To the Graduate Council:

I am submitting herewith a thesis written by Cynthia Stevens entitled "The Relationship of Job Stress and Job Satisfaction in the Service Work Environment." I have examined the final paper copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Human Resource Development.

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THE RELATIONSHIP OF JOB STRESS AND JOB SATISFACTION IN THE SERVICE WORK ENVIRONMENT

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ABSTRACT

The main purpose in conducting this study was to examine the relationship between certain job characteristics, personal demographics, and job stress among service worker employees. Another purpose was aimed specifically at providing current data concerning the elements of work that could induce job stress through job dissatisfaction, thus updating the body of knowledge on the subject. Lastly, by increasing the body of knowledge concerning the problems associated with service worker work, human resource professionals are better informed of suggested areas in need of improvement. In return, they can better attend to and facilitate employees' health and quality of life issues.

The researcher surveyed 300 participants who were service workers in East Tennessee. The respondents were sent a booklet containing demographic questions and two surveys: the Job Satisfaction Survey for assessing overall level of job satisfaction and the Job Stress Survey for assessing total job stress of the total participants.

Statistical methods utilized in this study included calculating mean, standard deviations, one-way analysis of variances (.05 level of probability with 95% confidence interval), multiple analyses of variances, and Tukey tests for significance. Finally, the Pearson *r* test was used to test any relationships between job characteristics, personal demographics, and Job Satisfaction Survey or Job Stress Survey.

Major findings of the study showed that (a) employees with a college degree encountered a higher level of total job stress than those with only a high school degree or those no longer pursuing an educational goal; (b) employees with college

degrees seemed to experience stress more frequently; (c) employees with college degrees appeared to be less satisfied with their job than those with a lesser degree or no high school degree; (d) there appears to be a trend that as overtime increases so does levels of stress; (e) employees asked to work overtime three or more times each week had significantly higher levels of stress due to the frequency of the requests; and (f) employees who received an award of appreciation for service or performance had a significantly higher level of satisfaction than those who did not receive any form of recognition. Finally, results showed that as any type of stress increased, job satisfaction decreased.

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CHAPTER 1

INTRODUCTION

The new millennium brought complexities and change in the work environment. Generations are searching for more autonomy and flexibility, organizations are increasing work demands for greater control, and dual career families struggle to maintain some form of balance between work and life demands. Society, in general, is beginning to understand the linkages in the stress and strain process and what role individual differences play in the dynamics. In the future, research in job stress will depend on a better understanding of the processes that make people ill at work if society is to adequately intervene and enhance well-being. In all of this, distancing ourselves from the definition of "*work*," the words of Kornhauser in his book *The Mental Health of the Industrial Worker* are sound:

> Mental health is not so much a freedom from specific frustrations as it is an overall balanced relationship to the world. This permits a person to maintain a realistic, positive belief in himself and his purposeful activities as his job and life situation facilitate. As feelings of adequacy, inner security, and meaningfulness of his existence continue it can be presumed that his mental health will tend to be good. Every thing that deprives the person of purpose and zest, that leaves him with negative feelings about himself, with anxieties, tensions, a sense of lostness, emptiness, and futility is important. (as cited in Cooper, 1998)

Originally, the concept of stress derived from everyday clinical practice. Some 70 years ago, a young student at the Medical Department of the German University of Prague attended a lecture on the symptoms typical of various diseases. The lecturer demonstrated patients with early stages of various infectious diseases and disorders. The lecturer described the symptoms common to many of these diseases: pain in the joints,

enlargement to the spleen, disturbances of gastrointestinal function, skin rash, and the problems they caused in diagnostic work. The fact these symptoms could all be related to stress on the body could not be ignored (Cooper, 1998).

Statement of the Problem

A relevant concern for managers of service work employees is the quest to understand the impact of certain job characteristics on the quality of employees' lives, especially in the area of job stress. Job stress and employee health have been relatively neglected areas of research among industrial-organizational psychologists. Some of the major problems of the research have been confusion in the use of terminology, weak methodology, and lack of systematic approaches in the research. Additional work in this area was needed (Beehr, 1998).

To provide current data and update the body of knowledge on the subject, the researcher first investigated the relationship between service work and job stress. An increased body of knowledge concerning the problems associated with service work creates better-informed human resource professionals. In turn, they can better attend to and facilitate employees' health and quality of life issues. Investigating job stressors such as working long hours, perceived fairness, supervisory support, and employee recognition programs created data allowing the researcher to advance the study of job stress and job satisfaction among service workers in East Tennessee.

Theoretical Framework

Many theories exit on the topics of job stress and how it relates to job satisfaction. This section is dedicated to the discussion of several job satisfaction theories as well as

job stress theories. The theory of human motivation proposed by Maslow (1970) concentrated on ways of achieving satisfaction in life, but many aspects of his theory also applied to the workplace. Abraham Maslow is known for establishing the theory of a hierarchy of needs, writing that human beings are motivated by unsatisfied needs and that certain lower needs must be satisfied before higher needs can be satisfied. Maslow felt that people are trustworthy, self-protecting, and self-governing, emphasizing that humans tend to gravitate toward growth and love. According to Maslow, general types of needs can be broken into five levels: physiological, safety, love, esteem, and self-actualization. Maslow believed all five levels must be satisfied before a person can act unselfishly and fully contribute back to society.

The first level of needs, physiological, is the most basic (e.g., air, water, food, sleep, and sex) with hunger being the primary element in this group. Once this need is met, people yearn to move to the next higher need, safety. Safety needs require established stability and consistency in a chaotic world and are mostly psychological in nature. Again, once this need is met, people desire to satisfy the next need, the belongingness and love need, a hungering for affection in relationships, as well as acceptance.

If this need is met, people attempt to satisfy their esteem need of which there are two types. The first is self-esteem, which results from competence or mastery of a task. The second involves the attention and recognition that comes from others. Finally, if one has met all these needs, according to Maslow (1970), he or she then seeks self-

actualization, which is the desire to become everything one is capable of becoming, whether it is seeking knowledge, peace, self-fulfillment, or oneness with God.

Applying Maslow's (1970) theory to job satisfaction was not difficult. Each of these needs could be related to work. To eat, people generally must have money and to have money, people generally must have a job. Satisfying the safety need could center around having policies and procedures to ensure consistency as well as a workplace free from harmful conditions and environments. Work groups, open communication, and employee involvement satisfy the belongingness need, and awards and recognition programs meet the need for esteem. Finally, the self-actualization need involves the importance of a person finding a job that suits him or her. This can be achieved through assistance of business management ensuring that the hiring process results in a proper match. Maslow said he had helped people who had lost interest in their lives and in their jobs by assisting them to get opportunities to do what satisfied them in their job. In Maslow's view, an organization could not be fully successful unless it gave its employees a way to satisfy their needs. His theories were closely related to this study's examination of service worker employees, their work environments, their management, and the job itself in relation to job satisfaction.

A second theorist, Selye (1975), based his work on that of an earlier, noted Harvard physiologist named Dr. Walter Cannon who had, at the beginning of the century, identified and named the "*fight or flight response*," which is the body's response to feeling threatened or in danger. But whereas Cannon saw the "*fight or flight*" syndrome as a positive mechanism that the body uses to protect itself, Selye realized that if the

stress reaction goes on too long, it damages the body and leads to illness. Another of Selye's enduring legacies is that he borrowed the word "*stress*" from the field of engineering (where it refers to external mechanical forces, strains and tensions) to describe this reaction in the body. Cannon had earlier introduced the term "*stress*" to medicine, but it was Selye who popularized it. Another of Selye's unique and important findings was that the stress response in the body was the same no matter what the cause or source of stress (he called these sources "*stressors*"). Later, on noting that a wide assortment of stressors all produced the same response, he named it the general adaptation syndrome (or GAS). Selye's theory was that the body's supply of stress hormones eventually becomes exhausted and this is what leads to illness. Eventually the body suffers damage and either gets sick or dies. Selye believed humans benefit when the body goes into a state of high alert to deal with a specific crisis but suffer if the state of arousal goes on too long. Both Cannon and Selye's theories were related to this study regarding the stressors and their outcomes faced by service worker employees' work and personal environments.

Herzberg's (1976) motivation-hygiene theory is another theory based on motivation concluding that employees have two different categories of needs that are essentially independent of each other and affect behavior in different ways. Herzberg cited hygiene factors or needs as extrinsic factors that affect job dissatisfaction. These are factors that surround the job; they make up the environment in which the employees work. Job security, pay, physical working conditions, supervision, and relations with coworkers are included. The second part of Herzberg's motivation theory involves what

people actually do on the job. These motivators include achievement, recognition, growth, advancement, and interest in the job. These factors result from internal generators in employees, yielding motivation rather than movement. Herzberg noted that unacceptable conditions in regard to these factors will lead to job dissatisfaction and acceptable conditions will lead only to a state of no dissatisfaction.

Victor Vroom (1970), a final theorist, fathered a three-foundation expectancy theory as follows: (a) individuals believe that certain behaviors are linked to certain outcomes; (b) outcomes (rewards) have varying degrees of value, worth, and attractiveness for different individuals; and (c) individuals believe that certain behaviors are associated with a probability of success; this determines the individual's decision regarding the effort required to achieve the associated outcome. Vroom distinguished the key variable as the level of effort, which depended on three elements: (a) expectancy, (b) valence, and (c) instrumentality. Expectancy refers to a person's belief that a particular level of performance will be achieved if a certain amount of effort is expended, which in turn would lead to a certain outcome. Valence refers to the strength of an individual's desire for a particular outcome, and instrumentality refers to a person's belief that a specific action leads to a specific outcome. Consequently, Herzberg's and Vroom's theories were echoed in this study through the discussion of fundamental human needs and expectations in the workplace.

Purpose of the Study

The researcher's purpose in this study was three-fold. First, by investigating the relationship between service work and job stress, this study aimed specifically at

providing current data concerning the elements of work that could induce job stress through job dissatisfaction, thus updating the body of knowledge on the subject. Secondly, with an increased body of knowledge concerning the problems associated with service work, human resource professionals can be better informed of suggested areas in need of improvement. In turn, they can better attend to and facilitate employees' health and quality of life issues. Lastly, the primary purpose of the study was to find out whether or not job stressors such as working long hours, perceived fairness, supervisory support, and employee recognition programs were related to job stress and job satisfaction among service workers in East Tennessee.

In conducting such studies and viewing each element as contributing factors to the bottom line, companies can begin to foster loyalty in their service worker workers (O'Connor, 1998). As stated by Beehr (1998), "Research on occupational stress has advanced a great deal since 1978, but it is still an unfinished enterprise" (p. 843).

Research Questions

Research questions provided clear direction and focus to this study. The researcher developed three questions covering the literature review and the statement of the problem:

1. Is there a significant relationship between service worker work and job satisfaction?
2. Is there a significant relationship between service worker work and job stress?
3. To what extent does job stress predict job dissatisfaction?

Hypotheses

This study explored the differences and relationship between job satisfaction and job stress. Measures of job satisfaction and job stress were collected from employees of an East Tennessee based restaurant. In addition to the three research questions, this study examined the following seven null hypotheses:

$H_0$1: There is no significant difference between service worker employees' level of total job stress based on their personal demographics.

$H_0$2: There is no significant difference between service worker employees' level of job stress frequency and severity based on their personal demographics.

$H_0$3: There is no significant difference between service worker employees' level of job satisfaction based on their personal demographics.

$H_0$4: There is no significant difference between service worker employees' level of job stress based on their job characteristics.

$H_0$5: There is no significant difference between service worker employees' level of job stress frequency and severity based on their job characteristics.

$H_0$6: There is no significant difference between service worker employees' level of job satisfaction based on their job characteristics.

$H_0$7: There is no significant relationship between stress severity or frequency and job satisfaction in a service worker environment.

Research Assumptions, Delimitations, and Limitations

Assumptions

To accurately assess the validity of the findings of this study, it was necessary to examine the assumptions underlying the study. If any of the assumptions were not true, it could have affected the results and conclusions. The investigation of sources relating to

job stress and job satisfaction among service worker employee was based on the following assumptions:

1. It was possible to identify sources of job stress and job satisfaction among service workers collectively and specifically by means of two survey instruments.
2. Respondents provided truthful and accurate data.
3. Respondents had certain perceptions and experiences about their jobs that were useful for this study.
4. Respondents chosen by their supervisors were representative of all service workers.

Delimitations

This study can be generalized to similar samples. However, in addition to the limitations previously mentioned, certain delimitations should not be overlooked. Delimitations were any restrictions put on the research process by the researchers. The study was delimited in the following ways:

1. The research sample consisted of people who were currently employed by one organization encompassing 20 various locations in East Tennessee.
2. The study was limited to one restaurant service industry.
3. This study was limited by the collection of data through surveys distributed by supervisors of the organization.
4. The research sample was chosen as a population group rather than randomly.

Limitations

Limitations were restrictions that are outside of the researcher's control but nevertheless could have affected the study results. Although the items noted below could have affected the number of surveys received or the demographics of the participant

results, they were expected to negatively affect the conclusions of the research. Seven limitations were noted for this study.

1. The service worker sample was limited to those chosen by the supervisor to complete and return the surveys.

2. The service worker sample was limited to a fast-paced environment where little time existed for attention to detail and thought.

3. The service worker sample was limited by the fact that no minimum level of education was required for the positions used in the study.

4. The service worker sample was distracted by constant levels of noise exposure and customer interruptions.

5. The service worker sample was limited by its lack of a diverse racial and ethnic mix.

6. The service worker sample was disinterested by the $25 Wal-Mart gift certificate incentive.

7. The service worker sample was chosen by management to participate in the study due to their level of reliability and candor. This limitation may have promoted the 100% rate of return as well as skewed research findings.

Definition of Terms

After reviewing literature related to job stress and job satisfaction, a number of terms and definitions were frequently utilized and were pertinent to this study. Definitions of words relevant to this study have been defined to give brief, concise meaning to otherwise broad terms. The following terms have been defined for purposes of this study:

1. *Age.* The length of time that one has existed (*American Heritage Dictionary of the English Language,* 2000). This study focused on individuals who were in the following age categories: (a) 18-25 years of age, (b) 26-35 years of age, (c) 36-45 years of age, (d) 46-55 years of age, and (e) over 55 years of age.

2. *Distress.* A negative psychological response to a stressor, as indicated by the presence of negative psychological states (Simmons & Nelson, 2001).

3. *Eustress.* A positive psychological response to a stressor, as indicated by the presence of positive psychological states (Simmons & Nelson, 2001).

4. *Job Satisfaction.* The extent to which an employee likes (satisfaction) or dislikes (dissatisfaction) his or her job (Spector, 1997).

5. *Languidity.* An attitude of neuroticism, extroversion, and reactivity (Brooks, 2000, p. 18).

6. *Service worker.* Occupation concerned with performing tasks in and around institutions and in commercial and other establishments (United States Department of Labor, Office of Administrative Law Judges Law Library, 1991).

7. *Morningness.* The flexibility of sleeping habits (Brooks, 2000, p. 18).

8. *Occupational Stress.* A (perceived) substantial imbalance between demand and response capacity produced by job related stimuli (Cooper, 1998).

9. *Population.* The group to which the researcher would like the results of a study to be generalizable (Gay, 1996).

10. *Quality of Life.* Perceived satisfaction concerning working hours, time for chores, amount of free time, job tension, job-family life interference, job-free time interference, and job fatigue (Roberson, 1986).

11. *Somatic.* Of or relating to the exterior of the body (Merriam-Webster's Collegiate Dictionary, 1999).

12. *Taylorism.* A management system devised by F.W. Taylor and published in his 1911 book of scientific management describing factories that were managed through scientific methods rather than by use of the empirical rule of thumb (Sandrone, 1995).

Summary

This chapter reviewed the need for this study, the theoretical framework surrounding job satisfaction and job characteristics, and the problem statement. The purpose of this study was set forth, which was primarily to examine the relationship

between certain job characteristics and job satisfaction among service worker employees. Based on this purpose, seven hypotheses were developed. Assumptions, delimitations, and limitations of the study were presented. Finally, definition of terms was provided for reading clarification.

CHAPTER II

REVIEW OF LITERATURE

This chapter examines the evolution of the service worker workforce and the impact of job stress as it relates to job satisfaction. In addition, this chapter reviews (a) environmental conditions, (b) types of compensation programs, (c) sources of job stress in and out of the workplace, and (d) the outcomes resulting from job stress as it relates to job satisfaction. The scope of this literature review was limited to research conducted from the 1970s through the millennium.

Related Literature

Influential Models

Researchers in the 1980s such as Cherniss (1980), Hofstede (1980), Golembiewski and Munzenrider (1988) found the Maslach Burnout Inventory (MBI) to be the almost universally accepted "*gold standard*" to assess burnout. This popular psychological phenomenon was defined by the test authors, Maslach and Jackson, as an assessment to test the syndrome of emotional exhaustion. The key aspect of the syndrome refers to feelings of being over-extended and drained from one's emotional resources. The MBI includes three subscales: Exhaustion, Cynicism, and Professional Efficacy. All items are scored on a 7-point frequency rating scale. The factorial validity across nations and occupational groups was largely confirmed and its subscales were internally consistent. The MBI-GS was a suitable instrument for measuring burnout across various occupational groups and nationalities, especially when burnout was the main focus of a study. The MBI, however, was originally designed for use in the area of

human services (Schutte, Toppinen, Kalimo, & Schaufeli, 2000).

Many studies focusing on job stress utilized the Occupational Stress Indicator (OSI) as a measuring instrument. The OSI, founded on the notion that stressors do not influence everyone in the same way, views stress as the "*lack of fit*" between the individual and his or her environment (as cited in Evers, Frese, & Cooper, 2000). The model states that work pressures lead to negative outcomes such as lower job satisfaction and mental and physical health problems and that this relationship moderates individual differences. The OSI is a popular instrument for the diagnosis of stress and stress-related personalities and outcomes. The three major dimensions assessed by the OSI are occupational role stress, personal strain, and personal coping resources. The respondents with higher external control report higher dissatisfaction and higher ill health. Respondents with high scores on dysfunctional coping styles report more health problems as well (Evers, et al.).

The Job Satisfaction Survey, developed by Spector in 1985 and published by Sage Publications, consists of 36 questions. This instrument examines employee attitudes about the job and aspects of the job. These assessments were made through the following nine facets: (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent rewards, (f) operating procedures, (g) coworkers, (h) nature of work, and (i) communication, along with a total satisfaction score. According to Spector (1997), questions regarding pay referred to a person's satisfaction with pay and pay raises, while promotion referred to a person's satisfaction with promotion opportunities. Questions regarding supervision focused on a person's satisfaction with his or her immediate

supervisor, and fringe benefits surveyed the satisfaction a person had with both monetary and momentary benefits. The facet, contingent rewards, focused on a person's satisfaction with appreciation, recognition, and rewards for good work.

