THE RELATIONSHIPS OF OCCUPATIONAL STRESS AND CERTAIN OTHER VARIABLES TO JOB SATISFACTION OF LICENSED PROFESSIONAL COUNSELORS IN VIRGINIA

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(ABSTRACT)

The purpose of this investigation was to determine the relationship of occupational stress and certain demographic variables to job satisfaction among licensed professional counselors in Virginia. The relationships of the factors comprising occupational stress to the components of job satisfaction were of interest as well as how overall occupational stress related to overall job satisfaction.

The sample consisted of 400 licensed professional counselors selected randomly from a mailing list of the 1,038 licensees supplied by the Virginia Board of Professional Counselors. The response rate was 81.75%. While some LPC's remain in positions they have held for years, some are new at their jobs and some work part-time. Those surveyed include persons working in administration, counselor education, and other various occupations, as well as full-time practitioners.

Survey instruments included the Minnesota Satisfaction Questionnaire as a measure of general job satisfaction and 20 subscales, The Occupational Environment Scales measuring occupational stress and six subscales, and a data form. The

data form was developed to collect demographical information.

By combining the demographic data generated in this study, a description can be developed of LPC's in Virginia. Of 281 counselors identifying their work setting, 40.2% specified they were employed in education. Practitioner was the selection chosen by 49.1% of the respondents to disclose their present role. Ninety-three percent of the counselors were white and 55.8% were female. Experience was indicated as over 10 years for 74.4% of those responding and 54.7% of the sample have been licensed from 5 to 10 years. Of 294 responding counselors all but one had a masters or postmasters degree.

Of the counselors participating, 48.5% indicated they experienced some job stress, but 78.5% indicated they were satisfied with their present job. Although a negative relationship was found between overall occupational stress and job satisfaction, stress resulting from work responsibility impacted positively with job satisfaction. As the score on the stress subscale responsibility increases, the score on general job satisfaction increases. Older, more experienced counselors indicated higher levels of job satisfaction.

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CHAPTER I

INTRODUCTION

The literature abounds with articles on job satisfaction and the negative effects of the lack of job satisfaction on the individual, organizations and society at large. Job satisfaction is negatively correlated with absenteeism and turnover in both industry and human services and positively correlated with client outcome in human services (Moos & Houts, 1968; Sarata, 1977; Sarata & Reppucci, 1975). Stress theorists have emphasized the impact that occupational stress makes on job satisfaction. While investigators from various theoretical orientations have linked an array of variables to job satisfaction, most studies have been limited by choice of methodology, data analysis procedures or a paucity of variables considered or some combination thereof. Job satisfaction research could be served well by a means of comprehensively explaining job satisfaction using empirical evidence.

The general conclusion that occupational stress correlates negatively with job satisfaction has been supported by studies by Gross (1983), House and Rizzo (1972), Jayaratne and Chess (1983), Kahn, Wolfe, Quinn, Snack and Rosenthal (1964), Rigger, Godley and Hafer (1984) and Rizzo, House and Lirtzman (1970). In an article taking issue with this perspective, Hall and Lawler (1971) observed and reported on various components of job pressure and their

relationships to several facets of job satisfaction using a sample of research engineers.

The relationships of the pressures of time, financial responsibility, and quality of work to satisfaction with security, social esteem, autonomy and self fulfillment was the purpose of the Hall and Lawler study. They found that financial pressure correlated positively with autonomy at .40 ($p < .10$). The correlation of pressures to each other or satisfactions to each other were not published.

In 1976, Ronald J. Burke embarked upon an investigation of occupational stresses and job satisfaction. Burke's study of the relationships between 14 occupational stress items and 12 job satisfaction items was designed to illuminate the complex relationships existing between occupational stress and job satisfaction that is overshadowed by the supposition that occupational stresses are negatively correlated with job satisfaction. In examining the 168 correlations between the 14 occupational stress items and the 12 job satisfaction items, Burke found that 117 (70%) of which 76 (65%) were statistically significant ($p < .05$) supported the position that as occupational stress increases, job satisfaction decreases. However, he also found 51 (30%) of the correlations of which 9 (18%) were statistically significant ($p < .05$) refuted that premise.

