | ① | ② | ③ | ④ |
| 24. I wish I could be as happy as others seem to be | ① | ② | ③ | ④ |
| 25. I feel like a failure | ① | ② | ③ | ④ |
| 26. I feel rested | ① | ② | ③ | ④ |
| 27. I am "calm, cool, and collected" | ① | ② | ③ | ④ |
| 28. I feel that difficulties are piling up so that I cannot overcome them | ① | ② | ③ | ④ |
| 29. I worry too much over something that really doesn't matter | ① | ② | ③ | ④ |
| 30. I am happy | ① | ② | ③ | ④ |
| 31. I have disturbing thoughts | ① | ② | ③ | ④ |
| 32. I lack self-confidence | ① | ② | ③ | ④ |
| 33. I feel secure | ① | ② | ③ | ④ |
| 34. I make decisions easily | ① | ② | ③ | ④ |
| 35. I feel inadequate | ① | ② | ③ | ④ |
| 36. I am content | ① | ② | ③ | ④ |
| 37. Some unimportant thought runs through my mind and bothers me | ① | ② | ③ | ④ |
| 38. I take disappointments so keenly that I can't put them out of my mind | ① | ② | ③ | ④ |
| 39. I am a steady person | ① | ② | ③ | ④ |
| 40. I get in a state of tension or turmoil as I think over my recent concerns and interests | ① | ② | ③ | ④ |

*Copyright 1968, 1977 by Charles D. Spielberger. Reproduction of this test or any portion thereof by any process without written permission of the Publisher is prohibited.*

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix C

## Maslach Burnout Inventory

## (Maslach & Jackson, 1986).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

*Christina Maslach • Susan E. Jackson*

# *Human Services Survey*

The purpose of this survey is to discover how various persons in the human services or helping professions view their jobs and the people with whom they work closely. Because persons in a wide variety of occupations will answer this survey, it uses the term *recipients* to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way *about your job.* If you have *never* had this feeling, write a "0" (zero) before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

**Example:**

| HOW OFTEN: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| | Never | A few times a year or less | Once a month or less | A few times a month | Once a week | A few times a week | Every day |

| HOW OFTEN 0 - 6 | Statement: |
|---|---|
| _____ | I feel depressed at work. |

If you *never* feel depressed at work, you would write the number "0" (zero) under the heading "HOW OFTEN." If you *rarely* feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week, but not daily) you would write a "5."

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# *Human Services Survey*

| HOW OFTEN: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| | Never | A few times a year or less | Once a month or less | A few times a month | Once a week | A few times a week | Every day |

| HOW OFTEN 0 - 6 | Statements: |
|---|---|
| 1. _____ | I feel emotionally drained from my work. |
| 2. _____ | I feel used up at the end of the workday. |
| 3. _____ | I feel fatigued when I get up in the morning and have to face another day on the job. |
| 4. _____ | I can easily understand how my recipients feel about things. |
| 5. _____ | I feel I treat some recipients as if they were impersonal objects. |
| 6. _____ | Working with people all day is really a strain for me. |
| 7. _____ | I deal very effectively with the problems of my recipients. |
| 8. _____ | I feel burned out from my work. |
| 9. _____ | I feel I'm positively influencing other people's lives through my work. |
| 10. _____ | I've become more callous toward people since I took this job. |
| 11. _____ | I worry that this job is hardening me emotionally. |
| 12. _____ | I feel very energetic. |
| 13. _____ | I feel frustrated by my job. |
| 14. _____ | I feel I'm working too hard on my job. |
| 15. _____ | I don't really care what happens to some recipients. |
| 16. _____ | Working with people directly puts too much stress on me. |
| 17. _____ | I can easily create a relaxed atmosphere with my recipients. |
| 18. _____ | I feel exhilarated after working closely with my recipients. |
| 19. _____ | I have accomplished many worthwhile things in this job. |
| 20. _____ | I feel like I'm at the end of my rope. |
| 21. _____ | In my work, I deal with emotional problems very calmly. |
| 22. _____ | I feel recipients blame me for some of their problems. |

| (Administrative use only) | | cat. | | cat. | | cat. |
|---|---|---|---|---|---|---|
| | EE: _____ | _____ | DP: _____ | _____ | PA: _____ | _____ |

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Please Return

# Directions

Read each statement carefully. For each statement, fill in the circle with the number which fits you best.

Fill in (1) if the statement is *rarely* or *never* true.
Fill in (2) if the statement is *occasionally* true.
Fill in (3) if the statement is *often* true.
Fill in (4) if the statement is *usually* true.
Fill in (5) if the statement is true *most of the time.*

For example, if you believe that a statement is often true about you, you would fill in the (3) circle for that statement on your rating sheet.

**Example**

1. ① ② ● ④ ⑤

Fill in only one circle for each statement. Be sure to rate ALL of the statements for each section you are asked to complete. DO NOT ERASE! If you need to change an answer, make an "X" through the incorrect response and then fill in the correct circle.



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Section One (ORQ)

Make your ratings in Section One of the Rating Sheet.