A researcher named Dewe (1989) observed, "when measuring work stressors, more attention would be given to such facets as intensity, frequency, and the meaning individuals attribute to events" (p. 993). Ideally, measures of job stress should evaluate both the perceived severity of specific sources of stress in the workplace and how often each job-related stressor was experienced by the respondent during a specified period. The Job Stress Survey was designed by Spielberger and Vagg in 1991 using that theory (Spielberger et al., 1996). It was constructed to assess stress in the workplace from a generic perspective.

The Job Stress Survey proved a sound foundation for consultation and allowed comparison across individuals, different occupational levels, and work environments. As stated by O'Roark, "Empirically developed and technically refined, the Job Satisfaction Survey exemplifies increasing efforts to narrow the distance between what is known by researchers in applied psychological science and what is experienced by those holding a job in the 'real world' of work" (as cited in Spielberger et al., p. 123). Several researchers, such as Murphy and Hurrell (1987), Jackson and Schuler (1985), and Dewe (1989), influenced the Job Satisfaction Survey regarding the assessment of core questions describing generic, job-related stressors, focusing on aspects of work situations that often result in psychological strain and giving attention to the frequency and perceived severity of events. Therefore, the Job Stress Survey was chosen for this study due to its generic

measure of job stress that could be quickly and conveniently administered to workers at difference occupational levels in a variety of work settings.

Investigation on the Service Worker Workforce

Research has focused on a variety of variables pertaining to both physical and mental effects that work conditions have on a service worker workforce. Work hours, the length of the workweek, types of compensation programs, and perceived fairness were a few of the areas investigated (Roberson, 1986). Work stress and its associated problems cost organizations an estimated $200 billion or more each year in areas such as decreased productivity, absenteeism, turnover, worker conflict, higher health care costs, and more workers' compensation claims of all kinds. As stated by Simmons and Nelson (2001), most people complain that work is their biggest source of stress, and few feel that their jobs give them pleasure or satisfaction. Probably the most important outcome variables associated with the study of work stress were health and well-being.

Despite the variety of approaches to conceptualizing stress, the literature was generally in agreement that certain stressors could elicit responses in individuals and over time could have an adverse impact on their health. A large-scale survey of over 12,000 workers in the European Union concluded that job stress was potentially a greater risk factor among workers who experienced high job demands and at the same time were unable to exercise a great deal of control over their work environment. Such jobs are most commonly found among skilled service worker workers. Although managerial and white-collar occupations have been regarded as placing high demands and time pressures on the job holder, such jobs have been proven less stressful because they afford

individuals sufficient autonomy to control these time demands and were intrinsically rewarding (Cartwright & Boyes, 2000).

Understanding Stress

The physical or psychological stimuli to which an individual responds are commonly referred to as either stressors or demands. The negative responses to stressors are commonly termed distress, and distress is commonly studied for its negative relationship to adverse health outcomes. Some of the most apparent outcomes of work-related distress in service worker workers are absenteeism, turnover, and injuries (Simmons & Nelson, 2001). When referring to these outcomes, many use the general term "*stress*."

The cognitive appraisal approach to the study of stress is most commonly associated with the work of Richard Lazarus. Lazarus stated, "The essence of the approach to understanding stress is that people can have different responses to stressors they encounter depending on whether they perceive a relevant stressor as positive or negative" (as cited in Simmons & Nelson, 2001, p. 7). When a person encounters a stressor, she or he evaluates the encounter with respect to its significance for well-being. The two types of appraisals and associated response patterns are positive (i.e., eustress) and negative (i.e., distress). Negative appraisals include harm, loss, threat, and challenge. In harm and loss, some damage to the person has already occurred (such as injury, illness, loss of a loved one, or damage to self-esteem). Threat involves harm or losses that have not yet occurred but are anticipated.

The fact that distress is not healthy is well established. Heart attack, stroke, cancer, peptic ulcer, asthma, diabetes, hypertension, headache, back pain, and arthritis are among the many diseases and symptoms that are found to be caused or worsened by stressful events. Recent evidence confirms that job strain or distress is associated with increased reports of medical symptoms and health-damaging behavior in service worker workers (Simmons & Nelson, 2001).

Evolution of the Workweek

The length of the average workweek in the United States declined sharply over the past century, from an average of 72 hours in 1860 to 42 hours in 1940. Little change has been observed since that time (Heneman, Schwab, Fossum, & Dyer, 1981). The first major change in the workweek occurred with the development of agriculture and the domestication of animals. For those raising the crops and keeping animals, the workweek was from sunrise to after sunset, seven days a week. The development of agriculture and the domestication of animals eventually brought about a modest surplus of food. This in turn provided the opportunity for the introduction of differentiated labor. Some people could devote all of their time to specialties such as the manufacture of weapons, tools, clothing, and other life-sustaining necessities (Pierce, 1989).

World War I created an extremely heavy demand for labor. On the basis of this demand, unions were able to successfully bargain for, and gain acceptance of, the eight-hour day. The 1920s and '30s were the decades in which the five-day week began. The Great Depression focused national attention on shortening the workweek as a means of giving more people employment opportunities.

Legislatively, the National Industrial Recovery Act of 1933 led to the inclusion of a 40-hour workweek provision in a large number of industry codes. The Public Contracts Act of 1936 and the Fair Labor Standards Act of 1938 required the payment of time-and-a-half for work over 40 hours per week (Pierce, 1989). The one variable that has the most potential to dramatically impact the quality of employee life is the scheduling of work hours. Hours of work, such as shift work, directly influence the time, number, and quality of hours spent away from the workplace. For this reason, understanding the relationship between shift work and job stress is important in its own right (Roberson, 1986).

Evolution of Shift Work

As shift work became a necessity for many organizations, job stress increased. Although it seemed wise to investigate the effects shift work had on job stress, relatively few examined shift workers' perceptions of the characteristics concerning particular shifts and the advantages and disadvantages associated with them (Bohle & Tilley, 1998). A clearer understanding of the relationship offered assistance in identifying areas that contributed to the increase in job stress. Employee perceptions differ on this issue. Due to technological advances, the typical worker was able to work fewer hours without experiencing reduction of "*real take-home pay*" (i.e., income after taxes).

With the average workweek at approximately 42 hours, neither workers nor management showed much interest in seeking further reductions. For workers, further shortening of the workweek would cause a smaller pay check and for management, a cut back of hours would mean having to hire and train more often. Still, because our society

greatly benefits from "*round-the-clock*" operations (i.e., law enforcement, health care, utilities, retail), it was more economically wise, especially for industry, to continue meeting high customer demands and earning a quicker return on investment, not to mention minimizing the cost of start-up time for equipment (Anch, Browman, Mitler, & Walsch, 1988).

Companies vowing total customer satisfaction were in no hurry to abandon operations requiring around-the-clock shifts. Shift work schedules, schedules that involved working other than traditional daylight hours, were used by a variety of organizations for many years. Even though these schedules provide a number of benefits for the organization, such as better utilization of existing buildings and equipment (Dunham, 1977), health-related problems certainly developed. Twenty-six percent (26%) of the labor force were not day workers, which caused a definite imbalance between work and life; the most dramatic effects on the normal body cycle concerning eating and sleeping were caused by rotating shifts (O'Connor, 1998).

Evening and weekend working, shift work, and discontinuous employment were associated in the past with factory work and occupations in primary industries. Nowadays, the image of the stereotypical office worker as someone who works nine till five, enjoys high levels of job security, and has a predictable career future has been shattered by the pressures of sweatshops and the widespread re-emergence of Taylorism (Cartwright & Boyes, 2000).

Impact of Shift Work

In their study concentrating on the dark side of the service worker, Westfall-Lake and McBride (1998) showed that shift workers often develop habits such as excessive alcohol and drug use, smoking, and over eating, which lead to stomach problems, irritability, malaise, depression, insomnia, fatigue, time-off, and family problems. The study also showed that many rotating shift employees could not tolerate food after one O'clock or two O'clock in the morning hours. It was not surprising that many of these workers described themselves as irritable, grumpy, and even depressed. Of the 24-hour performers, 60% complained of sleep problems (Westfall-Lake & McBride).

In a 1990 study, White and Keith found that non-daytime hours of employment were associated with higher levels of divorce. The risk of working nonstandard hours or days was not randomly distributed across the labor force; indeed, this work circumstance appeared to exacerbate inequalities in family life (as cited in Perry-Jenkins, Repetti, & Crouter, 2000). Work and family importance were negatively related due to life stage or socialization forces that influenced the prioritization of work and family. For example, work was often a top priority in early adulthood, whereas family often became more important in later years (Cooper, 1998). Additionally, a 1994 study conducted by Presser and Cox on the low-educated American woman found that less-educated mothers were much more likely to work nonstandard hours and days than were better-educated mothers, as were never-married mothers, a group that was disproportionately over-represented in low-level, service worker jobs (as cited in Perry-Jenkins et al.).

The early evening hours differ dramatically for husbands and wives in dual-earner

families. For husbands, it is a time to relax, recover from the stresses of the workday, and begin leisure activities; for wives, it is a time to gear up after the relatively enjoyable workday and to focus on housework and childcare. Supporting literature is based on the idea that any effect stress has on an individual's psychological and even physiological functioning would ultimately influence his or her behavior at home and in so doing would have an impact on the family and all of its members (Perry-Jenkins et al., 2000).

A substantial body of research suggests that chronic job stressors influence families when they cause feelings of overload or conflict between the roles of worker and family members. Workplace injury, lapses in safety, and reduced performance are also outcomes. Research by Barton stressed the significance of individual circumstances in influencing choice of shifts (as cited in Brooks, 2000). Some individuals prefer night work, for example, as this enables them to share childcare responsibilities.

Research clearly indicates a significant correlation between individuals' flexibility of sleeping, their ability to overcome drowsiness, and their tolerance to shift work as coping mechanisms alleviating the detrimental effect of nonstandard working. The difference in tolerance to shift work between individuals was beyond dispute. However, it was argued that intolerance may be considered a chronic disease. A 1990 research project by Skipper, Jung, and Coffey defined such intolerance by the intensity of medical complaints including sleep difficulties, persistent fatigue, behavioral changes, digestive troubles, and reliance on sleep-inducing drugs (as cited in Brooks, 2000). While noise minimization was suggested as a coping strategy to shift workers, the inescapable circadian rhythm (the body's natural reaction to daylight and darkness) seems to be the

prevailing culprit (Matrices Consultants, 1997). This constant struggle shift workers encounter in obtaining quality sleep contributes to an increase in job stress (Anch et al., 1988; Brooks).

Health Implications of Shift Work

Considerable research focused on the adverse health implications of shift work, including sleep and wake disorders, neuroticism, cardiovascular diseases, and gastrointestinal problems. For example, a team of researchers found that the time between starting a particular working arrangement and the onset of gastrodenitis was on average just over 4 ½ years for permanent night workers, a little over 7 years for other shift workers, and 12 years for day workers. The frequency and pattern of meal taking is disrupted by shift work and lowered during night work. There is literature that supports the contention that personal control has a moderating effect on health and job stress (Brooks, 2000). Most studies showed non-significant variations over the three shifts. Variation in temperature was the most prominent. The highest temperature occurred during the morning and afternoon shifts and lowest temperature during the night shift. The digit span performance was best in the evening and night and lowest in the morning (Milosevic & Cabarkapa, 1998).

Shift work is not only at odds with an individual's natural biological cycle, it also contradicts society's established social rhythm. As a consequence, shift work has an adverse influence on relationships and participation in social life, which often leads to isolation. Tolerance of shift work is likely to be influenced by social and domestic pressures and, as a consequence, has a different impact on women and men. It was

suggested that regular hours, even night work, enables employees to plan and fulfill family responsibilities, participate in social activities, and cope with mental and physical fatigue better than working rotational shifts, particularly where shift patterns are not predictable in advance (Brooks, 2000).

As indicated by Westfall-Lake and McBride (1998), the dark and bright views of shift workers acted as self-fulfilling prophecies that led to two shift work models: Burnout and Achievement. The majority of hour shift workers fit into one of these models. Burnout led to the "*Double H Pattern*": Helplessness and Hopelessness. These twins of failure contributed to mindsets that lead to human error and they contributed to excesses and non-achievement.

Achievement, in the Achievement Model, became a career-long event that was maintained by continuously working on four areas: fitness, alertness, sleep, and time off. Dr. Merrill Mitler reported finding " a link between the brain's sleep processes and such world scale disasters as Chernobyl and the Challenger explosion" (as cited in Westfall-Lake & McBride, 1998, p. 43). The doctor also stated that it "appears to be more than coincidental the four major nuclear accidents occurred in the post-midnight hours or what was commonly called the nightly danger zone" (Westfall-Lake & McBride, p. 42). Last-minute decisions on the Challenger launching also were made before sunrise on the fateful morning.

Much of modern life, with its emphasis on 24-hour operations, "is basically asking too much of the human body" (Westfall-Lake & McBride, 1998, p. 61). Other late night incidents often associated with shift work set-ups and slips included the Bhopal

Gas Release, the Three-Mile Island nuclear incident, and the Exxon Valdez oil spill. The cost of the resulting reduced job alertness has been estimated at $70 billion a year (Westfall-Lake & McBride).

Autonomy Factor

Several studies have examined the impact of flexible hours on stress. One focused on inter role conflict and found that flextime groups expressed less conflict than those employees working fixed hours. Another reported that a reduction in morning tension was associated with the flexible working-hour arrangement. A third one concluded that flextime systems reduced stress resulting from concern over childcare activities.

These researchers also found a significant negative association between employee perceptions of time autonomy and psychological and physical symptoms of stress (Pierce, 1989). If employees perceived a lack of choice over this crucial aspect of their lives, then the detrimental effects of shift work were more likely to adversely affect individual and organizational outcomes.

When asked to indicate the single most important factor that would have reduced the likelihood of employees leaving, employees ranked the availability of flexible working hours (8%) third after better resources to do the job and better pay. Day care followed, and then facilities (7%), career breaks (6%), greater availability of job share (3%), increased part-time work (2%), and after school childcare (1%) (Pierce, 1989).

Consistent messages emerged from investigations focusing upon fatigue and fatigue-related symptoms as dependent variables. Fourteen percent (14%) of employees

in one survey cited fatigue as a major disadvantage of the compressed working-hour arrangement. Two related empirical studies reported on the impact of compressed workweeks on the anxiety and stress experienced by workers. In another study, Iskra-Golec (1993) sought to determine "whether and to what extent individual characteristics such as morningness, flexibility of sleeping habits, languidity, neuroticism, extroversion, and reactivity determined attitude towards shift work" (as cited in Brooks, 2000, p. 18).

In this experimental study, Iskra-Golec (1993) surveyed two groups of steel plant employees: (a) female shift and (b) day workers, who were matched for age, job tenure, marital status, number, and age of children. This inspection showed a positive correlation between attitude to shift work and flexibility of sleeping habits and a negative correlation between attitude and lack of energy. Also, through the use of a multiple regression analysis an indication showed that the best predictors of positive attitudes to shift work were flexibility of sleeping habits and ability to overcome drowsiness, thus concluding that individuals with better attitudes towards shift work could minimize their levels of occupational stress. "Attitude towards shift work certainly has an impact on the human body" (Bohle & Tilley, 1998, p. 63).

Employee Retention

Not surprisingly, work schedules have been shown to have an impact on many aspects of employees' working and domestic lives and on their retention in the workplace (Burton & Burton, 1982, as cited in Brooks, 2000). Studies suggested that employee retention was related to aspects of control or choice over working lives and conditions while the rigidity of employee relations could result in increased turnover (Brooks).

Research focused on a variety of issues, such as the disturbance of circadian rhythms, sleep problems, physical and psychological health, social and domestic disruption, performance, absenteeism, and safety. Focusing on employee choice had a crucial moderating influence on stress levels and job satisfaction. It was generally agreed that circadian rhythms differed between individuals, particularly in the rhythm rate of adjustment, its size and peak. For example, research has indicated there are morning and evening types.

Choice of permanent night work, for example, may indicate a self-selection process by those better disposed, physiologically and psychologically, to night work. Furthermore, sleep quality and duration are causal factors influencing workplace performance, absenteeism, and stress, while sleep deprivation leads to both physical and psychological ill-health (Brooks, 2000).

Work Demands

A few of the most stressful situations are primarily related to survival in business and the achievement of career goals. Five out of the top 10 stressors directly concerned with work demands were quoted as "*time pressures and deadlines*," "*having to work continually to achieve self-set target,*" "*mentally straining work*," "*poor time management*," "*work-overload*," and "*dealing with demanding or difficult clients/prospects*." Additionally, the interface between work and family was found to be a source of stress among workers (Lai, Chan, Ko, & Boey, 2000).

Unhealthy Consequences

When excessive stress is present in the workplace, it has undesirable consequences on mental and physical health. Ten years ago, the National Institute for Occupational Safety and Health (NIOSH) identified psychological disorders in the workplace as one of the 10 leading work-related diseases and injuries in the U.S. Through the National Occupational Research Agenda, NIOSH has continued to emphasize the importance of finding effective interventions to reduce stress in the workplace.

Two reviews by Folkard and Harrington (as cited in Sparks, Cooper, Fried, & Shirom, 1997) looked at the existing literature on working hours, namely shift work and health. Harrington concluded that working in excess of 48 to 56 hours a week is harmful. Folkard argued that further research is needed as the available evidence on work hours was not sufficient to offer clear-cut recommendations (Sparks et al.) One such variable is the type of job itself.

Certain task characteristics moderate health outcomes. For example, research conducted in 1991 by Raggatt concluded that the impact of long hours is greater for jobs that require attention such as driving or repetitive work (as cited in Bernard, Bouck, & Young, 2000). The results support the hypothesis that preventive efforts are needed in all groups, but they underline that different strategies are required for different categories of service worker employees. Hannerz and Tuchsen (2001) concluded that different strategies are needed to meet the various work motivators of employees. This was helpful information to all industries.