Burke concluded that while the results supported the general hypothesis that greater overall stress correlated with lower overall satisfaction, when the relationships of specific items on the occupational stress index to specific items on the job satisfaction index were examined, a more complex situation emerged. Some stress factors may actually serve to enhance the job satisfaction of the individual and the goals of the organization. Therefore, increasing those stressors may be as important as decreasing stressors with negative implications. The differences in the findings of the Burke (1976) study and the one by Hall and Lawler (1971) could be a result of different populations, sampling, methodologies and variables. Because of the differences in the approaches of the two investigations and the lack of data reported on individual items, a comparison of variables in the two studies would be based on supposition and, consequently, so would any comparison of results. More recent studies by Farber and Heifetz (1981), Gross (1983), and Helwig (1979) involved far fewer variables compared to the scope of Burke's study.

In the study of both job satisfaction and stress, many personal and demographic variables have been investigated. Age was included by Helwig (1979) who found a negative relationship between age and role ambiguity, a stress factor. Dehlinger and Perlman (1978) reported research indicating a positive relationship between age and job

satisfaction. However, a negative correlation between the job satisfaction and age has been reported by some investigations including Kalahidi and Deivasenapathy (1980).

Education has been a variable in studies of job satisfaction by Klein and Mayer (1966), Penzer (1969), and Phillips and Hayes (1978). Their finding of a negative relationship conflicted with the positive correlations reported by Quinn and Baldi de Mandilovith (1980), and Weaver (1980).

Research by Blair (1981) supported the hypothesis that experience is negatively related to job satisfaction. However, in 1982, Schultz presented evidence that job satisfaction and experience have a positive relationship. Others (Bledsoe and Haywood, 1981; Martin, 1981) have found no relationship between these factors.

The relationship between race and job satisfaction was researched by Zaharia and Baumeister in 1979, who found that white workers were more satisfied with their jobs than black. This position was corroborated by Weaver (1980). Weaver (1975) along with others, has voiced the belief that culture values are central to the difference.

Gender and job satisfaction relationships appear to be complex when the literature is scrutinized. Andrisani and Shapiro (1978), Herzberg (1966), and Wild and Dawson (1976) agree that factors that influence job satisfaction differ in their importance between women and men. Other theorists

(Barbash, 1976; Hulin and Smith, 1964; Schultz, 1982) posit that only if other co-variants are held constant can the relationship of gender and job satisfaction be clarified.

Investigation of the relationship of professional affiliations and job satisfaction by Schultz (1982) provided evidence that those having low satisfaction on the work site may seek professional fulfillment in professional organizations, but conversely those who are satisfied on the job may join professional groups. Inquiries by Cheloha and Farr (1980) and Levinson (1983) found a positive relationship between job satisfaction and the number of professional memberships.

In the study of job satisfaction an approach is needed that permits inclusion of certain variables considered important in the study of job satisfaction by various investigators. Failure to include more than one or two independent variables or incorporate other relevant variables such as gender, race, etc., has led to failure to incorporate all the relevant factors into one model, thereby hindering job satisfaction theory. What is needed is a method to explain job satisfaction using stress and other factors in a single model.

While conclusions among investigators varied, inclusion of nonstress variables with job stress may serve the dual purposes of clarifying their impact on job satisfaction, while at the same time producing a more powerful explanation

of job satisfaction. Jayaratne and Chess (1983) recommended incorporation of nonstress factors as variables along with stress factors. Although these variables have been found to be related to job satisfaction, no research was found regarding which may be most important.

The Hall and Lawler study (1971) and the Burke study (1976) identified a more complex relationship between job stress and job satisfaction than the view that job satisfaction correlates negatively with job stress (Gross 1983; House and Rizzo, 1972; Jayaratne and Chess, 1983; Kahn et al., 1964; Rigger et al., 1984; and Rizzo et al., 1970). The purpose of the present study was to add to the body of knowledge regarding the relationship of job satisfaction and job stress in extending the research reported above by replicating Burke's study using research based instruments, combining stress components and additional variables that have been found to relate to job satisfaction into a single model and employing multiple regression procedure to explain job satisfaction. This has provided a basis for determining a comprehensive model producing a stronger explanation of job satisfaction than reliance on any single factor or combinations of only two or three independent variables.

Because Burke's study was on all male population of engineers and accountants, a sample of licensed professional counselors not only provided information on an entirely different occupation, but also contributed knowledge

regarding a population which includes a substantial proportion of women. More than half adult women work, primarily of necessity, and projections indicate the percentage will increase. Counseling is not dominated by one gender, but is one occupation in which both sexes are well represented. Women account for approximately half of licensed professional counselors in Virginia. At present there is little knowledge regarding occupational stress and job satisfaction and the inter-relationships of the components of these two concepts among women.