1. At work I am expected to do too many different tasks in too little time.
2. I feel that my job responsibilities are increasing.
3. I am expected to perform tasks on my job for which I have never been trained.
4. I have to take work home with me.
5. I have the resources I need to get my job done.
6. I feel competent in what I do.
7. I work under tight time deadlines.
8. I wish that I had more help to deal with the demands placed upon me at work.
9. My job requires me to work in several equally important areas at once.
10. I am expected to do more work than is reasonable.
11. I feel that my career is progressing about as I hoped it would.
12. I feel that my job fits my skills and interests.
13. I am bored with my job.
14. I feel I have enough responsibility on my job.
15. I feel my talents are being used on my job.
16. I feel my job has a good future.
17. I am able to satisfy my needs for success and recognition in my job.
18. I feel overqualified for my job.
19. I learn new skills in my work.
20. I have to perform tasks that are beneath my ability.
21. My supervisor provides me with useful feedback about my performance.
22. It is clear to me what I have to do to get ahead.
23. I am uncertain about what I am supposed to accomplish in my work.
24. When faced with several tasks I know which should be done first.
25. I know where to begin a new project when it is assigned to me.
26. My supervisor asks for one thing, but really wants another.
27. I understand what is acceptable personal behavior on my job (e.g., dress, interpersonal relations, etc.)
28. The priorities of my job are clear to me.
29. I have a clear understanding of how my boss wants me to spend my time.
30. I know the basis on which I am evaluated.
31. I feel conflict between what my employer expects me to do and what I think is right or proper.
32. I feel caught between factions at work.
33. I have more than one person telling me what to do.
34. I feel I have a stake in the success of my employer (or enterprise).
35. I feel good about the work I do.
36. My supervisors have conflicting ideas about what I should be doing.
37. I am proud of what I do for a living.
38. It is clear who really runs things where I work.
39. I have divided loyalties on my job.
40. The work I do has as much payoff for me as for my employer.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

41. I feel I deal with more people during the day than I prefer.
42. I spend time concerned with the problems others at work bring to me.
43. I am responsible for the welfare of subordinates.
44. People on the job look to me for leadership.
45. I have on the job responsibility for the activities of others.
46. I worry about whether the people who work for/with me will get things done properly.
47. People who work for/with me are really hard to deal with.
48. If I make a mistake in my work, the consequences for others can be pretty bad.
49. My job demands that I handle an angry public.
50. I like the people I work with.
51. On my job I am exposed to high levels of noise.
52. On my job I am exposed to high levels of wetness.
53. On my job I am exposed to high levels of dust.
54. On my job I am exposed to high temperatures.
55. On my job I am exposed to bright light.
56. On my job I am exposed to low temperatures.
57. I have an erratic work schedule.
58. On my job I am exposed to personal isolation.
59. On my job I am exposed to unpleasant odors.
60. On my job I am exposed to poisonous substances.



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Section Two (PSQ)

Make your ratings in Section Two of the Rating Sheet.

1. I don't seem to be able to get much done at work.
2. I dread going to work. lately.
3. I am bored with my work.
4. I find myself getting behind in my work. lately.
5. I have accidents on the job of late.
6. The quality of my work is good.
7. Recently. I have been absent from work.
8. I find my work interesting and/or exciting.
9. I can concentrate on the things I need to at work.
10. I make errors or mistakes in my work.
11. Lately, I am easily irritated.
12. Lately. I have been depressed.
13. Lately, I have been feeling anxious.
14. I have been happy, lately.
15. So many thoughts run through my head at night that I have trouble falling asleep.
16. Lately, I respond badly in situations that normally wouldn't bother me.
17. I find myself complaining about little things.
18. Lately, I have been worrying.
19. I have a good sense of humor.
20. Things are going about as they should.
21. I wish I had more time to spend with close friends.
22. I quarrel with my spouse.
23. I quarrel with friends.
24. My spouse and I are happy together.
25. Lately, I do things by myself instead of with other people.
26. I quarrel with members of the family.
27. Lately, my relationships with people are good.
28. I find that I need time to myself to work out my problems.
29. I wish I had more time to spend by myself.
30. I have been withdrawing from people lately.
31. I have unplanned weight gains.
32. My eating habits are erratic.
33. I find myself drinking a lot lately.
34. Lately, I have been tired.
35. I have been feeling tense.
36. I have trouble falling and staying asleep.
37. I have aches and pains I can not explain.
38. I eat the wrong foods.
39. I feel apathetic.
40. I feel lethargic.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Section Three (PRQ)

Make your ratings in Section Three of the Rating Sheet.

1. When I need a vacation I take one.
2. I am able to do what I want to do in my free time.
3. On weekends I spend time doing the things I enjoy most.
4. Lately, my main recreational activity is watching television.
5. A lot of my free time is spent attending performances (e.g., sporting events, theater, movies, concerts, etc.).
6. I spend a lot of my free time in participant activities (e.g., sports, music, painting, woodworking, sewing, etc.).
7. I spend a lot of my time in community activities (e.g., scouts, religious, school, local, government, etc.).
8. I find engaging in recreational activities relaxing.
9. I spend enough time in recreational activities to satisfy my needs.
10. I spend a lot of my free time on hobbies (e.g., collections of various kinds, etc.)
11. I am careful about my diet (e.g., eating regularly, moderately, and with good nutrition in mind).
12. I get regular physical checkups.
13. I avoid excessive use of alcohol.
14. I exercise regularly (at least 20 minutes most days).
15. I practice "relaxation" techniques.
16. I get the sleep I need.
17. I avoid eating or drinking things I know are unhealthy (e.g., coffee, tea, cigarettes, etc.).
18. I engage in meditation.
19. I practice deep breathing exercises a few minutes several times each day.
20. I set aside time to do the things I really enjoy.
21. There is at least one person important to me who values me.
22. I have help with tasks around the house.
23. I have help with the important things that have to be done.
24. There is at least one sympathetic person with whom I can discuss my concerns.
25. There is at least one sympathetic person with whom I can discuss my work problems.
26. I feel I have at least one good friend I can count on.
27. I feel loved.
28. There is a person with whom I feel really close.
29. I have a circle of friends who value me.
30. I gain personal benefit from participation in formal social groups (e.g., religious, political, professional organizations, etc.)
31. I am able to put my job out of my mind when I go home.
32. I feel that there are other jobs I could do besides my current one.
33. I periodically re-examine or reorganize my work style and schedule.
34. I can establish priorities for the use of my time.
35. Once they are set, I am able to stick to my priorities.
36. I have techniques to help avoid being distracted.
37. I can identify important elements of problems I encounter.
38. When faced with a problem I use a systematic approach.
39. When faced with the need to make a decision I try to think through the consequences of choices I might make.
40. I try to keep aware of important ways I behave and things I do.