Moderators and Demographics

The working environment also moderates this relationship. Health problems arise from poor ergonomic design of the workstation and other factors such as noise level, vibrations, poor heat ventilations, and inadequate lighting. Age also plays a role. Two studies, one in 1994 by the Federation Research and one in 1995 by STE Research, found stress positively associated with those aged 40 and over (as cited in Sparks et al., 1997). Employees aged over 40 years may have felt more likely targets for redundancy than younger employees and therefore worked longer hours under more stress and unstable economic environments. Age was an important factor in predicting health outcomes in employees working long hours.

Choice was also an important moderator in the health and work-hours relationship. A 1986 study by Hall and Savery concluded that individual control over hours of work has been found to influence percentage of stress levels and tolerance of a work schedule (Sparks et al., 1997). They argued that the stronger relationship found between work hours and well-being compared with the existence of choice at the individual level. Research showed choice not only affected the employee but the family too. Pressures at work, job changes, and work overload were brought into the home environment, affecting the families of employees. Also, being in a dual-earner family was a source of stress. As stated by Sparks, this was especially so for women because they were expected by men to work the "*double shift*"- pursue a job and manage a home (Sparks et al.).

The dual-career family model also created problems for men. For example, many

managers and executives were expected to be mobile as part of their job and so be readily available for job transfers both within and between countries. A lack of availability or mobility obviously affected their promotion prospects (Sparks & Cooper, 1999).

There were, of course, limitations to the present research. Newton and Keenan (1985) suggested that investigation into the predictive power of the independent variables for mental and physical ill-health was necessary to clarify which job dimensions were more important for employees' well-being in a particular occupation. Alternative research methods, such as a qualitative approach, pinpointed stressors unique to a particular work situation. Indeed, techniques such as open-ended questionnaires utilized by researchers Newton and Keenan, and self-reported accounts of stressful episodes first introduced in 1985 by a researcher named Parkes, were utilized in occupational settings to identify many occupation-specific stressors previously obscured by using more structured quantitative models (Sparks & Cooper, 1999).

A combination of high demands and low control contributes to increased health risks such as cardiovascular disease. The general aim of one study was to compare psychological and physiological stress reactions during and after work in a service worker assembly work environment (Melin, Lundberg, Soderlund, & Granquvist, 1999). The results of the study showed that female managers unwound more slowly in several subjective and physiological parameters after work in comparison to their male colleagues. The objective was to increase the amount of control and possibilities for social interactions between workers, to decrease the monotony of assembly line work by enlarged work cycles, but at the same time to keep the production level constant. From

a control perspective, it was hypothesized that the flexible form of organization would elicit a more favorable stress profile than the assembly line environment (Melin et al., 1999). A study conducted on human service workers found that the origins of work stress are situated primarily in the structural aspects of the work environment rather than in personal attributes. Results showed that negative affectivity and work environment dimensions account for most of the correlations with strain. Authors also noted that a reduction in levels of strain and an increase in productivity could be achieved with job redesign, not necessarily by decreasing work demands but by increasing the levels of control and support (Dollard, Winefield, Winefield, & Jonge, 2000).

A Supervisor's Duty

Helping employees cope was one of the most critical responsibilities in a supervisor's job description. Frontline employees (FLEs), especially in service-oriented organizations, presented interesting paradoxes. This fact supports the observation that FLEs "*are typically underpaid, under trained, overworked and highly stressed*"(Singh, 2000, p. 15). This apparent tension of satisfying management and customers and of meeting productivity and quality goals emerged as a consistent theme that underlined the study of FLEs in the existing literature. Not surprisingly, frontline jobs were consistently found to foster burnout and high turnover (Singh, 2000). Poor management techniques and poor supervisors have been consistently cited in numerous studies as perceived to be principal sources of stress by FLEs. Concerns over equitable treatment in assignments and promotions, malicious and self-protective behavior by supervisors, ambiguous policies and rules, and fears of internal review and investigation described a complicated

system of organizational stress from which there appeared to be no relief within the occupation (Carayon, Smith, & Haims, 1999). Brewer (1998) stated, "Those whose current positions closely match their talents, needs, values and motives are most likely to feel fulfilled in their work and to continue in it over time" (p. 27). If the individual is continuously exposed to poor work organizations and improper job assignments, stress reactions lead to different types of strain, such as hypertension, cardiovascular diseases, ulcers, neurosis, depression, alienation, and withdrawal. Additionally, there are individual characteristics that influence the stress process. For instance, older individuals tend to be more satisfied with their jobs but are more likely to suffer from hypertension (Carayon et al.).

To battle the individual characteristics that influence the stress process, employers make an investment in employees' skill and knowledge. This base strengthens the bond between workers and their employers. One of the ways employers demonstrate this investment is through the use of competitive pay systems. A fair and equitably pay system creates a more involved, committed workforce, increasing group productivity as well as decreasing turnover rates, as suggested by results provided by Park, Ofori-Dankwa, and Bishop in 1994 (as cited in Guthrie, 2000).

Compensation Impact

Pay systems influence employees' levels of job performance, satisfaction, and withdrawal behavior. A theoretical premise is that pay systems have a unique impact on employees' emotional distress (Shirom, Westman, & Mclamed, 1999). Researchers caution, however, about choosing the right compensation plan for the employees in

question. Specifically, research results suggest that skill or knowledge-based plans are associated with decreased turnover, whereas group-based rewards are associated with increased turnover, particularly in larger firms (Guthrie, 2000). In all types of pay plans, it is important to plan, communicate, and adhere to consistent practices pertaining to the use of base pay as maintenance or underlying benefit versus its application as "*the carrot and stick*." From a pay standpoint, this means that we have to consider using pay progressions based on broader responsibilities, with greater lateral movement versus vertical promotions (Chingos, 1997).

In a study conducted on performance-based pay, researcher Charles Peck (1993) stated that everyone seemed to agree that linking employee pay to performance is the most effective compensation structure to encourage organizational improvement efforts. In recent years, however, it has become increasingly difficult to build performance into the standard merit increase matrix. In order to replace merit increases, many companies implemented pay-for-performance incentive plans. These plans took many forms. Individual incentives, group or team incentives, management incentives, and sales incentives were most common. Companies that created variable pay plans did so for good business reasons. They found that a pay plan that paid for improved business results translated into more customers, higher profitability, and a more motivated workforce. In designing these systems, both advantages and disadvantages to variable reward systems were observed (Peck, 1992).

A common disadvantage to reward systems was that without the proper measures in place, employees lost interest in quality. It was extremely important to include a

quality measure along with the productivity measure in any variable pay formula. Without a quality component, the formula encouraged production or provided services that did not necessarily meet quality standards. If this ever happened, it was clearly the fault of the plan's design. Experience showed that any employee could calculate their potential payment by providing the relevant data (Peck, 1993). When employees felt defenseless and exposed to a poor compensation plan, the general effects of the pay system led to emotional distress, especially on service worker employees (as cited in Shirom et al., 1999).

In several longitudinal field studies, Siearist and his colleagues provided evidence regarding service worker employees' pay systems. Performance-contingent pay systems, as an integrative measurement of workload, included shift work, noise, and time pressure. The researchers found that elevated levels of physiological risk factors increased the implications for cardiovascular heart disease (Shirom et al., 1999). This finding supported the idea that working under a performance-contingent pay system was hazardous to the psychological well-being of some employees. Shirom et al. hypothesized that the more variable the system, the higher its harmful impact on employees' emotional distress.

Time pressure on the job was also shown to be associated with psychological distress (as cited in Shirom et al., 1999). Under some piece-rate systems, rest periods were rare and closely monitored. Performance-contingent pay systems elicited high levels of energy expenditure by the worker, often above healthful limits. This characteristic was reinforced by interpersonal competition among employees. Only a few

studies have documented the adverse effects of performance-contingent pay systems on employees' psychological distress. These field experiments provided evidence that during periods of piece-rate payments, employees secreted significantly higher amounts of stress hormones than during periods of time-based pay. The above rationale and empirical evidence led to the hypothesis that relative to time-based pay, piece-rates would have the most pronounced harmful effects on employees' emotional distress, followed by individual and by group wage incentives, in that order (Shirom et al.).

In 1995, Turner, Wheaton, and Lloyd concluded that performance-contingent pay systems were associated with the characteristics of time-pressure, continuous monitoring of performance, and interpersonal competition. Several socio demographic characteristics were shown to predispose people to poor mental health since they, among other factors, determined people's life-long stress exposure (Shirom et al., 1999). In 1992, Birdi, Warr, and Oswald's study found that these demographic characteristics included educational attainment, gender, age, martial status, and ethnic status (as cited in Shirom et al.). As shown through multiple analyses of three performance-contingent pay systems, the effects of pay on service worker workers extended past these characteristics. Baron and Keeny's study found that all three performance-contingent pay systems significantly predicted psychological distress, thereby confirming a medical relationship (as cited in Shirom et al.). For anxiety, only piece-rate was a significant predictor. Interestingly, in Sweden, a 1994 study conducted by Landy found that a piece-rate system was permitted only under special circumstances because of its alleged associations with psychological and physiological strain and also because it is considered

to be a form of inappropriate control (as cited in Shirom et al.).

Successfully introducing and implementing a performance and pay system that measures employee performance goals, rewards excellent employees, and responds to the market dynamics requires careful project management. Such a system should include methods for frequent individual performance feedback and accurate and accountable pay decision-making (Woodson, 1999). A proactive approach in de-emphasizing fixed pay was through the use of incentive compensation, which was a defined program in which staff members knew up front what the objectives were and what the rewards would be. Because research shows that monetary rewards rank a solid fifth in importance to peoples' job satisfaction, it was to an organization's advantage to be proactive in this arena. Research also showed that the top motivators were (a) achievement, (b) recognition, (c) the work itself, and (d) responsibility (Gores, 2000).

The United States is not the only country faced with job stress, job satisfaction, and pay system contingencies. Mexico has been fighting an ongoing battle with trade liberalization and wage inequality among its laborers. Mexico has a wealth of skilled labor and a shortage of unskilled labor relative to the rest of the world. Under import provisions, Mexico extended trade protection preferentially to industries that use unskilled labor (Ghosh, Saunders, & Biswas, 2002).

Although the United States' economy has experienced unprecedented economic growth, a 2002 analysis of its labor markets indicated that despite strong economic growth, the wage gap between skilled and unskilled workers was widening. A decline in the relative wage of the unskilled workers guided the adoption of less skill-intensive

technologies across all sectors. This observation led Berman to conclude that it was technology rather than trade that was widening the wage differential (as cited in Ghosh et al., 2002). New technology penetrated not only manufacturing but also cut into the service sector. As a consequence, in many occupations a change was observed from a physical to a mental workload.

The 21st Century business creed demands complex cognitive skills such as vigilance, accuracy, and rapid decision-making. Because of fierce competitiveness, employees are forced to continuously display "*consumer friendly*" attitudes in ways that contradict the expression of their genuine feelings. Interestingly, those who work predominantly with other people, such as managers, secretaries, health care workers (e.g., physicians and nurses), catering personnel (waiters, cooks, and barkeepers), and teachers, experience the highest work pace (Schaufeli & Enzmann, 1998). It was concluded that there exists a long-run relation in the connection among the variables of (a) labor productivity, (b) technology, (c) wage differentials, and (d) employee satisfaction (Ghosh et al., 2002). In trying to understand the root causes of employee satisfaction, trade and wage studies were significant. Linked to pay fairness was employee outcomes within an organization. Pay was arguably one of the most critical, if not the most critical, outcome of organizational membership for employees (Shaw & Gupta, 2001).

Actual pay and people's attitudes about it was the subject of much research but, over the decades, the vast majority of studies concentrated on the foundations of different kinds of pay attitudes rather than on their consequences (Shaw & Gupta, 2001). Shaw and Gupta found an importance between pay, health, and behavioral outcomes.

Employee health affected organizational performance by affecting (a) absenteeism and turnover, (b) employee productivity, and (c) increased organizational costs through climbing insurance premiums, for example. Pay was a central feature in the work lives of many individuals and, obviously, nearly all individuals would rather receive more than less pay. Still, people differed in their need for money as money played a much more central role in the lives of some people than others. Pay attitudes were inconsistently related to physiological, psychological, and behavioral outcomes, but these relationships could be clarified by a consideration of how badly employees actually needed money to survive. When employees were economically dependent, they were much more likely to experience life dissatisfaction, depression, and somatic complaints as a consequence of the perception of unfair pay (Shaw & Gupta).

Modern Technology Stress

A study led by Perry-Jenkins found that effectively managed pay systems and establishing clear objectives were not the only concerns of an organization; the constant balancing act between work and family was also an issue (Perry Jenkins et al., 2000). The growing use of computers, pagers, and cell phones, for example, meant that, for some employees, work could be performed almost anywhere: at home, on the highway, or in an airplane (Tergeist, 1995). The debate on working hours changed from the quantitative to the qualitative in that the issue of working time duration was being linked to a focus on flexible working time arrangements. Night and weekend work was closely examined.

With the expansion of the service sector and the extension of operating hours in

the manufacturing and service industry, the demand for night and weekend workers grows each year. At the same time, however, people's willingness to work at such times decreases. Of the firms surveyed in five European countries (Belgium, Germany, Italy, Spain, and the United Kingdom), 38% reported past difficulties in finding workers for Saturday work. Despite high levels of unemployment in some areas, 68% expected to experience such difficulties in the future (Tergeist).

Job Stress and Satisfaction: Personal Demographics

Personal characteristics of stress were found to predispose some individuals to occupational injuries. Two factors associated with accidents were extreme extraversion and neuroticism. Extreme extraversion was defined by overconfidence, intolerance, and aggression and was associated with risk-taking behavior, which leads to accidents. The second factor, neuroticism, was defined by anxiety, tension, indecision, and depression and was associated with task distractibility, which leads to accidents in the workplace (Iverson & Erwin, 1997).

Westman and Etzion (1995) found that a husband's burnout affected the wife's burnout, and vice versa. The stress symptoms exhibited by the individual's burnt-out spouse led to a contagion process that affected the individual. The researchers also found interest in the fact that the spouse's sense of control served as an additional resource that benefited the partner. This indicates that spouses might empower each other with their own sense of control (Westman & Etzion).

In another study focusing on age, stress, and blood pressure conducted by Pickering and colleagues at the Cardiovascular and Hypertension Center at New York

Hospital-Cornell Medical Center found that job stress not only affected the middle-aged workers while they were on the job but also carried over into their home lives (Pickering, 1992). Increased turnover was one of the organizational effects of high stress at work. Although only 14% of employees said that workplace stress caused them to quit or change jobs within the previous two years, more than one-third of new employees said that they left their previous job because of stress. It was clear that organizations made immeasurable sacrifices in productivity by tolerating employee abuse. What made the losses immeasurable was the concept of opportunity costs. As stated by Bassman (1992), "One cannot measure something that isn't there; no one knows how productive a person could be under different circumstances" (p. 150).

Much of what is known about the effects of work on health comes from studies of job stress. A study conducted by Nelson and Burke (2000) found evidence that indicated work in general actually had positive effects on women's health. Employed women had better health than unemployed women in terms of fewer sick days, better psychological well-being, and greater resilience to family role stress. Multiple roles appeared to benefit women in terms of lower risk of cardiovascular illness, and the advantage was particularly strong for women in higher status careers (Langan-Fox, 1998). It also appeared that the quality of the job was more important than simply being employed.

Additionally, specific work conditions were linked with emotional well-being among women. These included support and encouragement, challenging jobs, the absence of stressful conflict, a balanced workload, and clear expectations. In contrast, Nelson and Burke (2000) found that the health benefits of careers could be compromised

by the health risks associated with stressors at work. Women reported higher levels of distress symptoms than men, and yet the life expectancy for women was approximately eight years longer. The symptoms experienced most often by women tended to be nonfatal, while men had a tendency to report more serious illnesses like cardiovascular disease.

There were also gender differences in physical, psychological, and behavioral symptoms of stress. Physical symptoms reported more often among women included headaches and poorer overall physical health. Anxiety, depression, and sleep disturbances were the psychological symptoms most often reported by women, and work stress had been implicated as a culprit in these distress symptoms.

Women's rate of depression was twice that found in men, and women were more likely to commit suicide (Nelson & Burke, 2000). Indications of studies remain consistent with the fact that men fared better in terms of psychological well-being, which was attributed to different roles men and women play in society and to gender differences in how they express distress (Lai et al., 2000).

Job Stress and Satisfaction: Job Characteristics

Another health problem associated with shift-work schedules is fatigue. Service workers reported that the most serious health-related problem they associated with shift work was the fatigue that accompanied the night and rotating schedules. Other studies also confirmed higher levels of fatigue among night-shift workers, apparently as a result of higher levels of sleeplessness following an interrupted and shorter sleeping period. When they changed from shift work to more regular work, they reported improvements in

the social dimensions of their lives.

Shift workers reduced the number of organizations they belong to away from work, presumably because of the irregularity with which they were able to attend functions. Finally, with regard to employees' use of free time, a two-sample study of workers on rotating shifts found that they had the most difficulty with leisure time and they spent more leisure time alone than did their colleagues on fixed schedules. The balance of evidence suggested that shift-work schedules were related to family and marital problems (Pierce, 1989). Research suggests that work and leisure are positively related to each other as well as to life satisfaction and psychological health (Pearson, 1998).

In shift-work families, there were reports of general family disturbances, a higher incidence of sexual problems, higher divorce rates, and general role-fulfillment problems of the husband/father. Staines and Pleck investigated the family-life effects attributable to non-standard work schedules. They noted that working nonstandard days as well as nonstandard hours was associated with poorer quality family life. When the workweek included Saturdays and Sundays, fewer hours per week were spent with children and doing housework (as cited in Brooks, 2000).

Popular belief suggests that shift workers suffers from various minor psychological disorders, perhaps as a by-product of the physical dysfunctions they naturally experience (Pierce, 1998). There is evidence to suggest the incidence of mental ill health is rising. Estimates based on the 1995 Labor Force Survey suggested that over 500,000 people suffered from work-related stress, depression, or anxiety, or from an

illness brought on by stress.

The emergence of psychological and physical ill-health associated with work has challenged the assumption about the positive benefits of work. An extensive amount of research concluded that prolonged exposure to work-related psychosocial hazards had negative mental and physical health consequences for employees. Work stressors or hazards were defined as an environmental situation potentially capable of producing the state of stress.

Strain refers to reactions to the condition of stress. Even short-term strains are presumed to have long-term outcomes. Psychological strain includes cognitive effects such as poor concentration and job dissatisfaction and disorders of mental health states such as anxiety and depression. Longer-term physiological effects of stress were identified as coronary heart disease, hypertension, and peptic ulcers. Longer-term psychological outcomes include mental illness, suicide, and marital dissolution. If the stressor continues, a stage of exhaustion is reached where organic damage or even death could occur (Kahn, 1993).