Use of licensed professional counselors in Virginia as a subject population provided a homogeneous occupational group for the study while coincidentally providing some research data on an emerging profession in a field which has inspired numerous articles on stress (Casas, Furlong & Castillo, 1980; Dragan, 1981; Forney, Wallace-Schutzman & Wiggers, 1982; Helwig, 1979; Merino, 1981; Truch, 1981; and Watkins, 1983). Several authors (Cummings & Nall, 1983; Forney et al., 1982; Savicki & Cooley, 1982) have emphasized the dearth of research to support the quantity written about stress in counseling. Moracco (1981) concluded "Descriptive research needs to be conducted to provide information on what are the specific stressors in a counselor's life."

When Virginia passed the first counselor licensing legislature in 1975 it was relatively easy for one to be "grandfathered in" compared to today's rigorous

requirements. While some LPC's remain in positions they have held for many years, some are new to their jobs and some work part-time. Those surveyed include persons working in administration, counselor education, and other various occupations as well as full-time practitioners.

Statement of the Problem

Although occupational stress and job satisfaction in counseling has received much attention, there is a paucity of research regarding how the components of each construct relates to the other.

Research Questions

This study investigated the following research questions:

1. What is the relationship between occupational stress and job satisfaction of licensed professional counselors in Virginia?
2. What relationships are there among the following variables: occupational stress, job satisfaction, age, level of education, gender, advancement opportunity, growth opportunity and annual income?

Hypotheses

This study tested the following hypotheses:

1. Global occupational stress as measured by item 1 on the data form will be negatively related ($p < .05$) to global job satisfaction as measured by item 5 on the data form.

2. The independent variables role overload, role insufficiency, role ambiguity, role boundary, and physical environment as measured by the subscales of the Occupational Environment Scales, Form E-2, will negatively explain a significant ($p < .05$) amount of the variance in the dependent variables job satisfaction components as measured by the subscales of the Minnesota Satisfaction Questionnaire.
3. The independent variable responsibility as measured by the subscale of the Occupational Environment Scales, Form E-2, will positively explain a significant ($p < .05$) amount of variance in the dependent variables job satisfaction facets as measured by the Minnesota Satisfaction Questionnaire.
4. Inclusion of the level of education, annual income, age, gender, advancement opportunity and growth opportunity with the independent variables occupational stresses will enhance the explanation of the amount of variance in overall job satisfaction.

Significance of the Study

In the job satisfaction literature, many variables have been studied as they relate to job satisfaction. Occupational stress from the perspective of simple logic as

well as evidenced by research has been negatively correlated with job satisfaction as expected when both concepts are examined in global measures. However, when the components of occupational stress and the facets comprising job satisfaction are examined, more complex relationships appear. This study sought to clarify those relationships by the explanation of job satisfaction from the components of occupational stress and to further enhance the explanation of job satisfaction by including certain other variables linked to job satisfaction in separate studies but about which little is known as to their relative power in explaining job satisfaction.

Information will enable the licensed professional counselor to understand and, therefore, better cope with the stresses encountered. Knowledge of the stress level of counselors may help individual counselors to realistically reevaluate self expectations. Counselors considering the pursuit of licensure as a possible career goal will have better information upon which to base their decisions as will counselor educators in selection of students into programs of study and as advisors in giving a more realistic portrayal of work in the field in various environments.

Knowledge of the patterns of stress and satisfactions experienced by licensed professional counselors will provide an opportunity to determine how well the values, needs and personality of the individual will integrate with the role

before the investment of large amounts of time, effort and money. Some individuals may find their present circumstances more appropriate; others may choose to pursue careers in other fields.

Ability to explain job satisfaction based on the impact various stress components make on job satisfaction will enable counseling organizations to make adaptations that are desirable rather than expending efforts in reducing stress that enhances job satisfaction. Although management has no direct control over job satisfaction (an individual affective state), stress-producing factors can be altered. Knowledge of job satisfaction predictors can enable leaders to assist counselors in achieving both individual and organizational goals. Integration of the two sets of goals is fundamental to management. Sheldon Berger, in a presentation to the 1979 APA convention, described administrative interventions at the Tazwood Center for Human Services in Illinois which alleviated stress and resulted in overwhelmingly positive satisfaction ratings among staff members. Interventions included

1. Participative management
2. In-service training based on needs assessment
3. Weekly staff process to deal with conflict
4. Annual evaluations
5. Responsibilities of supervisors defined
6. Communication patterns
7. Support systems

Limitations

The population for this study consists only of the licensed professional counselors in the Commonwealth of Virginia. Other counselors may have significant differences in occupational stress and job satisfaction.