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# OSI Rating Sheet - Form HS

Name _____ Age _____ Sex _____

Job Title _____ Date _____

## Section One (ORQ)

| | | | | | |
|---|---|---|---|---|---|
| 1 ①②③④⑤ | 11 ①②③④⑤ | 21 ①②③④⑤ | 31 ①②③④⑤ | 41 ①②③④⑤ | 51 ①②③④⑤ |
| 2 ①②③④⑤ | 12 ①②③④⑤ | 22 ①②③④⑤ | 32 ①②③④⑤ | 42 ①②③④⑤ | 52 ①②③④⑤ |
| 3 ①②③④⑤ | 13 ①②③④⑤ | 23 ①②③④⑤ | 33 ①②③④⑤ | 43 ①②③④⑤ | 53 ①②③④⑤ |
| 4 ①②③④⑤ | 14 ①②③④⑤ | 24 ①②③④⑤ | 34 ①②③④⑤ | 44 ①②③④⑤ | 54 ①②③④⑤ |
| 5 ①②③④⑤ | 15 ①②③④⑤ | 25 ①②③④⑤ | 35 ①②③④⑤ | 45 ①②③④⑤ | 55 ①②③④⑤ |
| 6 ①②③④⑤ | 16 ①②③④⑤ | 26 ①②③④⑤ | 36 ①②③④⑤ | 46 ①②③④⑤ | 56 ①②③④⑤ |
| 7 ①②③④⑤ | 17 ①②③④⑤ | 27 ①②③④⑤ | 37 ①②③④⑤ | 47 ①②③④⑤ | 57 ①②③④⑤ |
| 8 ①②③④⑤ | 18 ①②③④⑤ | 28 ①②③④⑤ | 38 ①②③④⑤ | 48 ①②③④⑤ | 58 ①②③④⑤ |
| 9 ①②③④⑤ | 19 ①②③④⑤ | 29 ①②③④⑤ | 39 ①②③④⑤ | 49 ①②③④⑤ | 59 ①②③④⑤ |
| 10 ①②③④⑤ | 20 ①②③④⑤ | 30 ①②③④⑤ | 40 ①②③④⑤ | 50 ①②③④⑤ | 60 ①②③④⑤ |

1 is *rarely* or *never*. 2 is *occasionally*. 3 is *often*. 4 is *usually*. 5 is *most of the time*

## Section Two (PSQ)

| | | | |
|---|---|---|---|
| 1 ①②③④⑤ | 11 ①②③④⑤ | 21 ①②③④⑤ | 31 ①②③④⑤ |
| 2 ①②③④⑤ | 12 ①②③④⑤ | 22 ①②③④⑤ | 32 ①②③④⑤ |
| 3 ①②③④⑤ | 13 ①②③④⑤ | 23 ①②③④⑤ | 33 ①②③④⑤ |
| 4 ①②③④⑤ | 14 ①②③④⑤ | 24 ①②③④⑤ | 34 ①②③④⑤ |
| 5 ①②③④⑤ | 15 ①②③④⑤ | 25 ①②③④⑤ | 35 ①②③④⑤ |
| 6 ①②③④⑤ | 16 ①②③④⑤ | 26 ①②③④⑤ | 36 ①②③④⑤ |
| 7 ①②③④⑤ | 17 ①②③④⑤ | 27 ①②③④⑤ | 37 ①②③④⑤ |
| 8 ①②③④⑤ | 18 ①②③④⑤ | 28 ①②③④⑤ | 38 ①②③④⑤ |
| 9 ①②③④⑤ | 19 ①②③④⑤ | 29 ①②③④⑤ | 39 ①②③④⑤ |
| 10 ①②③④⑤ | 20 ①②③④⑤ | 30 ①②③④⑤ | 40 ①②③④⑤ |

1 is *rarely* or *never*. 2 is *occasionally*. 3 is *often*. 4 is *usually*. 5 is *most of the time*

## Section Three (PRQ)

| | | | |
|---|---|---|---|
| 1 ①②③④⑤ | 11 ①②③④⑤ | 21 ①②③④⑤ | 31 ①②③④⑤ |
| 2 ①②③④⑤ | 12 ①②③④⑤ | 22 ①②③④⑤ | 32 ①②③④⑤ |
| 3 ①②③④⑤ | 13 ①②③④⑤ | 23 ①②③④⑤ | 33 ①②③④⑤ |
| 4 ①②③④⑤ | 14 ①②③④⑤ | 24 ①②③④⑤ | 34 ①②③④⑤ |
| 5 ①②③④⑤ | 15 ①②③④⑤ | 25 ①②③④⑤ | 35 ①②③④⑤ |
| 6 ①②③④⑤ | 16 ①②③④⑤ | 26 ①②③④⑤ | 36 ①②③④⑤ |
| 7 ①②③④⑤ | 17 ①②③④⑤ | 27 ①②③④⑤ | 37 ①②③④⑤ |
| 8 ①②③④⑤ | 18 ①②③④⑤ | 28 ①②③④⑤ | 38 ①②③④⑤ |
| 9 ①②③④⑤ | 19 ①②③④⑤ | 29 ①②③④⑤ | 39 ①②③④⑤ |
| 10 ①②③④⑤ | 20 ①②③④⑤ | 30 ①②③④⑤ | 40 ①②③④⑤ |

1 is *rarely* or *never*. 2 is *occasionally*. 3 is *often*. 4 is *usually*. 5 is *most of the time*

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix D

## Occupational Stress Inventory (OSI)

## (Osipow & Spokane, 1987)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix E

## Demographic Information Sheet

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Demographic Information Sheet

Name: _____.