Lack of job control and job future ambiguity had short-term influences on stress reactions that lead to different types of strains. Current research reported that older employees rather than younger employees were more likely to be injured. As older employees tended to have higher tenure, they were assigned greater responsibility at work, which placed them at greater risk of injury. It was therefore hypothesized that older employees would experience greater injury rates than younger employees. It was also noted that women had a 45% greater accident rate than men, which could be

attributed to the disproportionate amount of external responsibilities that women have to contend with before and after work.

Interestingly, a positive relationship between education and injury was found. Within a similar occupational group consisting of production and assembly workers, less-educated employees displayed lower injury rates than higher-educated employees because of the different duties they undertook. Higher-educated employees tended to possess greater skill than less-educated employees, which enlarges their work responsibilities, increasing their accident potential. Qualities of work life factors comprised the variables of autonomy, job hazards, job stress, and social support (Iverson & Erwin, 1997).

Research suggested that quality of work life factors also affected injury rates. Autonomy, defined as the degrees to which an individual has influence over his or her job, was hypothesized to have a negative relationship with occupational injury. Harrell noted that when employees had greater control over their work with the freedom to be more attentive or cautious, they were less likely to be injured (as cited in Iverson & Erwin, 1997).

Hughes, Galinsky, and Morris found in 1992 that the association between chronic stressors at work and marital tension was mediated by the worker's perception that work and family life interfered with each other (as citied in Perry-Jenkins et al., 2000). Those who reported poor supervision at work also described greater difficulty managing work and family demands, which was linked to increased child behavior problems due to its association with less nurturing parenting.

One of the interesting features of the chronic stress transfer studies published in the 1990s was that they tended to report either no direct correlation or very little correlation between an individual's scores on global measures of stress at work and assessments of individual or family functioning (Perry-Jenkins et al., 2000). Job stressors had an impact on families when they caused some experience of stress within the individual, such as emotional distress, fatigue, and a sense of conflict between work and family roles, or role overload.

Responses to any stressor, including job stressors, were shaped by personality, coping style, and social support. Research pointed to characteristics of work and family that shaped the transfer of the stress process. Vulnerability to role strain seemed to vary according to structural characteristics of both job and family, such as the number and flexibility of work hours, family size, and ages of children (Perry-Jenkins et al., 2000). A serious limitation of studies that addressed multiple roles, whether it was from a balance or strain perspective, was a lack of attention to the connection between role enactments or a misunderstanding of role responsibility. A gender perspective challenged researchers to examine how individual constructs gave meaning to their roles, for ultimately it was the meaning attached to role behavior that held consequences for individual and family functioning (Perry-Jenkins et al.).

Research on the meaning of the provided role for women and men consistently found that employment status alone revealed little about the meaning and value of that role for the individual (Perry-Jenkins et al., 2000). Despite the continued recognition that work-family relationships were bi-directional, few studies emerged in the past decade

that explored how families shaped behavior in the workplace. People tended to select their work on the basis of goals, interests, skills, training, and experience. Evidence for the nonrandom nature of these processes came from the 1997 work of Cooksey, Menaghan, and Jekielek (as cited in Perry-Jenkins et al.), who found that mothers with low self-esteem and those with early histories of delinquent behavior were subsequently less likely to attain jobs that were high in complexity. Role overload, defined as having too much to do in the time available, had important implications for employee health and quality of work. Previous research in organizational settings demonstrated a significant relation between load and heavy smoking, elevated serum cholesterol, hypertension, and increased heart rate. Because each of these factors were associated with higher rates of coronary heart disease, correlation research implicated overload as a significant risk factor in the study of coronary disease.

Although a single brief exposure to overload on laboratory tasks was found by researchers O'Connell, Cummings, and Huber in 1976, Sales in 1970, and Kirmeyer in 1988 to increase productivity, at the same time it resulted in lowered quality of performance and feelings of time pressure, tension, anger, and personal failure (as cited in Kirmeyer). Much of previous research focused merely on volume or quantity of work to be done. Although volume proved important, researchers neglected other attributes of job demands that may have been equally or more important to overload stress. One such attribute was interruption. As load increased, the employee's environment became less controllable and predictable.

Externally imposed interruptions were often unpredictable in their timing and

duration. Researchers consistently found that uncontrollable and unpredictable environmental conditions were stressful. Although there was no direct evidence that interruptions caused role-overload stress, it was reasonably suspected that they were predictive of overload in some jobs (Kirmeyer, 1998).

The aim of one study was to test the main and interactive effects of key dimensions to predict levels of strain, specifically emotional exhaustion, depersonalization, and job dissatisfaction along with feelings of productivity and competency in a multi-occupational sample of human service workers. The study supported job redesign interventions for improving worker well-being and productivity. Few studies have examined the active learning hypothesis that jobs combining high demands and high control would lead workers to experience feelings of competence and productivity and accomplishment. Job demands were positively related to emotional exhaustion, depersonalization, and personal accomplishment and negatively associated with job satisfaction. Job control was positively related to personal accomplishment as well as job satisfaction. Social support was negatively associated with emotional exhaustion and depersonalization and positively related to job satisfaction.

The major implication from this study was that a reduction in levels of strain and an increase in productivity could be achieved with job redesign, not necessarily by decreasing work demands but by increasing the levels of control and support. Given the projected increase in demands, workers in the industry could be at high risk for the development of health problems, psychosocial in origin, without increases in control and support (Dollard et al., 2000).

The outcomes of job stress as it relates to job satisfaction has a profound impact on organizations (Perry-Jenkins et al., 2000). Researchers suggested that if an employee was found to experience an inordinate amount of stress such as impossible deadlines, disagreements with supervisors, or pressure to outperform others, the stress factor would ultimately affect the organization's economics by way of increased workers' compensation claims, absenteeism, poor customer service, and decreased employee retention rates (Bernard et al., 2000).

Finding Balance

Although the majority of stress sources come from the workplace, employee expectations, lack of family support, inability to balance life's demands, and basic gender differences are contributing factors outside of the workplace. Diversity in the make-up of American households increased over the past 20 to 30 years, resulting in stress for increasing numbers of employees as they attempt to find a balance between work and personal life. Very few households fit the norm of the 1950s when dads worked and moms stayed home.

With regard to mental health, stress arising from lack of family support and professionalism tends to increase the number of psychological symptoms. In other words, the greater the stress an individual experiences because of a lack of family support and isolation, the worse his or her mental health. When an employee cannot vent problems and frustrations with intimate others, his or her psychological well-being is jeopardized.

Much of the nation's workforce looks to the workplace not only to offer financial

stability but also to provide a social life. When the employee's expectations are not met, disappointment is inevitable. Many industries require workers to work independently and be self-disciplined, which generates emotional strains among the employees and often manifests into feelings of loneliness and isolation. Much of the stress that employees experience may be self-imposed. Independence and self-discipline reduce the level of job satisfaction among respondents. The negative relationship between professionalism-related stress and job satisfaction suggests that economic gains are not the only needs of employees (Lai et al., 2000). The outcomes of job stress as it relates to job satisfaction have clearly had an impact on both the individual and the organization, most of which are destructive in nature.

Research on work stress, with roots in both occupational health and clinical psychology, explored how short- and long-term stress at work make their mark on workers' behavior and well-being off the job (Perry-Jenkins et al., 2000). Effects on the individual included alcoholism, fatigue, family and marital problems, mental illness, and work-related injuries including musculoskeletal strain. Possibly as a by-product of stress levels, service worker workers on rotating shifts were found to consume more alcohol than employees working fixed morning, afternoon, or night schedules.

General Motivators

Literature on job stress indicated that all jobs could be categorized into four types: high-strain jobs with high demand and low control, low-strain jobs with low-demand and high control, active jobs with high demand and high control, and passive jobs with low demand and low control. Active jobs and high-strain jobs were the most interesting

contrasts. In 1993, Robbins explained that work motivation could be defined as "the willingness to exert high levels of effort toward organizational goals, conditioned by the person's ability to satisfy some individual need" (as cited in Lu, 1999, p. 61).

Two general types of work motivations are intrinsic and extrinsic factors. These motivators have two purposes. The first is to expand the categories of work stressors of demand and lack of discretion to include interpersonal conflicts; and the second is to incorporate work motivation and social support as potential moderating variables. Studies proved that work motivations are important moderators, and social support could directly reduce an employee's stress level and mental well-being (Lu, 1999). A longitudinal study conducted by Bohle and Tilley (1998) concerned the influence of attitudes on shift work. The service worker participants were divided into three groups by routine rostering arrangements over which they had no control. Rotations between day, afternoon, and night shifts continued for a 15-month duration and questionnaires were completed as each group rotated.

As a result of the study, five variables leading to various health and behavioral issues were found as predictors to dissatisfaction scores: both work and non-work conflict, psychological symptoms, vigor, and social support from co-workers and family. Dissatisfaction increased significantly between the 6- and 15-month stage, showing that a prolonged rotation pattern had negative effects. Even though results indicated that rotating shift work had an effect on attitudes and dissatisfaction with the employees' quality of life, there was no evidence that dissatisfaction was increased by night work (Bohle & Tilley, 1998). These research conclusions were readily applied to studies

concentrating on the psychological and physical symptoms produced by shift work practices.

The effects of different shift schedules on employee health, especially the compressed working weeks or 12-hour shifts, received increased attention. Sparks et al. (1997) stated that their success, as regards to productivity and employee health, however, was not yet fully evaluated.

The amount of physical activity was also important. Farmers and farm laborers showed relative protection from coronary heart disease, even though many of them worked long hours, compared with non-farm workers who had more sedentary occupations. Employees who worked long hours in sedentary occupations suffered health problems due to lack of exercise. However, at the other extreme, jobs incorporating excessive physical activity were also detrimental to health, with workers suffering from injuries and exhaustion. Hence the type of occupation was considered in the working hours health relationship (Sparks et al., 1997).

Work Related Disorders

Working in a physically stressful environment might increase one's susceptibility to other sources of stress. Important to consider was the whole work system, its characteristics, and its interactions with individual organizational members in defining the potential impact of work on the development of work-related musculoskeletal disorders (WRMDs). The balance theory of Carayon et al. (1999) provided an interesting framework for conceptualizing the job-related factors that affected both the stress process and WRMDs. During times of reorganization, if employees did not feel they were

sufficiently involved in the change process, research reported an increase in WRMDs (Carayon et al.). Further studies stated,

> It does seem very plausible that job stress can have a major influence on the development and treatment of upper-extremity WRMDs. Three separate studies, Silverstein, Fine, and Armstrong, 1987; Putz-Anderson, 1988; Carayon, Smith, and Haims, 1999, showed that traditional ergonomic risk factors such as repetitions, force, and posture have been hypothesized to contribute to WRMDs. (Carayon et al., 1999, p. 677)

Cost of Stress to Employer

In the United States, stress-related workers' compensation claims sharply rose from less than 5% in 1980 to 15% in 1989 (Schaufeli & Enzmann, 1998). The expenditure on job stress was huge. It was estimated that in the United States job stress cost employers in excess of $200 billion dollars per year in absenteeism, reduced productivity, medical expenses, and compensation claims. Moreover, stress claims were commonly the most costly. Many were twice as expensive as other claims (Schaufeli & Enzmann).

Burnout was found to be an additional attribute lending to job injuries. The term "*burnout*" was cited as overused and as having lost much of its meaning. The origin of the word described a state of exhaustion similar to the smothering of a fire or the extinguishing of a candle. Burnout was essentially the long-term result of an imbalance between investments and outcomes. Burnout was not a new phenomenon. Figures from several countries indicated that job stress, including burnout, had risen sharply in recent decades. When job demands were too high to cope with, stress reactions were likely to occur. Burnout was considered to be a special type of prolonged job stress that results

particularly from interpersonal demands at work (Schaufeli & Enzmann, 1998).

There was ample evidence that the prevalence of job stress was rather high. The work-related health problems mentioned most frequently were backpain at 30%, stress at 28%, and overall fatigue at 20%. A survey in the United States showed that more than 75% of American workers described their jobs as stressful and believed that the pressure was steadily increasing. Furthermore, United States' industry loses approximately 550 million working days per year due to absenteeism, of which 54% was estimated to be in some way stress related. The top three causes reported were (a) pressuring workers, (b) responsibility, and (c) contact with people (Schaufeli & Enzmann, 1998).

A study by Mausner-Dorsch and Eaton (2000) used a demand-control model. The demand-control model contributed to their study of job stress by providing a theoretical framework to explain the relation between the psychosocial characteristics of the work environment and health outcomes. Sex-stratified analyses suggested that women seem to be more sensitive to psychological job strain and might also be more exposed to it in their work environments than men. Some personality traits were potentially associated with the prevalence and incidence of depressive disorders independently of factors from the work environment (Mausner-Dorsch & Eaton).

Cost of Stress to Society

Work stress as a social phenomenon and social issue causes considerable concern to scholars and laymen alike because of its costs to workers and companies. Unfortunately, work stress is often seen by management as a result of an individual's failure in making adjustments to the work environment (Lai et al., 2000). Australian

workplaces use the rate of claims filed on workers' compensation as the dominant work stress indicator (Kahn, 1993).

The cost of job stress is acknowledged as a problem around the world. In the United Kingdom, the Confederation of British Industry calculated that the costs of sickness absences to the United Kingdom economy was over 12 billion pounds, 50% of which was estimated to be stress related. Stress claims accounted for 3.4% of all new workers' compensation claims. Furthermore, they did not reflect the costs to the individual such as loss of self-esteem, loss of professional esteem, new or exacerbated physical symptoms, loss of physical stamina, disruption to intimate life, lost hours of professional development, loss of professional sensitivity, or increased physiological distress. Research suggests that the real costs of stress should be considered by studying the psychological and physical well-being of the individual (Kahn, 1993).

Not only does workplace stress prove to be costly, but it also appears to be a growing problem as organizations throughout the Western world and beyond dramatically downsize, outsource, and develop less secure employment contracts. Many organizations are now smaller, with fewer people doing more and feeling much less secure. This "*second wave*" industrial revolution of contingent working, short-term contracts, and virtual organizations, netted a large amount of research in the area of job stress, together with numerous books and stress-specific journals in the field.

Much of the recent research in job stress concentrated on identifying occupational or organizational sources of stress as they relate to adverse strain indicators such as job dissatisfaction, mental ill health, and absence due to sickness. Authors emphasized that

stress arose when environmental supplies did not meet the person's needs or when environmental demands exceeded the person's abilities (Cooper, 1998). The work environment also suffered by stressed employees becoming angry, which led to their using improper work methods and damaging work techniques. People under stress often developed poor attitudes and motivation about their job and about their personal health and well-being. In addition, they were more likely to be absent from work because of sickness, which limited the ability of the body's defense and repair systems (Carayon et al., 1999).

In 1992, researchers Last and Wallace noted that preventive medicine was a relatively young branch of medicine aimed at prevention of health problems and disorders, illnesses, diseases, and epidemics (as cited in Quick, Quick, & Nelson, 1998). A researcher by the name of Cannon better understood the stress process in organizations due to using the general adaptation syndrome (GAS) which included three stages: alarm, resistance, and exhaustion (as cited in Quick et al.). While the alarm stage of the GAS was what Cannon labeled the emergency reaction, it was in the resistance stage of the GAS where an individual struggled, fought, and was exposed to health risks and distress. Finally, in the exhaustion stage, collapse occurred.

Cannon showed how conflict and confusion lead to individual distress and strain, with their associated organizational costs. Taken together, the medical foundations and psychological elaborations of the stress concept lay the groundwork for describing the stress process in organizations. The core elements of the stress process were organizational demands and stressors, which led to the stress response, resulting in

eustress or distressful consequences. The relationships among these constructs were expressed in two hypotheses. Intense, frequent, prolonged organizational demands increased the stress response in people at work and intense, frequent, prolonged elicitation of the stress response increased the risk and incidence rates of distressful health consequences (Quick et al., 1998).

Quick et al. (1998) showed how conflict and confusion could lead to individual distress and strain along with their associated organizational costs. Based on research data, it seemed likely that some employers would realize gains in productivity that partially offset the costs of treatment if they were to encourage their depressed employees to obtain treatment. The motivation of employers to encourage their depressed employees to seek treatment also depended on the belief that depression treatment can be effective in reducing short-term disability. The results reported were encouraging in suggesting that such studies were likely to document cost effectiveness (Kessler, Barber, Birnbaum, & Frank, 1999).

A survey conducted in 1997 by a long-term disability insurer found that claims for compensation arising from mental health problems had increased by 90% in the last five years. At the date of the study, four successful cases had been brought before the courts in which employees had been awarded compensation for mental illness induced by work-related stress. This evidence suggested that employees are increasingly seeking redress for psychiatric injuries resulting from workplace stress (Cartwright & Boyes, 2000). The theory of preventive stress management in organizations was introduced with a description of the preventive medicine model, followed by an explanation of the stress

process in organizations. Preventive stress management is an organizational philosophy and set of principles that includes specific methods for promoting individual and organizational health while preventing individual and organizational distress. The principles consisted of individual and organizational health being interdependent. This concept places the responsibility for individual and organizational health on the leader. Individual and organizational distress are referred to as avoidable. Researchers admitted that each individual and organization reacts uniquely to stress making organizations ever-changing, dynamic entities.

Modifiers of the stress response helped account for variance in consequences across individuals, influencing whether the consequences were eustressful or distressful. These dispositional factors and individual difference modifiers influenced vulnerability and helped account for significant portions of the explained variance in consequences. Because the stress response was a general response involving psychological as well as somatic (bodily) responses, there were parallel physiological susceptibility and natural protective, immunizing mechanisms and defenses. Individuals high in vulnerability modifiers were at greater risk of distress than individuals low in vulnerability modifiers. Individuals high in protective mechanisms and defenses were immunized against the risk of distress more than individuals low in these factors (Quick et al., 1998).

Working Smarter

Excessive work hours and abnormally long workweeks have escalated into a national problem. Many organizations support the workaholic culture. When faced with tougher competitive pressures, it is easy to buy into the seductive notion that working

harder and longer results in greater productivity. Bassman (1992) concluded that it is certainly far easier to embrace that notion than it is to figure out how to work smarter. But he continued to say that if businesses are to become truly competitive, they must learn how to work smarter, not just harder.