Definition of Terms

The following is a list of definitions for the purpose of this study:

1. licensed professional counselors - denotes the individuals that have been licensed by the Commonwealth of Virginia through the Board of Professional Counselors.
2. job satisfaction - for this study, job satisfaction is defined as the pleasurable emotional state resulting when thinking about one's job. This is reflected in the scores on the MSQ (Minnesota Satisfaction Questionnaire).
3. global job satisfaction - is defined as the general satisfaction felt with one's job as measured by item 5 of the data form.
4. occupational stress - is defined as job characteristics which pose a threat to the worker (Caplan, Cobb, French, Van Harrison & Pinneau, 1975). This is reflected in the scores on the OES (Occupational Environment Scales; Form E-2).

5. global occupational stress - is defined as the general stress felt regarding one's job as measured by item 1 of the data form.
6. advancement opportunity - is defined as the opportunity for advancement felt on one's job as measured by item 4 of the data form.
7. growth opportunity - is defined as the opportunity for growth felt regarding one's job as measured by item 26 of the data form.

Overview of the Study

The purpose of this study was to replicate Burke's study (1976) using as a population of licensed professional counselors in Virginia, an occupation not only differing from Burke's population but also one in which women are substantially represented. In Chapter I a description of the problem is presented, research questions stated and the study's value to understanding the relationship of stress and satisfaction explained. Limitations were discussed and terms defined. Chapter II summarizes research related to occupational stress and job satisfaction in general and especially occupational stress and job satisfaction of counselors, including current trends and historical background. Chapter III includes a detailed description of the procedures used, including research questions, population sampling procedures, instrumentation, data collection and analysis procedures. Chapter IV presents a

summary of the results. A discussion of the results, conclusions and recommendations for future research are contained in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

The attention given to the affective state of counselors in relationship to their occupational positions is reflected in the number of articles focusing on such issues as job satisfaction, occupational stress and burnout of counselors in the professional literature. This constellation of concern began with an interest in job satisfaction which has increased since Hoppock's 1935 monograph; however, little research has been done to support the abundance of articles. Sarata, in 1974, could find only 20 studies investigating job satisfaction in human service workers.

An overview of relevant studies regarding occupational stress and job satisfaction among counselors is presented in this chapter. Of its three sections, the first is a summary of job satisfaction including definitions, theories, measurement, correlates and effects. The second section is comprised of a discussion of the literature regarding stress and more precisely occupational stress. The definitions, theories, measurement, correlates and effects of occupational stress are presented in this section. The final section is a brief summary of the literature and its implications for research.

JOB SATISFACTION

The importance attached to job satisfaction by our American society can perhaps be best demonstrated by the government-sponsored investigation by Quinn, Staines and McCullough (1974). The significance of work to the individual is emphasized by Coles' (1978) conclusion that most people, when describing themselves, include what they do for a living. Self-concept, social contact and source of income were indicated to be more attributed to work than any other affiliation for most people, according to both Beck (1983) and Schultz (1982). Kasl (1977) perhaps most succinctly describes work as a "central life activity" and "critical role."

Hoppock (1935) is credited with the first investigations into job satisfaction, according to Herzberg, Mausner and Snyderman (1959) followed in 1938 by Hauser (Katzell, 1964). The Hawthorne studies by Mayo and associates as reported by Roethlisberger and Dickson (1939) were the first to attract serious attention to job satisfaction research (Fournet, Distefany & Pryer, 1966). These early studies focused on blue collar workers and variables extrinsic to the job resulting from the belief that there was a causal link with productivity (Kornhauser, 1965). Ronan (1970) cites the 1950's as the decade when job satisfaction research began to flourish and with it both broader populations, including technicians, managers and

human service workers as well as a wider range of variants encompassing intrinsic factors. While the Hawthorne studies gave the first indication of the importance of social factors, Landy and Trumbo (1976) credit Schaffer in 1953 as pioneering research into intrinsic job facets and their impact on job satisfaction. The individual worker became more central to the study of job satisfaction as a result of Argyris' book published in 1957. As a result of the increased attention focused on the importance of job satisfaction, several theories and definitions emerged.