Age: _____.

Sex: _____. Unit/Department:_____.

Position held: _____.

Time spent in this position:_____.

Full/part time/casual:_____.

Type of training completed:_____.

Years spent in nursing practice:_____.

Are you in your specialty of choice?_____.

What schedule do you generally work:_____.

Marital Status:_____.

Is your spouse/mate employed?_____.

Are you the primary wage earner?_____.

Would you consider your mate to be adequately supportive?

_____.

Do you have children?_____. How many?_____.

If you have children, is daycare accessibility an issue?_____.

Have you attended a stress management workshop previously?

_____.

Reasons for attending workshop:_____.

_____.

_____.

_____.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Perceived sources of stress (eg. marital, financial, co-workers, shifts, etc.):

._____.

_____.

_____.

_____.

_____.

_____.

How has stress effected you?_____.

_____.

_____.

_____.

Has your organization laid-off nursing staff in the past six months?

. If so, do you consider these layoffs to have been necessary? _____.

In your opinion, were these layoffs completed fairly?_____.

Have you been laid-off from a nursing job in the past?_____. If so, how long ago?_____.

Has your hospital/organization closed beds during the past six months? ___.

Has your hospital/organization eliminated or reduced services during the past six months? _____.If so, were you personally effected by these changes? _____. How? _____.

_____.

_____.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix F

## Workshop Evaluation Form

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## *Workshop Evaluation Form*

Please circle the response on each continuum which best reflects your opinion.

1. How informative did you find the workshop?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| not at all | mildly | moderately | quite | very |

2. How well was the material presented?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| not at all | mildly | moderately | quite | very |

3. How useful did you find the material?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| not at all | mildly | moderately | quite | very |

4. How well did the workshop address nursing concerns?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| not at all | mildly | moderately | quite | very |

5. Would you recommend this workshop to co-workers?

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| not at all | mildly | moderately | quite | very |

6. Which aspects of the workshop did you find particularly helpful?

_____.
_____.
_____.
_____.

7. Suggestions _____.
_____.
_____.
_____.
_____.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix G

## Participant Cover Letter

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

LAKEHEAD UNIVERSITY

955 Oliver Road, Thunder Bay, Ontario, Canada P7B 5E1

Department of Psychology
Telephone (807) 343-8441

## A WORKSHOP INTERVENTION APPROACH TO NURSING STRESS MANAGEMENT

Dear Participant:

We are conducting a study of staff nurses (RN's) on the subject of stress in the workplace. This research will be undertaken by myself, Anthony Russell, Masters student at Lakehead University, Dr. William Melnyk, Professor at Lakehead University and Registered Psychologist, and Mary-Beth Minthorn-Biggs, Doctoral Candidate and Psychometrist at McKellar Hospital in Thunder Bay, Ontario. A series of 12-hour (spread out over 4 days) stress management workshops will be offered to all nursing staff. Administrative staff will also be invited to attend in order to sensitize this group to nursing concerns and foster greater interdisciplinary understanding. Involvement of these persons may also encourage the implementation of constructive changes stemming from the workshop.

The intent of these workshops is (a) to provide personnel with an opportunity to become aware of the detrimental effects of stress, (b) to define what particular stressors the individual workplace may offer and to allow for discussion pertaining to these stressors with peers, (c) to present possible individual and social coping strategies, (d) to sensitize nursing and administrative staff to the effects of workplace stress and burnout and to offer a number of alternative managerial strategies, (e) to assess the short- and long-term impact of stress management workshops. To accomplish this goal, we would like you to complete a few questionnaires pertaining to your specific job and your background, attitudes toward your job, and the emotional reactions which you experience. You will be asked to complete three questionnaires on four occasions: prior to the workshop, 1 week after, 6 weeks after, and 3 months following the workshop. A brief demographic questionnaire will also be distributed prior to the workshops. Completion of the questionnaires will take 40-50 minutes per testing period.

Individual results of these questionnaires will be kept confidential and will not be released to hospital officials. Participants will be assigned a code number with the initial testing materials and each questionnaire will be identified by the placement of this code number on all forms. Only the experimenter shall have knowledge of the code numbers which identify the participants. This information will be used in order to ensure that each person's code number is consistently applied to each of the testing materials. Following the distribution of the final package of post-test materials the materials identifying each participant and their individual code number will be destroyed. All testing materials will then be identifiable only by code numbers. In this manner, demographic information and measures of stress can be obtained while ensuring the anonymity of participants. The raw data will be locked and stored for a period of five years after which it will be destroyed.