The distorted thinking that causes managers to demand longer hours from employees is responsible for many employees feeling abused by the system. Managers are under increasing pressure to produce more with less. Not only does this create havoc in the personal lives and health of overworked employees, but it has a negative impact on the organization as well. Bassman (1992) felt values should reflect the belief, assumption, and expectation that diversity is good, desirable, and a source of strength. Organizational behavior imitates those values. Those values are supported and communicated through policies, practices, and systems. Employee feedback should be continually solicited so management can effectively incorporate diversity into the culture. The real tragedy of employee abuse is the wasted potential of those afflicted (Bassman).

Looking in the Mirror

The ability to generate hope among an organization's members is particularly important during radical change efforts. When people believe that their actions will lead to positive results, they are more willing to accept difficult and uncertain challenges. Relationships between employees and their supervisors that are open and supportive reduce role ambiguity, reduce an employee's uncertainty of supervisory expectations, and increase the satisfaction experienced by employees (Simmons & Nelson, 2001). All self-management programs follow one general format.

First, the employees survey what they can and would do; they explore their talents and special themes and their opportunities and limitations. Some of the elements of wisdom are introduced and practiced in special exercises with trainees and a sponsor they find within the organization. Techniques used include relaxation, imagination, and focusing exercises. The main objective is to ensure that all employees develop their integrity, their abilities and their skills so they can adapt in their own way to the changes the organization is going through. This means that everybody has to pursue a career that capitalizes on their own talents and competencies that were compatible with the greater organizational picture. This management initiative provides challenging tasks with enough room for further development but without undue stress and health risks (Cooper, 1998).

A 2000 study confirmed that task control is a potent resource and managers should seek creative methods for extinguishing fear in the front lines. Balancing productivity and quality demands is as critical as providing coping resources (Singh, 2000). M. Carroll once said, "Sick companies produce sick employees, as dysfunctional families produce dysfunctional family members, as sick societies produce sick citizens" (as cited in Arthur, 2000, p. 549). Works by Carroll and Feltham found two factors contributed to the growth of Employee Assistance Programs (EAPs) in the 1990s: the threat of employee litigation for causing work-related stress and a greater willingness to admit mental health problems (as cited in Arthur). EAPs, and to a lesser extent stress management techniques, had a role to play in supporting employees who experienced symptoms of psychological distress. However, they had to be a part of a complete

strategy, involving management, human resources, and occupational health professionals. Policies, procedures, work patterns, communications, decision-making, and employee empowerment within organizations remained under constant evaluation. They were not in themselves effective enough to counter the effects of stressful work environments (Arthur).

Employee Assistance Programs

Evaluations of the effectiveness of counseling services conducted by Cartwright and Boyes (2000) confirmed that counseling could significantly improve psychological health and well-being but had little effect on job satisfaction and organizational commitment. In the context of executive stress and health, the continuation of the long working hours posed a long-term threat to health. Individual managers needed to become more self-disciplined about the number of hours they worked. This was important to their personal health and to those they managed, for whom they were a role model. Since lifestyle was a significant factor in good health, organizations placed more emphasis on health screenings and educational programs.

Many companies provide lifestyle awareness programs to all regular employees every few years. Other companies offer annual health fairs where employees may gain assistance regarding weight control, hypertension, smoking habits, alcohol intake, anemia, cholesterol, and exercise advice (Cartwright & Boyes, 2000).

Many organizations extended their health promotion activities to develop opportunities for exercise and workplace socializing. These took the form of workplace gyms and exercise classes or subsidized membership rates to local health clubs. One

company arranged for a masseur to visit its site once a week to give massages, the costs of which were met in part by the company. Given the important relationship between stress and perceptions of control, organizations also acted to ensure that employees felt that they were listened to and had some say in the way they did their jobs. Many solutions to workplace problems were solved at the very place at which they occurred, at the grassroots level. Finally, organizations had support mechanisms in place for employees with serious stress-related problems that included access to professional counseling.

Health researchers such as Gentry, Chesney, Gary, Hall, and Harburg suggested in a 1982 study that style of anger expression had health-related consequences. Specifically, researchers contrasted two distinct expressive styles: "*anger-out*" and "*anger-in*." Persons prone to behavioral expressions of anger characterized the anger-out expressive style, whereas anger-in referred to angry emotions that were experienced but not expressed (as cited in Martin et al., 1999).

In contrast to the literature linking anger out and health outcomes, other investigators reported that it was the non-expression of anger that endangered health. In particular, some studies indicated that people who do not express their anger are vulnerable to hypertension (Martin et al., 1999). By changing the workplace to reduce stress rather than by treating stress, a company could avoid lost productivity and avoid possible litigation (Kompier & Cooper, 2000). There was well-documented 1997 evidence by Berridge to suggest that counseling was effective in improving the psychological well-being of employees and had considerable cost benefits in terms of

decreasing employee absences (as cited in Kompier & Cooper).

Improvements in mental health and self-esteem resulting from counseling gave individuals the ability and confidence needed to pursue and secure job opportunities in potentially less stressful work environments. Many of the difficulties in establishing the cost-effectiveness of stress intervention activities occurred because there was a lack of integrated measurement. It was recommended that organizations establish a monitoring system to assess the effectiveness of their efforts in reducing stress but to also identify the early warning signs of potential problems stemming from stress-related activities (Kompier & Cooper, 2000).

Employee Assistance Systems

Mentoring programs were suggested by Nelson and Burke (2000) to assist employees experiencing difficulty in making life-changing decisions in work schedules; however, this posed problems of its own. Particular difficulties were associated with cross-gender mentoring relationships. Resentment from coworkers was one difficulty; another was that the pair must manage the closeness in the mentoring relationship along with the perceptions of the relationship by outsiders (Nelson & Burke).

Another beneficial assistance program to help employees cope was the use of exercise. It was found to be a coping mechanism with positive consequences in dealing with stress, as it helped the individual recover from the experience of distress. However, women often reported significantly less use of exercise and sports that men. One reason may be that women lacked the resources such as time, money, and childcare to engage in exercise. Another may be that women simply did not see sports as a stress management

technique.

The two positive coping methods women used more often than men were maintaining healthy eating patterns and maintaining positive attitudes. Women saw diet as a factor that increases their resilience. Positive attitudes promoted the uses of transformational coping, or seeing problems as challenges rather than threats (Nelson & Burke, 2000). It was certain that gender differences existed both in the kind of stressors experienced and the coping mechanisms used (Narayanan, Menon, & Spector, 1999).

Differences in stress symptoms among males and females include genetic and biological factors as well as structural and psychological aspects. Researchers proposed a conceptual framework to explain the relationship between gender and stress based on these variables. In 1999, Narayanan et al. reported that a researcher by the name of Hall found that highest levels of work control were found for females in the gender-integrated occupations.

Women in male-dominated industries reported worse mental health when they utilized an interpersonally oriented leadership style, whereas men in male-dominated industries reported better mental health when they utilized such a leadership style. A number of writers have suggested that when men dominate numerically in an industry, women in that industry experience pressure to alter their leadership style, which in turn has an impact on their mental health (Gardiner & Tiggemann, 1999).

There are definite gender stereotypes of leadership style. The stereotypically masculine leader emphasizes achievement of organizational goals, whereas the stereotypically feminine leader emphasizes people and relationships. In organizations

with more men, the women's behavior appears more like that of the men. Research conducted by Eagly and Johnson in 1990 postulated that this occurs because women in male-dominated environments adopt more male styles in order not to lose authority and position (as cited in Gardiner & Tiggemann, 1999). Gardiner and Tiggemann found that for women in the minority three consequences were likely to increase their stress: increased visibility, exaggeration of differences, and stereotyping. Gender differences in leadership style, stress, and mental health were attributed to both genders in the industries.

One of the biggest sources of stress reported by employees is wasted time. Narayanan et al. (1999) found work overload, interpersonal conflict, and lack of support to be major stressors. Stressors could differ as a function of job level or job type. Increasing levels of autonomy and increasing levels of support could improve high strain-isolated jobs.

Active-isolated jobs could benefit from enhanced social support. Passive jobs benefited from increased demands and increased autonomy, job rotation, and skill-variety. Stress arising from unfair supervision was not linked to work roles but was relevant across the organizations, and intervention could be fruitfully focused at the organizational level for action in this area (Kahn, 1993).

A 2000 study (Lai et al.) showed that a sample of employees in a supportive environment generally experienced a low level of work stress. The most stress was found to be derived from work demands and the least stress from interpersonal relationships at the workplace. Specifically, an early indicator of stress was job dissatisfaction as it

related to the immediate boss or non-recognition for good work, and industrial relations between workers. Even prior to the development of dissatisfaction, reports by workers of chronic work stressors such as (a) ambiguity, (b) low supervisor support, (c) low peer cohesion, (d) perceptions that processes were unfair, and (e) high job demands could provide early stress detection that could lead to a claim (Kahn, 1993). Stress, in essence, was a feeling of doubt about being able to cope, a perception that the resources available did not match the demands of the job. When stress persisted it caused physical and psychological ill health and adversely affected social functioning (Bonn & Bonn, 2000).

Several studies have shown a link between blood pressure and job stress. In particular, workload, work pressure, and lack of job control are related to an increase in blood pressure (Carayon et al., 1999). Also, organizational conditions create a working climate of distrust, fear, and confusion that lead employees to perceive more aches and pains and report more work-related musculoskeletal disorders (WRMDs). Overtime influences exposure to WRMD risk factors by causing fatigue and preventing an employee from functioning at peak efficiency. This could lead employees to use risky work methods to remain on schedule.

Overtime has an indirect effect on worker stress and health because it reduces the amount of rest and recovery time, takes time away from relaxation with family and friends, and reduces time with sources of social support that buffer stress. The social environment is a critical source of social support that reduces worker stress (Carayon et al., 1999). A 1998 research study suggested that work and leisure are positively related to each other as well as to life satisfaction and psychological health. Life satisfaction,

rather than psychological health, has been the most common dependent variable regarding job satisfaction (Pearson, 1998).

In a project where new organizational structures from the bottom up were introduced including an extensive transfer of power to the employees themselves and where there was education regarding personnel management and a clear channel of command between the employee and the final decision-makers, employees expressed a more satisfying work life and absenteeism due to sickness drastically decreased (Kompier & Cooper, 2000). Growing bodies of research demonstrate that support in the work place has important implications for many aspects of organizational behavior.

Studies show that social support increases job satisfaction and commitment and enhances overall mental health. Other research indicates that social support significantly affects one's ability to cope with various kinds of life stressors. The combined evidence suggests that social support is an important determinant of organizational effectiveness and personal well-being (Yoon & Thye, 2000).

Not only did gaps exist in the literature regarding the meaning and impact of work on mental health consumers, but the effects of the workplace were also ignored. In accordance with the vast literature on employment and well-being, mental health consumers described work as a vehicle that enabled fulfillment of numerous human needs. Both working and nonworking participants spoke about the importance of "*giving back*" to a system, of knowing and having others know that they were active participants within a collective group.

Mental health consumers described work as a set of opportunities to seek out and

meet new challenges and to experience a sense of accomplishment, thereby validating and developing self-esteem and a sense of self-worth. Consistent with literature on motivation and self-efficacy, it appears that satisfaction derived from achievement and mastery serves to foster the development of self-esteem (Kirsh, 2000). The nature of supervisory and co-worker relationships was a factor affecting quality of work life and maintenance of the job itself. Some consumers paid tribute to their supervisors and co-workers for their qualities and efforts; others pointed to the need for education and change.

Leiter in 1991 and Lee and Ashforth in 1993 examined the link between social support and recipient outcomes such as burnout (as cited in (Bacharach, Bamberger, & McKinney, 2000). Job performance and role strain were studied in 1998 by Schauebroeck and Fink, job-related stress was studied in 1985 by Cohen and Wills, and works on physical health were conducted in 1983 by Turner, Frankel, and Levin and again in 1988 by House, Umberson, and Landis (as cited in Bacharach et al.). Little research existed, however, on support providers dispensing ongoing assistance to their peers in organizations (Bacharach et al.). Investigators pointed out direct implications for management and work organizations, stating "attention to employees by supervisors was likely to improve mental health and reduce absenteeism rates due to short spells of sickness and thus may lead to an overall increase in productivity" (Kirsh, 2000, p. 26).

Wellness Programs

Primary interventions were the most direct method of tackling the problem of workplace stress and health, but stress and ill health continued to originate from

nonworking sources that affected well-being and performance, indicating that stress continued to affect workers in the new millennium. It was learned that the good health of the economy was dependent on the health and experience of senior executives and managers who ran its businesses (Cartwright & Boyes, 2000). Training topics identified as high priority were stress-reduction techniques, physical exercise techniques, and self-defense techniques (Bernard et al., 2000).

The most stress found was derived from work demands and the least stress from interpersonal relationships at the workplace. When operating in such a hostile environment, the employee put up moral and social buffers to cushion against many adverse impacts. Supervisors acted as mentors and moral supporters, not as bosses and rule enforcers. Help-seeking behavior among colleagues was also encouraged. Besides providing individual and group-based social support, employees regularly organized free seminars and workshops aimed at enhancing agents' problem-solving skills and styles of self-presentation (Lai et al., 2000). Finally, it was recognized that there was no single most appropriate shift system and that working time arrangements had to take into consideration empirical research, the operational and strategic. As part of a carefully managed change process, the top-down, directive approach needed to accommodate greater choices. Ground rules and changing roles of the individuals, teams and managers were established, allowing employees to choose their schedules and be involved at the ground level of decision-making (Brooks, 2000).

Quality of work life factors had an effect on occupational injuries. Significant were the roles of the supervisory and co-worker as they supported a decline in injuries.

The role of social support was very clear in accident literature. Supervisors and co-workers appeared to be important sources of task and informational support, which reduced the incidence of injuries (Iverson & Erwin, 1997). It was written that a good life plan was not confined to one's job, career, and professional development. Relationships with other people and other societal institutions played a crucial role too in terms of what an individual could contribute and what he or she could mean to others. The reward consisted of relationships and their outcomes, such as social support. Another feature of a good life plan is that it is not harmful to one's well-being and health, therefore demanding it be well-balanced over the different life domains. Essentially, the suggested plan is simply a general coping program in which individuals learned to get enough pleasure and rest and to deal with their own and others' stress effectively. Physical exercise such as swimming or running and practicing some form of free-flow thinking increases self-confidence and allows time for life reflection (Cooper, 1998).

Works by Staines in 1985 and Pleck in 1986 found that shift work was associated with less time in family roles, higher levels of conflict between work and family life, and lower levels of family adjustment and that flexibility of work schedules moderated the negative association between quality of family life and non-standard working times. They noted that not only did individuals' domestic and social circumstances differ, so did their ability to cope with life balance pressures (as cited in Brooks, 2000.

A significant element of choice in shifts worked enabled employees to exercise their creative powers to achieve the best fit between their working and non-working lives. Self-selection reduced the number of shift workers who found it difficult to cope with

shift work because of their family and social relationships and arrangements (as cited in Brooks, 2000). Evidence suggested that the creation of an organizational climate where involvement in shift work fostered perceived or real control in individual choice of shifts worked, appeared to relieve many of the reported detrimental effects. Conversely, compulsions, especially to work nights, rotate shifts, or to work irregular hours, led to increased reported health problems including reduced sleep, increased turnover, and possibly increased absenteeism.

Finding Balance Through Intervention

An increasing number of employees attempted to find balance between work and personal life. Very few households fit the norm of the 1950s when dad worked and mom stayed home. In married households, the chances were that both partners worked and that they did so for economic reasons. If approached correctly, work/life interventions by companies significantly helped employees' lives become more balanced as well as eliminated abusive conditions in the workplace. These resources would be necessary even if demands on employees were not excessive due to competitive pressures (Bassman, 1992).

Primary interventions were directed at eliminating or modifying the sources of stress. Secondary interventions were directed at increasing awareness, improving the stress resilience of the individual, and extending and improving their coping skills so that they manage stress more effectively. More recently, a study compared the effectiveness of stress management training based on three different theoretical perspectives: education and awareness, exercise, and cognitive restructuring on the health and well-being of

several hundred office workers. It found that exercise and education and awareness both had significant effects in improving the physical and mental health of participants three months after training. A very much higher proportion of cases were self-referrals rather than manager referral (Cartwright & Boyes, 2000).

Summary of Literature Review Chapter

The following conclusions can be made from the research reviewed. Job stress prevails as a health risk, causing an adverse impact on the health of those working in a service worker environment. The discovery of the additional costs and associated problems with job stress emphasizes the need for change and improvement (West-Fall Lake & McBride, 1998). Possible opportunities for change include work schedule flexibility, creative compensation programs, work place autonomy, and employee involvement. Due to the vast amount of research conducted on either job stress or job satisfaction, one could easily conclude that these two areas were of great importance to employees and organizations. Specifically, the findings of a 1993 study indicated that job stress has positive correlation with job dissatisfaction regarding the relationship with the immediate supervisor as well as the amount of support and recognition for good work (Kahn, 1993). Research showed that these findings remain consistent in the new millennium regardless of the industry or organization. Finally, the research indicated that comparative elements such as workload, work pressures, amount of job control, and life-balance support systems may have profound effects on job stress and job satisfaction and should not be ignored. In the end, Kornhauser's words resonate: "Mental health is not so

much a freedom from specific frustrations as it is an overall balanced relationship to the world" (as cited in Cooper, 1998).

CHAPTER III

METHODOLOGY

This chapter provides an overall description of the population and sample selected for this study. The (a) instrumentation, (b) data collection procedures, (c) motivational incentives, and the (d) data analysis procedures also are described. In addition, a flowchart of the study is included for the reader's clarification.

Population and Sample

Service worker employees were the population utilized for this study. The participants in this study consisted of 300 employees selected from a population of over 1,000 employees in East Tennessee. Participants were selected from 20 area restaurant facilities due to their non-union status and work characteristics. They are employees of the organization that follow directives set by the company, yet they are also under the various demands of the general public. They are a census of the whole population for this study. The study was conducted over the course of one month, January 2003, and included a survey distributed via the various store managers.

Instrument Dissemination

The instruments were administered to a sample of 300 workers with similar occupations in the area of service work, requiring shift work hours that could vary daily. The responses were compared to determine if a significant relationship existed between service worker work, job stress, and job satisfaction. Also, the data were further analyzed, and a list was compiled to enunciate the elements of service worker work that leads to job stress and/or job dissatisfaction according to the employee's perception.

Instruments Used in Study

The instruments chosen for the study were the Job Satisfaction Survey and the Job Stress Survey along with a 10 demographic question form. These three items were combined to form a single document.