Definitions of Job Satisfaction

The definitions of job satisfaction are as varied as the needs of the researchers developing those definitions. Compounding the lack of precision which Carroll (1973) maintains is required is the use of job satisfaction interchangeably with such related constructs as morale and work motivation. Locke, in 1976, defining job satisfaction as a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300), varied somewhat with his 1969 position of it being the converse of a negative emotional state associated with tasks required for material remuneration. The similarity to Guion's 1958 definition of work morale: "the extent to which the individual perceives that satisfaction as stemming from his total work situation" (p. 62) exemplifies the ambiguity associated with the definition of related terms. The

concept that job satisfaction is the sense of fulfillment or achievement which individuals derive from their work posited by Beck (1983) adds credence to the position that the concept of job satisfaction is changing from a simple relationship of pay to satisfaction to one which includes social functions and personal values (Cooper, Morgan, Foley & Kaplan, 1979). Katzell's (1964) definition of job satisfaction is the verbal expression of the worker's evaluation of his job. Thus, there is adequate evidence to support Miller and Muthard's (1964) contention that although many definitions appear acceptable, the conflicts resulting in the concept of satisfaction interfere with the usefulness of the term. However, there is a general agreement that satisfaction is an emotion people experience in reference to a particular state of affairs (Portigal, 1976).

Conceptualization of job satisfaction by Herzberg et al. (1959) as a two-factor model is in conflict with the traditional bipolar continuum model which conceives of job satisfaction on one end of the continuum and dissatisfaction at the other pole. Herzberg and his colleagues propose that satisfiers are elements which they call motivators that are intrinsic to a job and found in job content while hygiene elements which cause dissatisfaction are those that are extrinsic and found in job context.

Another dimension of job satisfaction conceptualization involves the general or global approach as supported by

Bockman (1971), Hinrichs (1968), Hoppock (1935), Locke (1969), Lofquist and Dawis (1975) and Mortimer (1979) versus the composite or additive construct made up of different facets which, when summed, produce an overall affect. The latter is based on the premise that workers can subjectively determine their satisfaction with different components of their job. Research by Hinrichs (1968), Hoppock (1935), Hulin (1963), Locke (1969), Wiess, Dawis, England and Lofquist (1967) and Wanous and Lawler (1972) has supported the composite position.

Theories of Job Satisfaction

Due to the wealth of theories regarding job satisfaction, several attempts have been made in grouping the major theories for purposes of examination. Lawler (1973) considered a major division to be between Herzberg's two-factor theory and those defined by Hultaker (1977) as linear models of job satisfaction. These are described by Dawis and Lofquist (1981) as the degree to which outcomes match the needs and values of the worker. This "linear" grouping was further divided into discrepancy theory, fulfillment theory and equity theory. Taking a different perspective, Gruneberg (1979) grouped theories as either process or content. As the terms suggest, process theories, which include equity theory and reference group theory, emphasize the process of interaction of job factors to produce job satisfaction, while content theories, including

vocational need theory, two-factor theory and need hierarchy theory, focus on the factors that influence job satisfaction.

Discrepancy Theory

While all discrepancy theories share a common basic principle--job satisfaction is determined by the discrepancy between the outcome a worker receives and some outcome standard--they are divided as to what should be used as an outcome standard. Smith, Kendall and Hulin (1969) chose the outcome that was expected by the worker. Porter (1961) compared the actual outcome the individual received with what they believed they should receive to measure discrepancy. Both Katzell in 1964 and Locke in 1969 approached discrepancy as the difference between actual outcome received and what people want.

Fulfillment Theory

Underlying need theory are two basic tenets. First, job satisfaction is dependent on the extent to which a person perceives that their job provides them with desired outcomes. Second, the higher a person values the outcome, the greater their satisfaction will be with the fulfillment of that outcome. Vroom presented this model in Work and Motivation (1964). Schaffer earlier (1953) proposed that people would be satisfied with their work to the extent it allowed them to fulfill needs they perceived as important,

thus linking job satisfaction theory to need theory which will be discussed below.

Process Theories

Equity Theory

Equity theory is based upon the extent to which an individual perceives their input being equitable with their rewards from their job. The more equitable they are, the greater the worker's satisfaction. Adams (1965) explained that the worker's concept of what amount of reward was fair for a given input was influenced by his perceptions of what seemed to be equitable treatment of other workers in similar circumstances. Gruneberg (1979), while agreeing that much has been written regarding job satisfaction from an equity perspective, finds serious gaps in its ability to be substantiated by empirical research.

Reference Group Theory

The comparison of one's own input to reward ratio with those of others as expounded by some equity theorists leads into reference group theory. The central point of reference group theory is that one's perception of equity is the product of the groups with which one identifies. Thus, two groups of workers doing the same job but having different educational levels have different concepts as to what is equitable (Klein & Maher, 1966). Limited support has been documented in research for this approach.