Results are to be used for research purposes only and it is the combined results of each distinct group of professionals which are of interest, not individual responses. The findings of this study will be presented to the Department of Psychology at Lakehead University in order to partially fulfill the requirements of a Master of Arts degree. A copy of the completed thesis will be distributed to the hospital by Anthony Russell. Results of this study may also be published in a professional journal. Copies of any article(s) will consequently be forwarded to the hospital as well. Participants may obtain results of this study by indicating on a request form that they would wish to have this information mailed to them. This study is expected to be completed by the spring of 1994.

Dates, times, and locations of the upcoming workshops will be posted in nursing stations and administrative offices and will be publicized by staff education departments. Workshops will be presented in a modular format in order to accommodate work schedules and will presented over a number of days. You may choose from any variation of dates and times, however, modules must be completed in ascending order (for example, Module 1 must be completed prior to attending Module 2). You may sign up for the workshop of your choice in the staff education office of your hospital or by contacting the experimenter directly. You may also pick up the pre-workshop questionnaires at the time of registration. All nursing personnel are welcome to attend. Participation in this project shall be considered voluntary.

Please sign the consent form which is included along with the initial testing materials and return it to me, along with your initial testing materials, on the first day of the workshop. If you have any questions or concerns feel free to contact me at 506-328-6111. Ethical approval for this research has been received from the Lakehead University Ethics Advisory Committee and by the the Region 3 Hospital Corporation.

Thank you for your participation.

Sincerely,

ACHIEVEMENT THROUGH EFFORT

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix H

## Participant Consent Form

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

LAKEHEAD UNIVERSITY

5 Oliver Road, Thunder Bay, Ontario, Canada P7B 5E1

Department of Psychology
Telephone (807) 343-8441

# A WORKSHOP INTERVENTION APPROACH TO NURSING STRESS MANAGEMENT

## CONSENT TO PARTICIPATE

I _____ have read and understood the covering letter relating to the study entitled "A Workshop Intervention Approach to Nursing Stress Management", by Anthony Russell and I agree to participate. I realize that this study is designed to assess the effectiveness of nursing stress and burnout workshops.

I understand that the 12-hour (spread out over 4 days) workshop will involve the presentation of information pertaining to stress management, personal coping skills, and organizational improvement strategies which may be of benefit to me. I am aware that I will be asked to complete questionnaires prior to, one week following, six weeks following, and three months following the workshop which I shall take part in. I realize that these materials will take 40-50 minutes to complete during each testing period. I am aware that the questionnaires concern my specific job and my personal background, my attitudes toward my job, and the emotional reactions which I experience. I realize that these questions are personal in nature and may arouse feelings of discomfort.

I have been informed that my responses will be kept confidential. I have been informed that I will be assigned a personal code number and that only the researcher will know my code number. I realize that once testing has been completed all materials linking my name and code number will be destroyed allowing testing material to be identified only by a series of anonymous code numbers. I have been informed that only Anthony Russell and his thesis advisors William Melnyk, PhD. and Mary-Beth Minthorn- Biggs, EdD. Candidate shall have access to the raw data. I understand that the raw data will be stored in a locked cabinet for a period of five years after which it will be destroyed by shredder.

I understand that I may withdraw from this study at any time and that the results of this study and copies of any publications which shall utilize this experimental data will be mailed to me upon my request by Anthony Russell. The study is expected to be completed by the spring of 1994.

Signature: _____.

Date: _____.



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix I

## Workshop Locations and Dates

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Workshop Locations and Dates

October 25,26 1993 Saint John Regional Hospital, Saint John, N.B.

October 27, 28 1993 Saint Joseph's Hospital, Saint John, N.B.

November 16, 23, 30 December 7, 1993 Carleton Memorial Hospital, Woodstock, N.B.

November 18, 25 December 2, 9 1993 Dr. Everett Chalmers Hospital, Fredericton, N.B.

January 19, 24 1994 White Rapids Manor, Fredericton Junction, N.B.

February 2, 3 1994 Saint Joseph's Hospital, Saint John, N.B.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix J

## Lakehead University Ethics Advisory Committee Approval

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

LAKEHEAD UNIVERSITY

...er Road, Thunder Bay, Ontario, Canada P7B 5E1

Office of the President
Telephone (807) 343-8200

29 March 1993

Mr. Anthony Russell
Department of Psychology
Lakehead University
THUNDER BAY, ONTARIO
P7B 5E1

Dear Mr. Russell:

Based on the recommendation of the Ethics Advisory Committee, I am pleased to grant ethical approval to your research project entitled: A WORKSHOP INTERVENTION APPROACH TO NURSING STRESS MANAGEMENT.

Best wishes for a successful research project.

Sincerely,

ROBERT G. ROSEHART
President

/lw

cc: Dr. W. Melnyk



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Appendix K

## Request For Study Results Form

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## *Request for Study Results*

Please check one of the options listed below:

____ I wish to have a copy of the research results mailed to me.

____ I do not wish to have a copy of the research results mailed to me.

If you have expressed a desire to have results sent to you include your mailing address below. Please print it legibly.