Job Satisfaction Survey

The Job Satisfaction Survey, developed by Spector in 1985 and published by Sage Publications, consists of 36 questions with a six-point Likert scale that assessed nine facets of job satisfaction: (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent rewards, (f) operating procedures, (g) co-workers, (h) nature of work, and (i) communication, along with a total satisfaction score. Each item was a statement that was either positive or negative about a job dimension. According to Spector (1997), questions regarding pay referred to a person's satisfaction with pay and pay raises, while promotion referred to a person's satisfaction with promotion opportunities. Questions regarding supervision focused on a person's satisfaction with his or her immediate supervisor, and fringe benefits surveyed the satisfaction a person had with both monetary and momentary benefits. The facet, contingent rewards, focused on a person's satisfaction with appreciation, recognition, and rewards for good work. The Job Satisfaction Survey yielded 10 scores and one total summed score. The reported internal consistency, from a sample of 3,067 individuals, ranged from .60 to .91 for the total scales. The Job Satisfaction Survey was free to copy and took about 15-20 minutes to administer.

Job Stress Survey

The Job Stress Survey was designed by Spielberger and Vagg in 1991 (Spielberger et al., 1996). It was constructed to assess stress in the workplace from a generic perspective. Dewe (1989) observed, "when measuring work stressors, more attention would be given to such facets as intensity, frequency, and the meaning individuals attribute to events" (p. 993). Ideally, measures of job stress should evaluate both the perceived severity of specific sources of stress in the workplace and how often each job-related stressor was experienced by the respondent during a specified period. The Job Stress Survey proved a sound foundation for consultation and allowed comparison across individuals, different occupational levels, and work environments. As stated by O'Roark, "Empirically developed and technically refined, the Job Satisfaction Survey exemplifies increasing efforts to narrow the distance between what is known by researchers in applied psychological science and what is experienced by those holding a job in the 'real world' of work" (Spielberger, p. 123). Several researchers, such as Murphy and Hurrell (1987), Jackson and Schuler (1985), and Dewe (1989) influenced its contents regarding the assessment of core questions describing generic, job-related stressors, focusing on aspects of work situations that often result in psychological strain and giving attention to the frequency and perceived severity of events. Therefore, the Job Stress Survey was chosen for this study due to its generic measure of job stress that could be quickly and conveniently administered to workers at difference occupational levels in a variety of work settings. The reported internal consistency, from a sample of 2,173 individuals, ranged from .48 to .75 over various time intervals. Unlike the Job

Satisfaction Survey, the Job Stress Survey must be purchased and can be completed in 15 to 20 minutes.

Procedures

A cover letter was designed to explain the purpose of the study and to encourage participation of the survey. The cover letter also included a carbon copy notation for the President of the company and the Human Resources Director. The cover letter stated a requested return date of completed questionnaires. The anonymity of all respondents was heavily stressed. As an incentive, a pizza party was provided to the store location with the fastest and largest percentage of returns. Eight gift certificates were given away in a drawing held with the names of all participants returning a survey.

Profile forms were developed to collect demographic information for the study. Although these instruments have been used and validated by other studies, the human resources department reviewed the forms to ensure the organization was comfortable with the questions and relatively free of litigious consequence.

Motivational Incentive

To increase the number of responses, eight $25.00 Wal-Mart gift certificates were given to the winner of a drawing conducted on the responses received from each store location. All people completing and returning a survey were asked to voluntarily put their names on a roster so that their name could be used in the drawing.

Data Collection and Analysis

The data from these instruments were computer tallied by the researcher. Descriptive statistical methods were used to summarize the data. The responses were

averaged and ranked. Analysis was supported by the use of quantitative statistics. The sample was divided into distinct subgroups based on similarities and dissimilarities with regard to survey responses. A second part of the analysis identified the sources of stress in service work that could lead to job dissatisfaction, job stress, and reduced quality of life. Analysis of variances (ANOVAs) were used to determine to what degree of difference existed between more than two means. This test was used to determine quality or validity between groups and within groups. Multivariate analyses (MANOVAs) were run on the identified groups of subjects on a combination of dependent variables simultaneously to determine if there existed a significant difference. The MANOVA utilized was the Wilks Lambda, the most widely used statistic for this function. Finally, to establish how the homogenous subsets differed, Tukey tests were performed at the 5% level of significance.

Summary of Research Methodology and Procedures Chapter

This chapter included information regarding the research design, methods, and procedures used in this study. The participants in this study consisted of 300 employees selected from a population of over 1,000 employees in East Tennessee. Each participant received a packet of information containing a cover letter, a packet consisting of the Job Satisfaction Survey, Job Stress Survey, and 10 demographic questions, and an envelope for the return of completed packets. Following data collection, appropriate statistical analyses were performed. This process is represented in Figure 1.

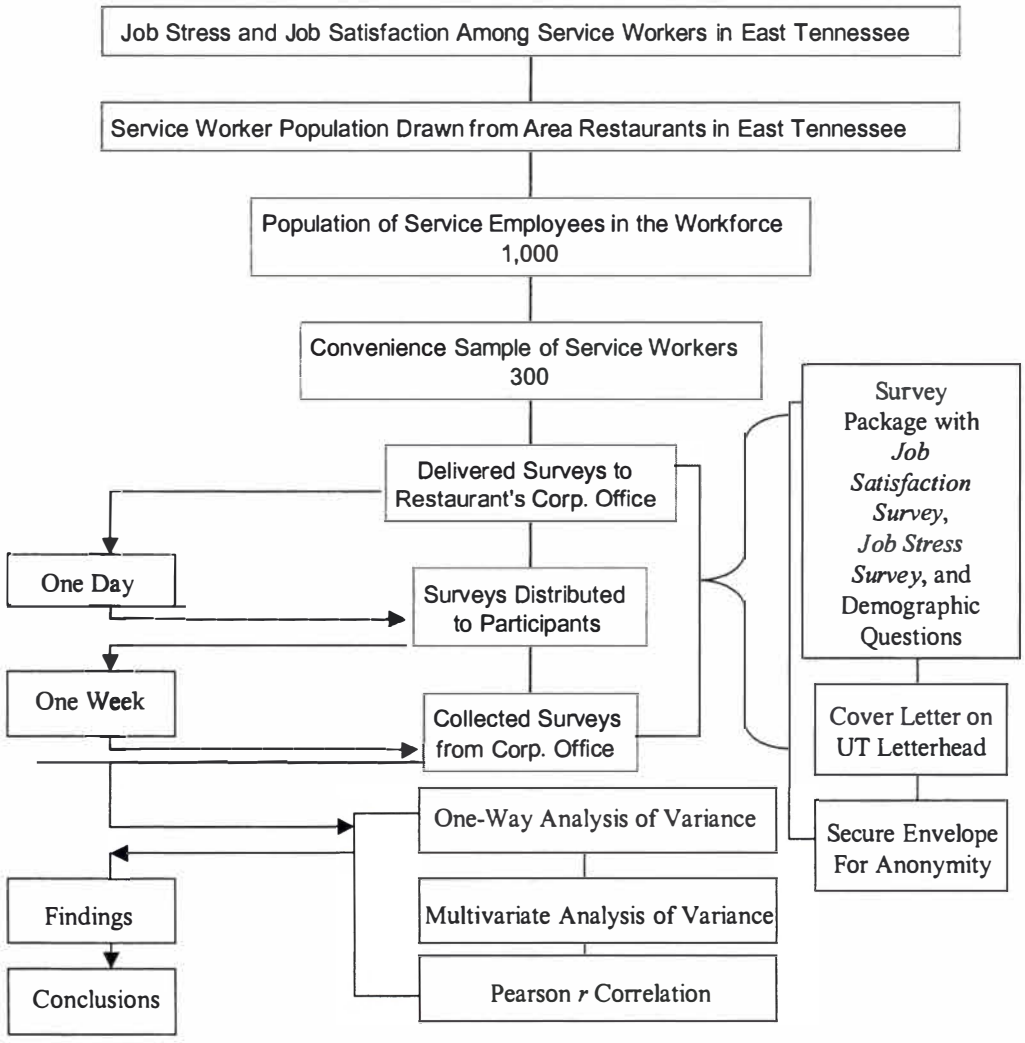


Figure 1. Flowchart of the Study

CHAPTER IV

FINDINGS

The purpose of this study was to determine whether or not a relationship existed between job stressors such as working long hours, perceived fairness, supervisory support, employee recognition programs, etc., and job satisfaction among service worker workers in East Tennessee. Also being studied were any significant differences between satisfaction, job stress, and the selected variables of (a) age, (b) marital status, (c) employment status, (d) position with the company, (e) overtime worked, (f) gender, (g) ethnicity, (h) educational level, (i) recognition, and (j) length of commute. As mentioned in Chapter III, a convenience survey of service workers employed by a restaurant in Tennessee was conducted to address those questions. The results from the returned surveys are presented in this chapter.

Response Rate

Surveys were sent to a total of 300 service worker employees who were less than 65 years of age. According to the human resources information system of the restaurant's corporate office, there were a total of 1,000 employees in East Tennessee in 2003. To minimize the amount of business interruption, only 15 surveys were distributed among 20 store locations each, cutting the list to 300. To increase the chance of achieving a large return rate, surveys were given to employees chosen by store managers based on employee availability and reliability. A drawing for eight $25 Wal-Mart gift certificates was also used as an incentive for those responding. Of those, 300 surveys were returned, yielding a response rate of 100%.

Demographic Results

Participants were asked to provide demographic data on their (a) age, (b) marital status, (c) employment status, (d) position with the company, (e) overtime worked, (f) gender, (g) ethnicity, (h) educational level, (i) recognition, and (j) length of commute. In addition, the question regarding recognition required the respondent to write in the type of company award (i.e., server of the quarter, employee of the year, hospitality award, etc.) they had received. Frequencies were calculated on each of these demographic and job-related questions: (a) age, (b) marital status, (c) employment status, (d) position with the company, (e) overtime worked, (f) gender, (g) ethnicity, (h) educational level, (i) recognition, and (j) length of commute. Table 1 shows the comprehensive demographic results for each demographic category.

Age of participants consisted of 80 (27.6%) respondents between 18 to 25 years of age, 82 (28.3%) between 26 and 35 years of age, 70 (24.1%) between 36 and 45 years of age, 37 (12.8%) between 46 and 55 years of age, and 23 (7.2%) who were over 55 years of age. Ten participants failed to indicate their age group. Due to some categories with small counts, the older groups, those between the ages of 46 and 55 and the over 55 group, were collapsed for purposes of statistical analyses.

On the demographic question regarding marital status, 139 (47.4%) of the employees were married; 39 (13.3%) were divorced; 5 (1.7%) were widowed; 11 (3.8%) were separated; and 99 (33.8%) were single. In all, 47.4% were married; 52.6% were not married. Seven people did not designate their marital status. For statistical analysis, data were collapsed into married and not married. The not married group consisted of

Table 1

Participants' Demographic Information (N = 300)

Variable and Level of Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Age				
18-25	80	27.6	27.4	27.4
26-35	82	28.3	28.1	55.5
36-45	70	24.1	24.0	79.5
46-55	37	12.8	12.7	92.1
Over 55	23	7.2	7.9	99.3
Total without missing value	292	97.3	100.0	100.0
Missing value	8	2.7		
Marital Status				
Married	139	46.3	47.4	47.4
Divorced	39	13.0	13.3	60.8
Widow	5	1.7	1.7	62.5
Separated	11	3.7	3.8	66.2
Single	99	33.0	33.8	100.0
Total without missing value	293	97.7	100.0	
Missing value	7	2.3		
Employment Status				
Full-Time	252	84.0	84.8	84.8
Part-Time	45	15.0	15.2	100.0
Total without missing value	297	99.0	100.0	
Missing value	3	1.0		
Position with Company				
Manager	129	43	43.5	131.3
Non-Manager	168	57	56.5	232.7
Total without missing value	297	99.0	100.0	
Missing value	3	1.0		

Table 1

(continued)

Variable and Level of Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Overtime Worked				
Never	106	35.3	36.6	36.6
Less than once a week	73	24.3	25.2	61.7
1-2 times a week	41	13.7	14.1	75.9
3 or more times a week	10	3.3	3.4	79.3
Always	60	20.0	20.7	100.0
Total without missing value	290	96.7	96.7	
Missing value	10	3.3	3.3	
Gender				
Male	105	35.0	35.6	35.6
Female	190	63.3	64.4	100.0
Total without missing value	295	98.3	100.0	
Missing value	5	1.7		
Ethnicity				
White	274	91.5	93.5	96.6
African-American	8	2.7	2.7	2.7
Hispanic	1	.3	.3	3.1
Asian-Pacific Islander	1	.3	.3	96.9
Native American	5	1.7	1.7	98.6
Total without missing value	293	97.7		
Missing value	7	2.3		
Educational Level				
Less than High School	63	21.0	22.0	22.0
High School Diploma	128	42.7	44.6	66.6
Some College	74	24.7	25.8	92.3
Associate's Degree	12	4.0	4.2	96.5
Bachelor's Degree	7	2.3	2.4	99.0
Post Graduate	3	1.0	1.0	100.0
Total without missing value	287	95.7	100.0	
Missing value	13	4.3		

Table 1

(continued)

Variable and Level of Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Award and Recognition				
Yes	30	10.0	10.4	10.4
No	259	86.3	89.6	100.0
Total without missing value	289	96.3	100.0	
Missing value	11	3.7		
Length of Commute				
Less than 10 minutes	95	31.7	32.2	32.2
11-20 minutes	101	33.7	34.2	66.4
21-30 minutes	47	15.7	15.9	82.4
31 or more minutes	52	17.4	17.6	387.5
Total without missing value	295	98.3		
Missing value	5	1.7		

divorced, widowed, separated and single.

Of the 300 participants who responded to demographic questions, 252 (84.8%) were at full-time status working in the organization in a service worker capacity. The other 45 (15.2%) were working in the organization in a service worker capacity at a part-time status.

In studying positions with the company, the majority of the answers for the "other" category were simply another type of manager; therefore, data were collapsed into manager/non-manager groupings. The categories resulted in 129 (43.5%) managers and 168 (56.5%) non-managers. Job title was specifically requested on the survey. The choices of non-manager titles were Bar Attendant, Preparation Cook, Cook, Server, Salad Preparation, and Busboy slash Dishwasher. Three employees did not designate their position with the company.

The next question asked, "How often are you asked to work overtime?" The results included 106 (36.6%) who said never; 73 (25.2) who said less than once a week; 41 (14.1%) who said 1-2 times a week; 10 (3.4%) who said 3 or more times a week; 60 (20.7%) who said they were always asked to work overtime. Ten employees did not indicate their amount of overtime.

Pertaining to gender, the respondents were primarily female. Of the 295 respondents who answered this question, 190 (64.4%,) were female, while only 105 (35.6%) were male.

Regarding ethnicity, 274 (93.5%) were White; 8 (2.7%) were African-American; 1 (.3%) was Hispanic; 1 (.3%) was Asian-Pacific Islander, and 5 (1.7%) were Native

American. A majority, 93.5%, were White; 6.5% were non-white. Seven people did not indicate ethnicity. Ethnicity will not be used for further comparisons due to the small number of non-Caucasians.

Education was originally divided into six categories, and participants were asked to mark the highest level of education they had obtained. The results included 63 (22%) of the employees who had less than a high school diploma; 128 (44.6%) had at least a high school diploma; 74 (25.8) had some college education; 12 (4.2%) had associate's degrees; 7 (2.4%) had bachelor's degrees, and 3 (1%) had some graduate work. These categories were collapsed into three groups for analysis. The new categories and results included 63 (22%) of the employees who had less than a high school diploma; 128 (44.6%) who had at least a high school diploma, and 96 (33.4%) who had college work. Thirteen employees did not designate their education levels.

The demographic variable, award with the company, was broken into two categories accompanied by a space to allow participants answering in the affirmative the opportunity to indicate the type of award they had received. Responses included 259 (89.6%) who said no and 30 (10.4%) who said yes. Eleven respondents failed to answer the question. Of the 30 affirmative answers made by the participants, 4 mentioned years of service awards; 5 mentioned service awards; 3 mentioned performance awards; 12 mentioned employee of the month; and 6 mentioned no specific award.

The last demographic question concerned the length of commute involved for each respondent. Responses included 95 (32.2%) who said less than 10 minutes; 101 (34.2%) who said 11-20 minutes; 47 (15.9%) who said 21-30 minutes; 52 (17.6%) who

said it took them 31 or more minutes to commute to work; and 5 respondents failed to indicate the length of their commute.

Reliability Results of Surveys

Two surveys were used to conduct this study, the Job Satisfaction Survey (Job Satisfaction) by Spector in 1985 and the Job Stress Survey by Spielberger and Vagg in 1991. It was necessary to check the reliabilities of the instruments on this population to assure that the total and subscale scores of both surveys had sufficient reliabilities to interpret results. The resulting reliability coefficient for overall job satisfaction was .8852. The overall reliability of total job stress was broken down into severity at .9329 and frequency at .9266, with overall stress resulting in a .9858 coefficient. All scales were found to be reliable since scales were above .8000 or higher.

Summary of Results

The Job Satisfaction Survey also had a Likert scale, with a range of 1 (negative response) through 5 (most positive response). The overall mean score of the Job Satisfaction Survey was 3.88 with a standard deviation of .69.

The Job Stress Survey asked respondents to answer 60 questions concerning the severity and frequency of stress on their jobs. The Job Stress Survey also had a Likert scale ranging from 1 (lowest amount) through 9 (highest amount). The overall mean score of total job stress was 16.13 with a standard deviation of 11.98. Severity resulted in an overall mean score of 4.12 with a standard deviation of 1.41 and the overall mean score of the frequency was 2.99 with a standard deviation of 1.79.

Hypotheses

$H_0$1: There is no significant difference between service worker employees' level of total job stress based on their personal demographics.

The researcher conducted an analysis of variance (ANOVA) to determine any significant difference between age, marital status, gender, ethnicity, or educational level differences concerning total level of job stress. Significant differences were found concerning educational levels $p<.001$. The results of the ANOVA are in Table 2.

Because the educational level had more than two groups, a Tukey Test was necessary. Those with college degrees were found to have a significantly higher level of stress than the three other groups. Between the three other groups, there were no differences.

The results of the Tukey Test are in Table 3. The hypothesis was rejected.

$H_0$2: There is no significant difference between service worker employees' level of job stress frequency and severity based on their personal demographics.

Next, the researcher performed a multivariate analysis of variance (MANOVA) to determine any significant difference with the subscales concerning personal demographics. The MANOVA found significant differences with education. The results of the MANOVA are in Table 4.