Content Theories

Vocational Need Theory

The work of Weiss et al. (1967), Dawis, Lofquist and Weiss (1968) and Lofquist and Dawis (1969) at the University of Minnesota was responsible for the development of the Theory of Work Adjustment. They

> view satisfaction as a function of the correspondence between the reinforcer system of the work environment and the individual's needs, provided that the individual's abilities correspond with the ability requirements of the work environment. Satisfaction represents the workers' appraisal of the extent to which the work environment fulfills their requirements (Dawis & Lofquist, 1981, p. 5).

The literature offers mixed support for this theory.

Need Hierarchy Theory

Investigation of job satisfaction has constantly been related to the fulfillment of needs (Castellano, 1975; Kornhauser, 1965; Pietrofesa & Splete, 1975; Zytowski, 1970). As research progressed, several theories emerged. Some of the more prevalent follow:

Maslow's need hierarchy theory. Abraham Maslow's (1943) five-stage hierarchy has been the basis for many job satisfaction studies. The levels, moving from low to high, consist of physiological, safety, belongingness, esteem and

self-actualization needs. Maslow postulated that until lower-order needs were fulfilled, higher-level needs would be of no interest to the individual; and once the lower-order needs were fulfilled, they no longer acted as motivators for the worker. Researchers applying Maslow's theory have reported mixed results (Ramser, 1973; Roberts, Walter & Miles, 1971; Wofford, 1971).

Porter's need hierarchy theory. In 1961, Lyman Porter, in an effort to apply Maslow's rationale to management personnel, proposed a hierarchy which presumed physiological needs to have been met within his target population. Autonomy was included in his hierarchy, which from lowest to highest order, consisted of security, social esteem, autonomy and self-actualization. He subsequently suggested that manager studies supported his model (Porter, 1963) which posited that the higher-level needs are most important and least satisfied among professionals.

Alderfer's ERG theory. In another adaptation of Maslow's work, Clayton Alderfer (1972) developed a model with three levels which he believed would prove more applicable to organizational settings while coinciding with the basic premises of Maslow. His model consists of existence needs, relatedness needs and growth needs, hence the term ERG theory. Alderfer also loosened some of Maslow's views so that there is not a rigid requirement of satisfaction of one level before one is motivated by

another. According to Alderfer, more than one level can be motivating behavior at the same time. Although unsubstantiated by research, at present the model seems to present a realistic foundation for explaining needs and motivation in the work place.

Herzberg's Hygiene-Motivation Theory

One of the earliest formulated theories of job satisfaction is also the most unique in its basic approach. In 1957, Herzberg, Mausner, Peterson and Capwell conducted a study which led to the premise that job satisfaction and job dissatisfaction are not extremes of the same continuum but, in fact, operate separate from each other. The theory proposes that certain factors which produce job dissatisfaction have no impact upon job satisfaction which is influenced by another distinct set of factors. Herzberg's theory, in fact, separates the higher-level needs of Maslow's theory from those of the lower levels. The physiological and safety needs are designated as hygiene or maintenance, proported to be found in the extrinsic job factors associated with job context. Lack of fulfillment of these needs produces job dissatisfaction, but job satisfaction is not produced when they are fulfilled. Job satisfaction is evidenced only when the higher-level needs of affection, esteem and selfactualization are realized. These intrinsic factors are termed satisfiers or motivators and are found in job content.

The theory which has stimulated a plethora of research has also been the subject of much controversy; while some critics find the methodology faulty (Wernimont, 1966), others attack the assumption that hygiene needs and motivator needs are mutually exclusive in their influence (Graen & Hulin, 1968; Hackman & Oldham, 1975; King, 1976). Pallone, Harley and Richard's 1971 review of research concluded there was little to support the theory and studies by Burke (1966), Dunnette, Campbell and Hakel (1967), Ewen, Smith, Hulin and Locke (1966), Friedlander (1964), Graen (1966), Halpern (1966), Harris and Locke (1974), Locke and Whiting (1977) and Starcevich (1972); all found evidence repudiating the basic premise of two continuum being influenced independently by different need fulfillment. There are, however, investigators who believe that the bulk of the research support the two-factor theory (Bockman, 1971; Whitsett & Winslow, 1967).

Measurement of Job Satisfaction

As evidenced by the foregoing review of job satisfaction, a number of definitions and theories exist, several of which Miller and Muthard (1964) suggested may be equally acceptable but which result in a plurality of measurement methodology (O'Toole, 1974; Smith et al., 1969). Both Fournet et al. in 1966 and Hinrichs again in 1968 emphasized the difficulty in comparing job satisfaction research because of the numerous methods applied by investigators.