_____.

_____.

_____.

_____.

_____.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix L

## Summary of Demographic Information

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Demographic Information

| | | Standard Deviation |
|---|---|---|
| Average age in years | 39.04 | 8.39 |
| Average number of years in nursing | 15.95 | 7.56 |
| Percentage of full-time employees | 56 | |
| Percentage of part-time employees | 40 | |
| Percentage of casual employees | 4 | |
| Percentage in specialty of choice | 63.64 | |
| Percent diploma program graduates | 84 | |
| Percent bachelor degree graduates | 16 | |
| Percentage married | 82.14 | |
| Percentage of spouses employeed | 92 | |
| Percent spouse primary wage earner | 73.08 | |
| Percent spouse adequately supportive | 86.36 | |
| Percentage single | 14.28 | |
| Percentage separated | 3.57 | |
| Percentage of sample with children | 76 | |
| Percentage with two children | 42.10 | |
| Percentage with three children | 47.37 | |
| Percentage with four children | 10.53 | |

(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Demographic Information (continued)

| | Standard Deviation |
|---|---|
| Percent taking first stress workshop | 91.07 |
| Percent reporting workplace laid off nursing staff in previous 6 months | 65 |
| Number personally been laid off from a nursing position in the past | 1 |
| Percent reporting workplace had closed beds in previous 6 months. | 68.42 |
| Percent reporting workplace had reduced/eliminated services in 6 mos. | 66.67 |
| Percent personally effected by aforementioned workplace changes | 47.06 |

Number of RN's responding = 28.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix M

## Reported Reasons for Attending Workshops

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reported Reasons for Attending Workshops

| Reason | Total number of citations |
|---|---|
| Stress at work | 4 |
| Uncertainty of jobs | 1 |
| Interested in research | 1 |
| Learn to deal with stress | 19 |
| Hospital changes | 1 |
| Returned from stress leave | 2 |
| Feedback to staff | 1 |
| Feedback to clients | 2 |
| Encouraged by friend | 1 |
| Reduce frustration | 1 |
| To support others | 1 |
| Feel inadequate | 1 |
| Healthcare environment | 1 |
| New personnel at top | 1 |

Number of RN's responding = 28.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix N

## Subjects Working in Specified Units/Departments

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Number of RN's Working in Specified Units/Departments

| Unit | Number of RN's |
|---|---|
| Out patient department | 2 |
| Critical care unit | 1 |
| Operating/recovery room | 2 |
| Emergency | 1 |
| Maternity | 1 |
| Community | 1 |
| Extended care | 1 |
| Employee health | 1 |
| Intensive care | 2 |
| Medicine | 2 |
| Float | 1 |
| General staff | 2 |
| Psychiatry | 1 |
| Discharge planning | 1 |
| Medical clinic | 3 |
| Nursing home | 4 |
| Quality management | 1 |

Number of RN's responding = 28.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

# Appendix O

## Reported Sources of Stress

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reported sources of stress

| Sources of stress | Total number of citations |
|---|---|
| Work | 7 |
| Co-workers | 6 |
| Demanding family members | 1 |
| Death of a loved-one | 2 |
| Marital breakdown | 1 |
| Single parent | 1 |
| Going to school | 1 |
| Changes | 2 |
| Being a role model for staff | 1 |
| Seriously ill patients | 1 |
| Family and/or home responsibilities | 7 |
| Children and/or step children | 5 |
| Financial concerns | 10 |
| Job security | 4 |
| Shift schedule | 8 |
| Relationship and/or marital concerns | 7 |

(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reported sources of stress (continued)

| Sources of stress | Total number of citations |
|---|---|
| Self-imposed standards and expectations | 1 |
| Busy schedule or routine | 3 |
| Health concerns | 1 |
| Lack of confidence | 1 |
| Fear of making mistakes | 1 |
| New supervisors | 1 |
| Lack of respect from bottom-up | 1 |
| Changing nursing role | 1 |
| Lack of jobs | 1 |
| Adapting to a new job | 1 |

Number of RN's responding = 28.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Appendix P

## Perceived Effects of Stress

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reported Effects of Stress

| Reported effects | Total number of citations |
|---|---|
| Tired | 6 |
| Loss of sleep | 7 |
| Headaches | 5 |
| Overeating/weight gain | 2 |
| Decreased desires | 1 |
| No fun anymore | 1 |
| Decreased patience | 2 |
| Sleep more | 1 |
| Decreased ability to take care of all needs | 1 |
| Ulcer | 1 |
| Exhaustion | 3 |
| Palpitations | 1 |
| Tremors | 1 |
| Tight chest | 1 |
| Workaholic tendencies | 2 |
| Anxiety-related swallowing difficulties | 1 |

(table continues)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reported Effects of Stress (continued)

| Reported effects | Total number of citations |
|---|---|
| Diarrhea | 1 |
| Withdrawl | 1 |
| Worrying constantly | 1 |
| Stomach cramping | 1 |
| Hypertension | 1 |
| Cry easily | 1 |
| Irritability | 3 |
| Not wanting to go to work | 1 |
| Wanting to tell supervisors off | 1 |
| Expect perfection from others | 1 |
| Tension in muscles | 1 |
| Opinionated | 1 |
| Acidic stomach | 1 |
| Not eating right | 1 |
| Not sleeping well | 1 |
| Can't remember | 1 |
| Floating | 1 |
| Ignore stressors | 1 |

Number of RN's responding = 28.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## References

Amaral, P., Nehemkis, A.M., & Fox, L. (1981). Staff support group on a cancer ward: A pilot project. Death Education, 5, 267-274.

American Psychological Association. (1983). Publication Manual of the American Psychological Association (3rd ed.). Hyattsville, MD: American Psychological Association.

Bailey, J.T., Steffen, S.M., & Grout, J.W. (1980). The stress audit.Identifying the stressors of ICU nursing. Journal of Nursing Education, 19(6),15-25.

Bender, H. (1981). Hospital care of the newborn: Some aspects of personal stress: Experiences in running a staff group. Journal of Child Psychotherapy, 7(2), 152-159.

Beszterczey, A. (1977). Staff stress on a newly-developed palliative care service. Canadian Psychiatric Association Journal, 22, 347-353.