To determine which subscales differed with education, ANOVAs were run. When reviewing the p values of both severity and frequency of job stress, it appears the only

Table 2

Analysis of Variance for Level of Stress and Personal Demographics

Source	Sum of Squares	*df*	Mean Square	*F*	*p*
Corrected Model	3283.528	8	410.441	3.029	.003
Intercept	55997.918	1	55997.918	413.213	<.001
Age	445.286	3	148.429	1.095	.352
Marital Status	5.244	1	5.244	.039	.844
Educational	2519.634	3	839.878	6.198	<.001
Gender	111.663	1	111.663	.824	.365
Error	35912.376	265	135.518		
Total	112530.87	274			
Corrected	39195.904	273			

**p< .05 level of significance*

Table 3

Tukey's Honestly Significant Difference Test for Comparisons of Means of Educational Level for Variable

			Subset	
	Educational Level	*N*	1	2
Tukey HSD	Less than High School	60	13.1554	
	Some College	72	16.0525	
	High School Diploma	120	16.4264	
	College Degree	22		25.7426
	Significant		.520	1.000

Table 4

Wilks' Lambda Comparison of Significant Difference with the Subscales of Frequency and Severity Concerning Personal Demographics

Effect	Wilks' Lambda	*F*	*df*	*p*
Intercept	.136	835.919	2	<.001
Age	.984	.704	6	.647
Marital Status	.991	1.181	2	.309
Educational Level	.910	4.265	6	<.001
Gender	.985	2.020	2	.135

**p< .05 level of significance*

one that differs is frequency with regards to education $p<.001$. The frequency of stress was significantly higher in those with college degrees compared to those with or without a high school education or still pursuing a higher education. There was no difference, however, between the last three categories. Those with higher degrees of education appeared to encounter stressful situations much more often than those who did not have higher degrees of education. The results of the Tukey Test are in Table 5. The hypothesis is rejected.

$H_0$3: There is no significant difference between service worker employees' level of job satisfaction based on their personal demographics.

The researcher carried an analysis of variance (ANOVA) to determine any significant difference between age, marital status, gender, ethnicity, or educational differences concerning total level of job satisfaction. Significant differences were found concerning educational levels $p=.015$. The results of the ANOVA are in Table 6.

Those with a college degree are significantly less satisfied than those with some college or no high school degree. There was no difference between some college work and a high school degree. The results of the Tukey are in Table 7. This hypothesis was rejected.

$H_0$4: There is no significant difference between service worker employees' level of total job stress based on their job characteristics.

The researcher conducted an analysis of variance (ANOVA) to determine any significant difference between employment status, position with the company, frequency of overtime worked, employee recognition, or length of commute concerning total level

Table 5

Tukey's Honestly Significant Difference Test for Comparisons of Means of Educational Level for Variable

			Subset	
	Educational Level	*N*	1	2
Tukey HSD	Less than High School	60	2.4406	
	Some College	72	2.9847	
	High School Diploma	120	3.0609	
	College Degree	22		4.6106
	Significant		.298	1.000

Table 6

Analysis of Variance for Level of Satisfaction and Personal Demographics

Source	Sum of Squares	*df*	Mean Square	*F*	*p*
Corrected Model	7.554	8	.944	2.009	.046
Intercept	2572.812	1	2572.812	5474.64	<.001
Age	.223	3	.074	.158	.924
Marital Status	1.791	1	1.791	3.811	.052
Educational	5.025	3	1.675	3.564	.015
Gender	.110	1	.110	.235	.628
Error	124.067	264	.470		
Total	4246.889	273			
Corrected Total	131.621	272			

**p< .05 level of significance*

Table 7

Tukey's Honestly Significant Difference Test for Comparisons of Means of Educational Level for Variable

			Subset	
	Educational Level	*N*	1	2
Tukey HSD	Less than High School	60	3.9906	
	High School Diploma	120	4.0886	4.0886
	Some College	72	4.1768	4.1768
	College Degree	22		4.8085
	Significant		.915	.059

of job stress. The ANOVA indicated job stress differed with the amount of overtime $p<.043$. The results of the ANOVA are in Table 8.

The Tukey test indicates the only significant differences were found between never having to work overtime and having to work overtime three or more times a week. However, when looking at the means, there appears to be a trend that as overtime increases so does levels of stress. The results of the Tukey are in Table 9. This hypothesis was rejected.

$H_0$5: There is no significant difference between service worker employees' level of job stress frequency and severity based on their job characteristics.

Next, the researcher performed a multivariate analysis of variance (MANOVA) to determine any significance difference with the subscales concerning these factors. The only characteristic resulting in a significant difference was overtime $p=.025$. The results of the MANOVA are in Table 10.

Then the researcher conducted an analysis of variance (ANOVA) to determine which variable overtime differed with severity or frequency. The results showed no impact regarding severity ($p=.174$) but there was a significant impact with frequency ($p=.023$). When running a Tukey analysis, significant difference was found between working overtime three or more times a week as compared to never; however, there appeared to be a trend that as overtime increased, frequency increased. Employment status did not appear to be a factor. The results of the Tukey Test are in Table 11. The hypothesis was rejected.

Table 8

Analysis of Variance for Level of Stress and Job Characteristics

Source	Sum of Squares	*df*	Mean Square	*F*	*p*
Corrected Model	1878.611	9	208.735	1.461	.163
Intercept	12151.280	1	12151.280	85.033	<.001
Employee Status	38.280	1	38.280	.268	.605
Award & Recognition	92.763	1	92.763	.649	.421
Position with Company	168.063	1	168.063	1.176	.279
Overtime Worked	1176.938	3	392.313	2.745	.043
Length of Commute	77.424	3	25.808	.181	.910
Error	38011.644	266	142.901		
Total	111048.83	276			
Corrected Total	39890.255	275			

**p< .05 level of significance*

Table 9

Tukey's Honestly Significant Difference Test for Comparisons of Means of Overtime Worked for Variable

		Subset	
Overtime	*N*	1	2
Never	103	13.9596	
Less than once a week	70	15.4327	15.4327
1-2 times a week	40	16.2241	16.2241
3 or more times a week	63		20.0728
Significant		.719	.139

Table 10

Wilks' Lambda Comparison of Significant Difference with the Subscales of Frequency and Severity Concerning Personal Demographics

Effect	Wilks' Lambda	*F*	*df*	*p*
Intercept	.380	216.051	2	<.001
Employee Status	.998	2	2	.781
Award &	.997	.379	2	.685
Position with	.998	.309	2	.735
Overtime Worked	.947	2.424	6	.025
Length of Commute	.981	.872	6	.515

**p< .05 level of significance*

Table 11

Tukey's Honestly Significant Difference Test for Comparisons of Means of Overtime Worked for Variable

			Subset	
	Overtime	*N*	1	2
Tukey HSD	Never	103	2.5829	
	Less than once a week	70	2572.812	5474.64
	1-2 times a week	40	.074	.158
	3 or more times a week	63	1.791	3.811
	Significant		.395	1.58

H_06: There is no significant difference between service worker employees' level of job satisfaction based on their job characteristics.

The researcher carried an analysis of variance (ANOVA) to determine any significant employment status, position with the company, frequency of overtime worked, employee recognition, or length of commute concerning total level of job satisfaction. Significant differences were found concerning employee recognition p=.029. The mean satisfaction resulted in 4.25 "Yes" and 3.96 "No". Those who have received an award have a significantly higher level of satisfaction than those who have not. The results of the ANOVA are in Table 12. This hypothesis was rejected.

H_07: There is no significant relationship between stress, severity or frequency and job satisfaction in a service worker environment.

The researcher performed a Pearson product-moment correlation coefficient (Pearson r). The Pearson r was applied to each subscale and total to determine any significant correlation between stress, the impact of severity or frequency if any, and the overall level of job satisfaction. The results showed a negative correlation with severity (r = -.616), frequency (r = -.485), and with stress totals (r = -.570) indicating that as any type of stress increased, satisfaction decreased. There was a significant correlation between all three stress scores and total job satisfaction; therefore, this hypotheses was rejected.

Summary

Results from data given by service worker employees in East Tennessee were presented in this chapter. The employees completed survey questions concerning

Table 12

Analysis of Variance for Level of Satisfaction and Job Characteristics

Source	Sum of Squares	*df*	Mean Square	*F*	*p*
Corrected Model	6.005	9	.667	1.424	.178
Intercept	938.346	1	938.346	2001.98	<.001
Employee Status	.891	1	.891	1.901	.169
Award & Recognition	2.257	1	2.257	4.815	.029
Position with Company	.473	1	.473	1.010	.316
Overtime Worked	.085	3	.028	.060	.981
Length of Commute	2.520	3	.840	1.792	.149
Error	124.208	265	.469		
Total	4313.766	275			
Corrected Total	130.213	274			

**p< .05 level of significance*

demographics, job satisfaction, and total job stress. Null hypotheses 1-6 were tested with ANOVAs and MANOVAs at the $p < .05$ level of significance. Hypothesis 7 was tested with Pearson *r*. The overall response rate was 100%. Of those, 85% were full-time employees in the service industry. Other noteworthy demographic results revealed that a majority (64%) of the respondents were female; most were not married (52%), and most were White (94%).

The results of hypothesis 1 revealed that respondents with a college degree encountered a higher level of total job stress than those with only a high school degree or those no longer pursuing an educational goal. There was no difference of job stress levels in those individuals who were working toward a higher degree and those who were no longer pursing an educational goal. Hypothesis 2 showed that level of education had no impact on the severity of stressful encounters among the groups, but it did indicate those with college degrees seemed to experience stress more frequently. The conclusion of hypothesis 3 was that those with college degrees appeared to be less satisfied than those with a lesser degree or no high school degree.

The analysis for hypothesis 4 showed that when looking at job characteristics and stress levels, there appears to be a trend that as overtime increases, so does levels of stress. Hypothesis 5 further analyzed overtime and attempted to answer questions regarding severity and frequency. The findings showed working overtime did not seem to impact the level of stress; however, when employees were consistently asked to work overtime three or more times each week, the frequency level of stress increased due to the frequency of the requests.

For hypothesis 6, the results showed the only job characteristic appearing to have a statistical impact concerning the level of job satisfaction was employee recognition. Employees who received an award of appreciation for service or performance had a significantly higher level of satisfaction than those who did not receive any form of recognition.

Finally, the results of hypothesis 7 analyzed the statistical significance between conclusions about the data, indicating that as any type of stress increased, satisfaction decreased. Due to the correlations between job characteristics and job satisfaction, null hypothesis 7 was rejected.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

This chapter summarizes the study and reviews major findings. Based upon the study's results, several conclusions and recommendations have been made. The chapter closes with implications for future research on job stress and job satisfaction.

Summary

The primary purpose of the study was to determine whether job stressors such as working long hours, perceived fairness, supervisory support, and employee recognition programs were related to job stress and job satisfaction. In addition, this study aimed specifically at providing current data concerning the elements of work that could induce job stress through job dissatisfaction, thus updating the body of knowledge on the subject. Also, by increasing the body of knowledge concerning the problems associated with service worker work, human resource professionals are better informed of suggested areas in need of improvement. In return, they can better attend to and facilitate employees' health and quality of life issues

The population for this study consisted of service worker employees chosen from 20 restaurant locations in the East Tennessee area. A total of 300 employees were selected. The overall response rate for this study was 100%. Most respondents were unmarried White females. The reliability coefficient for the Job Satisfaction Survey was .89 and for the Job Stress Survey was .99. The subscales for the Job Stress Survey were all above .90. All scales were found to be reliable since scales were above .80 or higher.

This study revealed several findings. Whereas some of the findings agreed in part

with evidence from the review of literature, other findings differed. Data regarding different job characteristics results varied; however, significant data existed; therefore, all null hypotheses relating to job characteristics as a whole were rejected. As an example, employee status or job position yielded no significant data, which relates directly with the supporting research by Perry-Jenkins et al. (2000) that also indicated employment status alone revealed little about the meaning and value of work for the individual. However, study results showed significant data concerning employee award and recognition programs and indicated they had a significant impact on the level of employee satisfaction. The literature supported this finding repeatedly. In Herzberg's (1976) motivation and hygiene theory, a fundamental intrinsic factor was the need for recognition. This factor yields motivation rather than movement. Herzberg noted that unacceptable conditions in regard to this factor would lead to job dissatisfaction. Also, in a 1993 study, Kahn found that job stress had a positive correlation with job dissatisfaction regarding the relationship with the immediate supervisor as well as the amount of support and recognition for good work. Additionally, Hannerz and Tuchsen (2001) concluded that different strategies were needed to continuously meet the various work motivators of employees. Research showed that these findings remain consistent regardless of the industry or organization.

The job characteristic of overtime did not result in significant data; however, a trend did indicate that as overtime increased, so did levels of stress. The literature supported this finding. A different study by Simmons and Nelson (2001) showed that certain stressors could elicit responses in individuals and overtime could have an adverse

impact on employees' health. Roberson (1986) also conducted a study on the number of work hours and how they directly influence the amount of time spent away from family and home. Roberson felt there was such a relationship that the study of this association alone was important in its own right. Additionally, two reviews by Folkard and Harrington looked at the existing literature and concluded that working in excess of 48-56 hours a week is harmful (as cited in Sparks et al., 1997).

In this study, statistical tests run on personal demographics did not show significant results regarding age differences in the respondents; however, the findings in other studies have varied. In a 1992 study focusing on age, stress, and blood pressure conducted by Pickering and colleagues at the Cardiovascular and Hypertension Center at New York Hospital-Cornell Medical Center found that job stress not only affected the middle-aged workers while they were on the job but also carried over into their home lives. Marital status was another personal demographic that did not show statistical significance; however, in a study conducted by White and Keith, non-daytime hours of employment were associated with higher levels of divorce (as cited in Perry-Jenkins et al., 2000).

Educational level was significantly related to job stress and job satisfaction. Those employees with college degrees indicated higher levels of stress and showed they encountered stress more frequently than those without a college degree. Those with a college degree were less satisfied with their job than those still pursuing a degree or those who were finished with educational development. The work of Vroom (1970) supports this finding by application of the Expectancy Theory. Under this theory, employees with

college degrees may have placed an over-valued expectation for accomplishing their goal of a degree, therefore leaving the employee feeling dissatisfied with life's outcome.

Gender diversity reflected no significant difference in job stress or job satisfaction; however, supporting literature presented by Perry-Jenkins et al. in 2000 was based on the idea that emotional effects during the early evening hours differed dramatically for husbands and wives in dual-earner families. For husbands, it was a time to relax, recover from the stresses of the workday, and begin leisure activities; for wives, it was a time to gear up after a long workday and focus on housework and childcare. Ultimately, the researchers felt that this additional imbalanced stress would eventually have an impact on the family and all of its members. As stated by Sparks et al. (1997), this was especially so for women because they were expected by men to work the "*double shift,*" pursue a job and manage a home (Sparks et al.). Additionally, the interface between work and family was found to be a source of stress among workers (Lai et al., 2000). On a more positive note, however, Westman and Etzion (1995) found that spouses who understood each other's difficulties of the day could more easily empower each other with their own knowledge.

Major Findings

Results of the data analysis revealed that the population of service workers used in this study was primarily female, White, and unmarried. Based on statistical analysis, null hypotheses 1, 2, 3, 4, 5, and 6 were rejected due to significant differences found between independent and dependent variables. Null hypothesis 7, stating that there was no significant relationship between stress, severity or frequency and job satisfaction in a

service worker environment, was rejected at the $p<.05$ level of significance. Statistical analysis revealed the following major findings:

1. Employees with a college degree encountered a higher level of total job stress than those with only high school degrees or those no longer pursuing an educational goal.

2. Employees with college degrees seemed to experience stress more frequently.

3. Employees with college degrees appeared to be less satisfied with their job than those with a lesser degree or no high school degree.

4. There appears to be a tendency that as overtime increases so does levels of stress.

5. Employees asked to work overtime three or more times each week had significantly higher levels of stress due to the frequency of the requests.

6. Employees who received an award of appreciation for service or performance had a significantly higher level of satisfaction than those who did not receive any form of recognition.

7. As any type of stress increased, job satisfaction decreased.

Conclusions

From the findings of the study, certain conclusions can be drawn keeping in mind the limitations and delimitations listed in Chapter I. With the knowledge that the reliabilities of the instruments were valid, the following conclusions were developed:

1. The service worker workforce in the service industry in East Tennessee is primarily made up of White females.

2. Employees with college degrees working in the service worker market are more likely to experience more frequent job stress.

3. Employees with college degrees working in the service worker market are more likely to experience less job satisfaction.

4. Employees forced to work overtime are more likely to experience higher

levels of stress as their overtime increases.

5. Employee award and recognition programs will likely increase the level of job satisfaction.

Recommendations

Based on the findings and conclusions of this study, the following research efforts are recommended for future studies. They are as follows:

1. Research replicating this study may choose an actual random selection process rather than one based on convenience.

2. Much of the review literature focused on the impact of health effects of stress in the work place; however, the demographic instrument contained no questions regarding medical information. The number of doctor's visits in the past 6 months or the volume of over-the-counter drugs for stress related symptoms would possibly provide informative and interesting data.

3. In this study, length of commute was not referenced through empirical research and the literature review section; however, the demographic instrument reflected a question in this area. Unless information is discovered concerning this factor, future researchers may be better advised to reserve this question for a more pressing element.

4. Much literature exists concerning compensation systems and its impact on the level of job satisfaction. Studies concentrating on job satisfaction as well as job stress would be well advised to include an area of concentration on their demographic instrument to this effect. The correlation, if any, could present an interesting discussion.

5. The Total Job Stress instrument used in this study indicated symptoms of job dissatisfaction. As a complement to the Total Job Stress instrument, questions regarding absenteeism could also be included on the demographic instrument.

Implications

After reviewing the literature review, results, conclusions, and recommendations from this study, some implications emerged. These implications are suggestions on ways to apply this study in real-life ways. These are simply inferences based on the

information and should be taken as such.

1. Utilization of defined job qualifications in the recruitment process could minimize unrealistic new-hire expectations. Creating specific minimum and preferred qualifications for each restaurant position may assist in making a successful job match to job candidates. This practice may better match those with higher-level degrees with positions requiring challenging job tasks.

2. Succession planning can be a useful tool in increasing job satisfaction. Employees work with management to create personal development plans according to where they may have the most impact on the organization as well as be the most satisfied.