The personal interview has often been selected as a technique for data collection in job satisfaction studies. While it allows the interviewer to uncover factors that the researcher might have overlooked, reliability and validity have been found lacking (Fournet et al., 1966; Kasl, 1977; Schultz, 1982; Ulrick & Trumbo, 1965). Rank order methodology has been criticized by Likert (1961) because although an item may be ranked first in overall attitudes, it may not be most important. Beck (1983) and Schultz (1982) have criticized the sentence-completion test, which allows individuals the opportunity of supplying their own thoughts to complete sentences regarding their work because of the difficulty in quantifying and consequently analyzing the data. A procedure popular with Herzberg, the critical incident technique, has met with considerable opposition (Ewen, 1964; Vroom & Maier, 1961).

Schultz (1982) points out that the questionnaire is the most used measurement in the investigation of job satisfaction. Use of a questionnaire allows the researcher to investigate a number of factors across a large sample of workers. Reliability, validity and ease of measurement have been provided over both time and volume of research. Although the questionnaire limits the factors to those chosen by the researchers (Seashore & Taber, 1976; Spaeth & Handler, 1979) and the responders may differ from non-responders, there are some actions which can be taken to minimize these concerns.

Portigal (1976) suggests that there is no precise definition of job satisfaction that supersedes others in terms of usefulness nor is there an agreed upon standard of measurement or technique. Consequently, this study will proceed with the use of a questionnaire. Use of a data sheet and survey procedures to minimize concerns recognized above are detailed in Chapter III.

In the quantifying of job satisfaction, one of two conceptualizations are favored. Some investigators prefer to use a general satisfaction factor to determine global satisfaction (facet-free). A more robust approach useful in factorial research and required for this study is an additive model which measures several facets which are contributors to job satisfaction. These, in turn, can be summed for a measure of job satisfaction.

Variants Associated with Job Satisfaction

A variety of factors have been associated with job satisfaction and been studied accordingly. Although there is some agreement that personal, situational, and job characteristics are important to job satisfaction, there is substantial disagreement as to which factors have the greatest influence. Some authors (Seashore & Taber, 1976; Spaeth & Handler, 1979) have pointed out that objective characteristics surrounding job and work environment have less influence on satisfaction than how these factors are perceived by the worker.

Not only are there differences in opinion as to which factors impact most on job satisfaction but also there are differences in how best to examine the relationships. Some prefer to investigate each factor independently regarding its relationship with job satisfaction (Ivanovich & Donnely, 1968), while others, including Hulin (1963) and Schwab and Heneman (1977), have sought to examine how combinations of variants impact on satisfaction through regression procedures. Because the interaction of factors is of major interest in the present investigation, a regression model will be employed.

Personal Variants

In considering factors which have been associated with job satisfaction in the literature, certain demographic and sociological characteristics are relevant. Variants connected with the individual which have been embodied in job satisfaction research are age, education, professional affiliation, race and gender.

Age

In a review of literature for a study of job satisfaction in mental health, Dehlinger and Perlman (1978) found research to support a positive relationship between age and job satisfaction. This linear model has been founded in investigations by Hulin (1963), Schwab and Heneman (1977) and Sheppard and Herrick (1972). Generally,

the accepted rationale explaining these findings is that new workers tend to have less realistic expectancies regarding their work, and with age, they either find occupations that better coincide with their needs as Hoppock suggests or their aspirations, expectancies and values shift to become more aligned with their actual employment situation as proposed by Mortimer (1979). However, a 1962 investigation of Indian workers by Sinha and Sarma found age and job satisfaction negatively correlated, a relationship corroborated in a later study of Indian workers by Kalanidi and Deivasenapathy (1980).

Other researchers have found data disputing the relationship as being linear (Beck, 1983; Dwivedi & Pastonjee, 1975; Herzberg et al., 1957). Herzberg and his associates offered a U model explaining that when the individual first entered the work force, the morale was high with an enthusiasm that comes with the excitement of new prospects. After they worked for a few years, the monotony and tedium of many jobs impacted negatively with satisfaction until, as a mature worker, promotion, change of occupation, or acceptance of more realistic rewards helped raise the level of satisfaction.

This hypothesis was disputed by at least two authors. Hulin, in 1963, criticized the study by the Herzberg group on the basis of data analysis. Schultz (1982) suggested that the most dissatisfied young workers leave their jobs

more rapidly than older workers because they have less concern regarding security and, therefore, are often not included in job satisfaction study samples.