Browner, C.H. (1987). Job stress and health: the role of social support at work, Research in Nursing and Health, 10, 93-100.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Bryant, E. (1994). When the going gets tough. The Canadian Nurse, February 90(2), 36-39.

Campbell, J.E. (1985). A role for nurse psychotherapists: Primary prevention counseling for general hospital staffs.Perspectives in Psychiatric Care, 3, 85-90.

Charlesworth, E.A., & Nathan, R.G. (1984). Stress management: A comprehensive guide to wellness (2nd ed.). New York: Ballantine Books.

Cherniss, G. (1980). Staff burnout: Job stress in the human services.Beverly Hills, Calif: Sage Publications, Inc.

Davis-Sacks, M. L., Jayaratne, S., & Chess, W. (1985). A comparison of the effects of social support on the incidence of burnout. Social Work, 30, 240-244.

Dean, A., & Lin, N. (1977). The stress-buffering role of social support. The Journal of Nervous and Mental Disease, 165(6),403-417.

Eisendrath, S.J. (1981). Psychiatric liaison support groups for general hospital staffs. Psychosomatics, 22(8), 685-694.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Emerson, C.P., & Bragdon, J.S. (1959). Essentials of medicine: The art and science of medical nursing (18th ed.).Montreal, Quebec: J.B. Lippincott Company.

Fawzy, F.I., Wellisch, D.K., Pasnau, R.O., & Leibowitz, B. (1983). Preventing nursing burnout: A challenge for liaison psychiatry. General Hospital Psychiatry, 5(2), 141-149.

Green, M. In Osterweis, M., Soloman, F., & Green, M. (Eds.) (1984). Bereavement: Reactions, consequences, and care. Washington: National Academy Press.

Hanson, P.G. (1986). The joy of stress (2nd ed.). Islington, Ontario: Hanson Stress Management Organization.

Howard, J.C., & Szczerbacki, D. (1988). Employee assistance programs in the hospital industry. Health Care Management Review, 13(2), 73-79.

Jackson, R.A. (1995). The heartbeat of reform. The Canadian Nurse, March 91(3), 23-27.

Jennings, B.M. (1990). Stress, locus of control, social support, and psychological symptoms among head nurses. Research in Nursing and Health, 13, 393-401.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Johnson, M.N. (1979). Anxiety/stress and the effects on disclosure between nurses and patients. Advances in Nursing Science, 1(4), 1-20.

Kansas, N. (1986). Support groups for mental health staff and trainees. International Journal of Group Therapy, 36(2), 279-296.

Kelly, J.G., & Cross, D.G. (1985). Stress, coping behaviors, and recommendations for intensive care and medical surgical ward registered nurses. Research in Nursing and Health, 8, 321-328.

Laschinger, H.K.S., & McWilliam, C.A. (1992). Health care in Canada: The presumption of care. Nursing and Health Care, 13(4), 204-207.

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

Maslach, C., & Jackson, S.E. (1986). Maslach Burnout Inventory Manual (2nd ed.). Palo Alto, Calif. : Consulting Psychologists Press.

McConnel, E. A. (1982). Burnout in the nursing profession. Toronto: C. V. Mosby

McNamara, E.M. (1976). The caring employer helps the troubled employee. Hospitals, 50, 93-96.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Moynihan, R.T., & Outlaw, E. (1984). Nursing support groups in a cancer center. Journal of Psychosocial Oncology, 2(1), 33-48.

Muldary, T.W. (1983). Burnout and health professionals: Manifestations and management. Norwalk, Conn.: Appleton-Century-Crofts.

New Brunswick Department of Health and Community Services. (1993). Back in Action Survey. Fredericton, N.B.: Province of New Brunswick.

Norusis, M.J. (1992). SPSS/PC+ Base System User's Guide, Version 5.0. Chicago, IL : SPSS Inc.

Nornhold, P. (1994). Hospital restructuring: How to cope with the changes. Nursing94, September, 47 -49.

O'Brien, S., & Page, S. (1994). Self-efficacy, perfectionism, and stress in Canadian nurses. Canadian Journal of Nursing Research, 26(3), 49-61.

Oehler, J.M., & Perault, P.Z. (1986). The process of scapegoating in a neonatal nurses' group. Group, 10(2), 74-84.

Osipow, S.H., & Spokane, A.R. (1987). Occupational Stress Inventory Manual (Research Version). Odessa, Florida:Psychological Assessment Resources, Inc.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Packard, J.S., & Motowidlo, S.J. (1987). Subjective stress, job satisfaction, and job performance of hospital nurses. Research in Nursing and Health, 10, 253-261.

Pines, A.M., Aronson, E., & Kafry, D. (1981). Burnout. New York : The Free Press.

Richman, J.M. (1989). Groupwork in a hospice setting. Social Work With Groups., 12(4), 171-184.

Richman, J.M., & Rosenfeld, L.B. (1987). Stress reduction for hospice workers: A support group model. Hospice Journal,3, 205-221.

Schneider, J. (1987). Self-care: Challenges and rewards for hospice professionals. The Hospice Journal, 3, 255-276.

Selye, H. (1975). Stress without distress. New York: Signet.

Selye, H. (1993). History of the stress concept. In L. Goldberger & S. Breznitz (Eds.) Handbook of Stress (2nd ed.) (pp. 7-17).Don Mills, Ont. : The Free Press.

Sherman, M. (1980). Psychiatry in the neonatal intensive care unit. Clinics in Perinatology, 7, 38-39.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Spielberger, C.D., Gorsch, R.L., & Lushene, R.E. (1970). Manual for the State-Trait Anxiety Inventory. Palo Alto, Calif. : Consulting Psychologists Press.