3. Health and wellness surveys are available through local healthcare facilities. Conducting a survey of this type may better uncover specific adverse consequences of job stress. Implementation of a wellness program or exercise incentive may be a viable option to reduce the level of stress as well as the cost of medical benefits. Also, results of a wellness survey will also indicate poor nutritional habits so that those may be addressed as well.

4. Long hours of operation are prevalent in the area of service work due to the irregular lives of society. These long hours result in demanding work schedules for the employees working in these service worker environments. Offering flexible schedules such as compressed workweeks, flextime, and job sharing are options management may find helpful in maintaining a healthy, satisfied work force.

5. Further employee education concerning how to cope with demanding work schedules may be beneficial. This type of education focuses on the circadian rhythm, how environmental temperatures as well as irregular eating and sleeping habits affect the body. Teaching employees how to create their own family support system is also a significant component of this type of training curriculum.

   Instituting wellness pay as part of the benefits package may promote attendance as well as better self-care. Employees with the knowledge that there is time available if they or their children become ill are more likely to seek immediate medical attention, reducing the overall amount of time away from the job.

6. Training offered to supervision and management in the area of motivation techniques, listening and communication skills, stress management, as well as subordinate development may have a positive effect on employees' levels of job satisfaction as well as a reduction in job stress.

Summary of Chapter

This chapter summarized the study, reviewed major findings, made some conclusions and recommendations, and gave implications for future research on the topic of job characteristics and job satisfaction. A couple of major findings included that employees with college degrees seemed to experience stress more frequently, and employees who received an award of appreciation for service or performance had a significantly higher level of satisfaction than those who did not receive any form of recognition. An interesting but non-conclusive finding was that these results are not fully supported by Herzberg's (1970) theory of hygiene and motivation. Herzberg's theory claims if the recognition need is met, then there is neither job satisfaction nor job dissatisfaction. The results from this study, however, showed that when recognition is present, then so is job satisfaction. Finally, it is hoped that the suggestions and implications made in this chapter will be helpful not only to the field of service worker but also to all human resource personnel trying to increase job satisfaction in their employees.

REFERENCES

References

American Heritage Dictionary of the English Language. (2000). Boston: Houghton Mifflin.

Anch, A. M., Browman, C. P., Mitler, M. M., & Walsh, J. K. (1988). *Sleep: A scientific perspective.* Englewood Cliffs, NJ: Prentice Hall.

Arthur, A. R. (2000). Employee assistance programmes: The emperor's new clothes of stress management. *British Journal of Guidance & Counseling, 28*(4), 549-559.

Baas, P. H., Charlton, S. G., & Bastin, G. T. (2000). Survey of New Zealand truck driver fatigue and fitness for duty. *Transportation Research Journal, 3*(4), 185-193.

Bacharach, S. B., Bamberger, P., & McKinney, V. (2000). Boundary management tactics and logics of action: The case of peer-support providers. *Administrative Science Quarterly, 45*(4), 704-736.

Bassman, E. S. (1992). *Abuse in the workplace: Management remedies and bottom line impact.* Westport, CT: Quorum Books.

Beehr, T. A. (1998). Research on occupational stress: An unfinished enterprise. *Personnel-Psychology, 51,* 835-844.

Bernard, T. M., Bouck, L. H., & Young, W. S. (2000). Stress factors experienced by female commercial drivers in the transportation industry. *Professional Safety*, 20-26.

Bohle, P., & Tilley, A. (1998). Early experience of shiftwork: Influence on attitudes. *Journal of Occupational and Organizational Psychology, 71*, 61-79.

Bonn, D., & Bonn, J. (2000). Work-related stress: Can it be a thing of the past? *The Lancet,* pp.124-136.

Brewer, E. W. (1998, Spring). Employee satisfaction and your management style. *NCEOA Journal*, pp. 27-29.

Brooks, I. (2000). Nurse retention: Moderating the ill-effects of shift work. *Human Resource Management Journal, 10*(4), 16-31.

Carayon, P., Smith, M. J., & Haims, M. C. (1999). Work organization, job stress, and work-related musculoskeletal disorders. *Human Factors, 41*(4), 644-668.

Cartwright, S., & Boyes, R. F. (2000). Taking the pulse of executive health in the U. K.: An executive commentary. *Academy of Management Executive, 14*(2), 16-24.

Chatterjee, C. (2000). Laughing to succeed. *Psychology Today, 33*(1), 16.

Cherniss, C. (1980). Staff burnout: Job stress in the human services. Beverly Hills, CA: Sage.

Chingos, P. T. (1997). *Paying for performance: A guide to compensation management.* New York: J. Wiley.

Cooper, C. L. (1998). *Theories of organizational stress*. Oxford, NY: Oxford University Press.

Dewe, P. J. (1989). Examining the nature of work stress: Individual evaluations of stressful experiences and coping. *Human Relations*, 42, 993-1013.

Dollard, M. F., Winefield, H. R., Winefield, A. H., & Jonge, J. D. (2000). Psychosocial job strain and productivity in human service workers: A test of the demand-control-support model. *Journal of Occupational and Organizational Psychology,*

73(4), 501-510.

Dunham, R. B. (1977). Shift work: A review and theoretical analysis. *Academy of Management Review, 2,* 624-634.

Encina, G. B. (2000). Crew workers split between hourly and piece-rate pay. University of California. Retrieved April 5, 2002, from http://www.cnr.berkeley.edu/ucce50/ag-labor/7research/7calag07.htm

Evers, A., Frese, M., & Cooper, C. L. (2000). Revisions and further developments of the occupational stress indicator: LISREL results from four Dutch studies. *Journal of Occupational and Organizational Psychology, 73*(2), 221-240.

Gardiner, M., & Tiggemann, M. (1999). Gender differences in leadership style, job stress and mental health in male and female-dominated industries. *Journal of Occupational and Organizational Psychology, 72*(3), 301-315.

Gay, L.R. (1996). *Educational research: Competencies for analysis and application.* Upper Saddle River, NJ: Prentice-Hall.

Ghosh, K., Saunders, P. J., & Biswas, B. (2002). An empirical investigation of the relations among wage differentials, productivity growth and trade. *Contemporary Economic Policy, 20*(1), 83-92.

Golembiewski, R.T., & Munzenrider, R.F. (1988). Phases of burnout: Developments in concept and applications. New York: Preager.

Gores, J. (2000). How effective is your incentive compensation system? *Journal of Management in Engineering, 16*(1), 29-33.

Guthrie, J. P. (2000). Alternative pay practices and employee turnover: An organization

economics perspective. *Group & Organization Management, 25*(4), 419-439.

Hannerz, H., & Tuchsen, F. (2001). Hospital admissions among male drivers in Denmark. *Occupational and Environmental Medicine, 15*(4), 253.

Hanson, G. H., & Harrison, A. (1999). Trade liberalization and wage inequality in Mexico. *Industrial & Labor Relations Review, 52*(2), 271-288.

Heneman, H. G., III, Schwab, D. S., Fossum, J. A., & Dyer, L. D. (1981). *Managing personnel and human resources: Strategies and programs.* Homewood, IL: Dow Jones-Irwin.

Herzberg, F. (1976). *The managerial choice: To be efficient and to be human.* Homewood, IL: Dow Jones-Irwin.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.

Iskra-Golec, I. (1993). The relationship between circadian, personality, and temperament characteristics and attitude toward shiftwork. *Ergonomics, 36,* 149-153.

Iverson, R. D., & Erwin, P. J. (1997). Predicting occupational injury: The role of affectivity. *Journal of Occupational and Organizational Psychology, 70*(2), 113-129.

Jackson, S. E., & Schuler, R. S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Process, 36,* 16-78.

Kahn, W. (1993). Caring for the caregivers: Patterns of organizational caregiving. *Administrative Science Quarterly, 38,* 539-563.

Kessler, R. C., Barber, C., Birnbaum, H. G., & Frank, R. G. (1999). Depression in the workplace: Effects on short-term disability. *Health Affairs, 18*(5), 163-171.

Kirmeyer, S. L. (1988). Coping with competing demands interruption and type A pattern. *Journal of Applied Psychology, 73*(4), 621-629.

Kirsh, B. (2000). Work, workers, workplaces: A qualitative analysis of narratives of mental health consumers. *Journal of Rehabilitation, 66*(4), 24-30.

Kohn, A. (1993). *Punished by rewards: The trouble with gold stars, incentive plans, A's, praise, and other bribes.* Boston: Houghton Mifflin Co.

Kogi, K. (1971). Social aspects of shift work in Japan. *International Labor Review, 104,* 415-433.

Kompier, M., & Cooper, C. (2000). *Preventing stress, improving productivity.* New York: Routledge.

Lai, G., Chan, K. B., Ko, Y. C., & Boey, K. W. (2000). Institutional context and stress appraisal. *Journal of Asian and African Studies, 35*(2), 209-228.

Langan-Fox, F. (1998). Women's careers and occupational stress. *International Review of Industrial and Organizational Psychology,* pp. 273-304.

Lu, L. (1999). Work motivation, job stress and employees' well-being. *Journal of Applied Management Studies, 8*(1), 61.

Martin, R., Wan, C. K., David, J. P., Wegner, E. L., Olson, B. D., & Watson, D. (1999). Style of anger expression: Relation to expressivity, personality, and health. *Personality and Social Psychology Bulletin, 24*(3), 1196-1207.

Maslow, A. H. (1970). *Motivation and personality* (2nd ed). New York: Harper and

Row.

Matrices Consultants, Inc. (1997). *Shiftwork: How to cope.* Portland, MA: Prentice Hall.

Mausner-Dorsch, H., & Eaton, W. W. (2000). Psychosocial work environment and depression: Epidemiological assessment of the demand-control model. *American Journal of Public Health, 90*(11), 1765-1770.

Melin, B., Lundberg, U., Soderlund, J., & Granquvist, M. (1999). Psychological and physiological stress reactions of male and female assembly workers: A comparison between two different forms of work organizations. *Journal of Organizational Behavior, 20,* 47-61.

Merriam-Webster's Collegiate Dictionary , Tenth Ed. (1999). Springfield, MA: Merriam-Webster, Incorporated.

Milosevic, S., & Cabarkapa, M. (1998). Variation in body temperature and performance during weekly rotating shift systems. *Selected Papers on Ergonomics and Traffic Psychology, 23,* 63-72.

Murphy, J. R., & Hurrell, J. J. (1987). *Stress measurement and management in organizations: Development and current status.* New York: Praeger.

Narayanan, L., Menon, S., & Spector, P. E. (1999). Stress in the workplace: A comparison of gender and occupations. *Journal of Organizational Behavior, 20,* 63-73.

Nelson, D., & Burke, R. (2000). Women executives: Health, stress, and success. *Academy of Management Executive, 14*(2), 107-121.

Newton, T. J., & Keenan, A. (1985). Coping with work-related stress. *Human Relations, 2, 107-126.*

O'Connor, J. (1998). Have your shift workers found work/life balance? *HRFocus, 75,* 5.

Osipow, S. H., & Spokane, A. R. (1981). *Mental measurements yearbook* (11th ed.) Odessa, FL: Psychological Assessment Resources.

Pearson, Q. M. (1998). Job satisfaction, leisure satisfaction, and psychological health. *The Career Development Quarterly, 46*(4), 416-426.

Peck, C. (1992). Small group incentives: Goal-based pay. *The Conference Board, Research Bulletin No. 1006.*

Peck, C. (1993). Variable pay: Non-traditional programs for motivation and reward. *The Conference Board Research Bulletin No. 1031.*

Perry-Jenkins, M., Repetti, R. L., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of Marriage & the Family, 62*(4), 981-998.

Pickering, T. G. (1992). Age, stress, and blood pressure. *Occupational Hazards, 54*(7), 25.

Pierce, J. L. (1989*). Alternative work schedules*. Boston: Allyn and Bacon.

Pierce, Q. M. (1998). Job satisfaction, leisure satisfaction, and psychological health. *The Career Development Quarterly, 46*(4), 416-426.

Quick, J. D., Quick, J. C., & Nelson, D. L. (1998). *The theory of preventive stress management in organizations.* New York: Oxford University Press.

Roberson, M. T. (1986). *Hours of work, attitudes, and well-being: The relationship*

between work schedule and the quality of life. Unpublished doctoral dissertation, The University of Tennessee, Knoxville.

Sandrone, V. (1995). Tayorism: F.W. Tayor & Scientific Management. Retrieved September 16, 2002, from http://www.quality.org/TQM-MSI/taylor.html

Schaufeli, W., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis.* Philadelphia, PA: Taylor & Francis.

Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. (2000). The factorial validity of the Maslach burnout inventory general survey across occupational groups and nations. *Journal of Occupational and Organization Psychology, 73*(1), 53-66.

Selye, H. (1975). *Stress without distress.* New York: New American Library.

Shaw, J. D., & Gupta, N. (2001). Pay fairness and employee: Exacerbation and attenuation effects of financial need. *Journal of Occupational and Organizational Psychology, 74*(3), 299-320.

Shirom, A., Westman, M., & Mclamed, S. (1999). The effects of pay systems on blue-collar employees' emotional distress: The mediating effects of objective and subjective work monotony. *Human Relations, 52*(8), 1077-1097.

Simmons, B. L., & Nelson, D. L. (2001). Eustress at work: The relationship between hope and health in hospital nurses. *Health Care Management Review, 26,* 45-47.

Singh, J. (2000). Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing, 64*(2), 15-35.

Sparks, K., & Cooper, C. L. (1999). Occupational differences in the work-strain relationship: Towards the use of situation-specific models. *Journal of*

Occupational and Organizational Psychology, 72(2), 219-229.

Sparks, K., Cooper, C., Fried, Y., & Shirom, A. (1997). The effects of work on health: A meta-analytic review. *Journal of Occupational and Organizational Psychology, 70*(4), 391-398.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences.* Thousand Oaks, CA: Sage.

Spielberger, C. D., Sarason, I. G., Brebner, J. M. T., Greenglass, E., Laungani, P.; & O'Roark, A. M. (1996). *Stress and emotion: Anxiety, anger, and curiosity* (Vol. 15). Washington, DC: Taylor & Francis.

Tergeist, P. (1995). *Organization for economic co-operation and development.* France: Andre-Pascal.

Westfall-Lake, P., & McBride, G. N., (1998). Shiftwork safety and performance. *A manual for managers and trainers.* New York: Lewis.

Westman, M., & Etzion, D. (1995). Cross-over of stress, strain and resources from one spouse to another. *Journal of Organizational Behavior, 16*, 169-181.

Woodson, S. B. (1999). Making the connection between physician performance and pay. *Healthcare Financial Management, 53*(2), 39-44.

Yoon, J., & Thye, S. (2000). Supervisor support in the work place: Legitimacy and positive affectivity. *Journal of Social Psychology, 140*(3), 295-316.

United States Bureau of Labor Statistics. (1999*). Occupational stress.* Washington, DC: United States Department of Labor.

United States Department of Labor, Office of Administrative Law Judges Law Library.

(1991). *Dictionary of occupational titles*. Retrieved May 10, 2003, from http://www.oalj.dol.gov/public/dot/refrnc/dot03a.htm

Vroom, V. H. (1970). *Management and motivation: Selected readings*. Harmondsworth: Penguin.

APPENDIX

LETTER INCLUDED WITH QUESTIONNAIRE

THE UNIVERSITY OF TENNESSEE

January 6, 2003

Department of Human Resource Development
25 HPER Building
1914 Andy Holt Ave.
Knoxville, Tennessee 37996-2745
(865) 974-4460
FAX (865) 974-4961
ewbrewer@utk.edu

Dear Shoney's Employee:

I am a graduate student at the University of Tennessee-Knoxville in the Department of Human Resource Development and am conducting a study for purposes of my thesis. I am writing to request your participation in a survey focusing on Shoney's employees and their level of job satisfaction. The enclosed Job Satisfaction Scale, Job Stress Survey, and demographic questions are designed to obtain information about your background, and your levels of communication conditions, job satisfaction and job stress in the organization.

Please note that you have been selected to participate in this study according to your job title and department. This study is for academic purposes only. *Your responses will be completely confidential, and your responses* ***will in no way*** *affect your pay, benefits, or supervision by Shoney's.*

To ensure confidentiality and facilitate tracking your feedback, the questionnaires are numerically coded to limit follow-up notifications. Please complete and return the enclosed questionnaire to your human resources department by January 17, 2003. You may use the provided envelope to maintain confidential answers. Please do not put your name on the questionnaires. Collected surveys will be kept in a secure area until data may be collected. Upon completion of data collection, all survey material will be destroyed. Results of the study will be made available to all participants.

Employees who return completed questionnaires will be entered in a drawing for a $25 Wal-Mart gift certificate. A total of eight will be given away upon completion of the study. The store returning the most questionnaires in the shortest time frame will be given a pizza party. Your timeliness is appreciated.

I realize your schedule is busy, however, I hope the short time it takes to complete and return this survey will lead to further insight into job stress and job satisfaction among employees of Shoney's.

Thank you in advance for your participation. If you have questions about the study, you may contact me at 865.609.6192.

Sincerely,

Cindy D. Stevens
UT Graduate Student

cc: Dr. Ernest W. Brewer, Professor, Department of Human Resource Development
Mr. Bill Baugh, President, Shoney's & Ms. Darlene Cox, HR Manager, Shoney's

VITA

Cynthia Dawn Stevens, daughter of Rusty Clarice Stevens, was born in Clinton, Oklahoma, on November 11, 1968. She graduated from Clinton High School in Clinton, Oklahoma in 1987. During her senior year of high school, she began working on a Bachelor of Arts degree with a major in English Education and a minor in Art at Southwestern Oklahoma State University in Weatherford, Oklahoma and graduated in December 1991. She began working towards her Master of Science degree at The University of Tennessee in Human Resource Development in June 1998. Cynthia is a member of the Kappa Delta Pi Honor Society.

Her career began in 1990 as an English as a Second Language Consultant for Bar-S Foods Co. in Clinton, Oklahoma. In that position, she taught English to Spanish-speaking employees of the organization and assisted them in obtaining their citizenship and general education diplomas. She was promoted to Assistant Training Coordinator in 1991. She was promoted to Training Manager in 1992 and relocated to a start-up facility for Bar-S Foods Co. in Altus, Oklahoma. She worked and resided there before moving to Tennessee in 1997, where she took a position with Carlex Glass Company in Vonore, Tennessee as a Training Coordinator. In 1999, Cynthia accepted a position with U. S. Foodservice located in Alcoa, Tennessee as V.P. of Human Resources, and she currently holds that position.