Sullivan, P.J. (1993). Occupational stress in psychiatric nursing. Journal of Advanced Nursing Research, 18, 591-601.

Topf, M. (1989). Personal hardiness, occupational stress, and burnout in critical care nurses. Research in Nursing and Health, 12, 179-186.

Ullrich, R. A. (1978, October). Herzberg revisited: Factors in job dissatisfaction. Journal of Nursing Administration, pp.19-24.

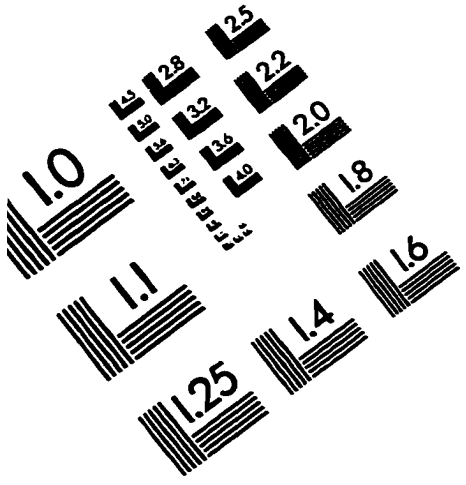
Vachon, M.L.S., Lyall, W.A.L., & Freeman, S.J.J. (1978). Measurement and management of stress in health professionals working with advanced cancer patients. Death Education, 1, 365-375.

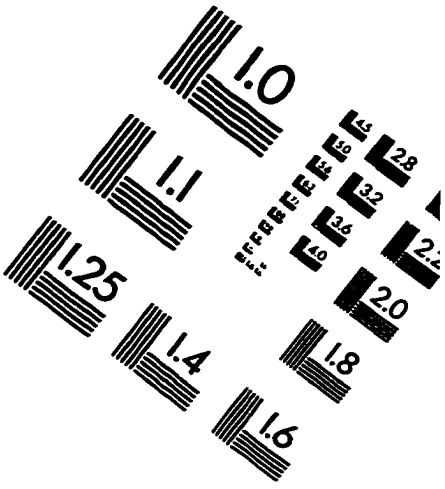
Weiner, M.F., Caldwell, T., & Tyson, J. (1983). Stresses and coping in ICU nursing: Why support groups fail. General Hospital Psychiatry, 5, 179-183.

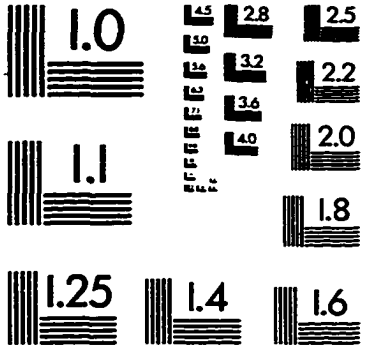
Williams, C.A. (1989). Empathy and burnout in male and female helping professionals. Research in Nursing and Health, 12, 169-178.

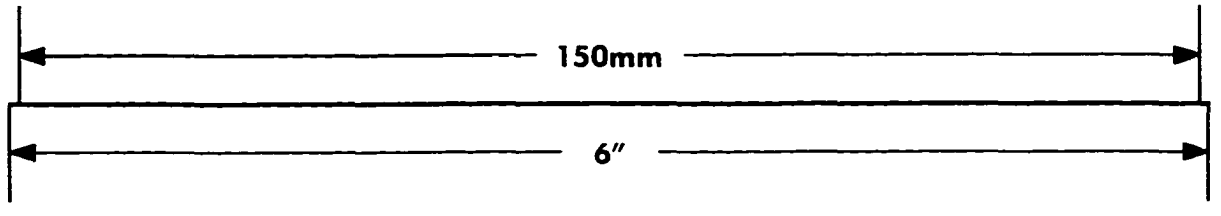
Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

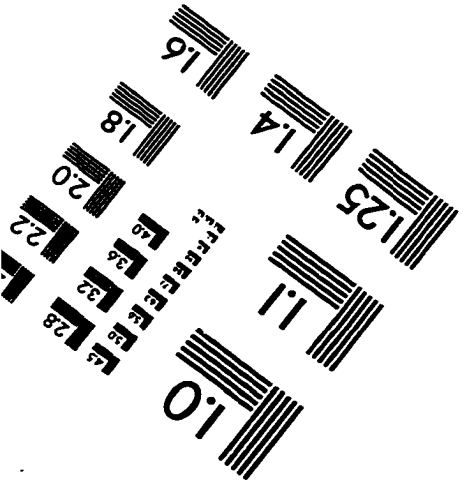
# IMAGE EVALUATION
# TEST TARGET (QA-3)

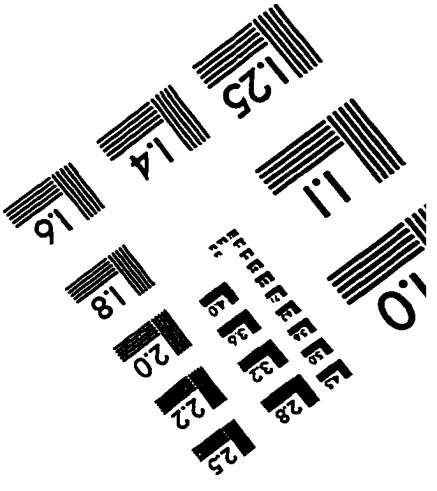



APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989

© 1993, Applied Image, Inc., All Rights Reserved

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.