Adding to equivocality of results of age and job satisfaction investigations are those which found no relationship between these variants (Schnitzius & Lester, 1980; Weaver, 1974).

Aside from the issue of the way age relates to job satisfaction is the relationship age has with other correlates to job satisfaction, particularly experience, which confounds the effects of age and satisfaction (Wild & Dawson, 1976). When two or more independent variables are highly related, multicollinearity may exist, threatening the internal validity of the study. Multicollinearity results in the same variance in the dependent variable being attributed to more than one predictor, or the problem of distinguishing the contribution of each of the related variables toward explanation of the total variance of the dependent variable.

Education

In the studies of mental health workers (Phillips & Hays, 1978), electronics managers (Klein & Maher, 1966) and marketing employees (Penzer, 1969), a negative correlation has been found between education and job satisfaction. These authors believe that in investigating any particular occupation those which have the minimum required level of

education will be satisfied when compared with workers in the same occupation with more education than required who feel they are not rewarded adequately.

Weaver (1974, 1980) and Quinn and Baldi de Mandilovitch (1980) noted positive relationships between education and job satisfaction when analyzing data from large national surveys. Others claim there is no relationship between the two variables (Maier, 1965; Sheppard & Herrick, 1972).

Some researchers conclude that education is confounded with age (Inlow, 1951; Vollmer & Kinney, 1955) or pay (Andrews & Henry, 1963). Perhaps the most viable position regarding the conflicting research is there is no consistency in the relationship between education and job satisfaction (Beck, 1983; Schultz, 1982).

Professional Affiliation

Interest in the relationship between one's membership in professional affiliations and job satisfaction has been limited. Schultz (1982) suggests that while a worker having low job satisfaction and, coincidentally, a lack of fulfillment of affiliation needs on the job may seek professional affiliation in professional membership, others experiencing a high level of job satisfaction may be equally motivated to join professional organizations.

Cheloha and Farr (1980) expressed expectation that those individuals enjoying a high level of job satisfaction would be more likely to be involved in outside professional

activities. In an investigation of Virginia school psychologists, Levinson (1983) found membership in professional associations a predictor of job satisfaction.

Race

Exploration of the professional literature regarding race and job satisfaction produces results which generally agree that white workers have a higher level of job satisfaction than their black counterparts (Weaver, 1980; Zaharia & Baumeister, 1979). However, Moch (1980) reported Mexican Americans as expressing levels of job satisfaction greater than both black and white workers. Several authors have expressed the opinion that cultural value differences are the underlying forces behind these differences (Jones, James, Bruni & Sells, 1977; Weaver, 1975).

Gender

Like age, the relationship of gender to job satisfaction is one of complexity which has produced inconsistent research results. Several writers have suggested that clarification of the relationship can be expected only if other covariants of gender are held constant. These include age (Barbash, 1976), compensation (Hulin & Smith, 1964), education (Barbash, 1976), job level (Hulin & Smith, 1964; Schultz, 1982), and promotional opportunity (Hulin & Smith, 1964; Schultz, 1982).

Another explanation of results among women differing from those of men is generally agreed upon by several authors (Andrisani & Shapiro, 1978; Herzberg, 1966; Wild & Dawson, 1976). They contend that factors which are important to women are different from those that men value, at least in the amount of reinforcement they provide and consequently their impact on job satisfaction varies between the genders. Research has reported that factors rated higher by men than women include autonomy (Murray & Atkinson, 1981), influencing decisions (Schuler, 1975), promotion opportunity (Murray & Atkinson, 1981; Shapiro & Stern, 1975), skill utilization (Centers & Bugental, 1966), working conditions (Lee, Mueller & Miller, 1981) and the work itself (Shapiro & Stern, 1975). Women, conversely, placed a higher value on satisfactory social relationships with co-workers (Centers & Bugental, 1966; Murray & Atkinson, 1981; Schuler, 1975) and promoting growth (Farber & Heifetz, 1981).

Although there are several instances of studies which find each gender being more satisfied with their work than the other, the consensus is that they do not differ in their levels of job satisfaction.

Situational Variants

Several factors which researchers have encompassed in studying job satisfaction are characteristics of their work setting or environment. Some may be impacted upon by the

organization through management strategies. These correlates of job satisfaction are achievement, advancement opportunities, autonomy, co-workers, experience, job environment, salary, supervision and variety.

Achievement

The term achievement has often been used interchangeably with success and accomplishment to describe the level of job performance acceptable to the individual. Ronan (1970) and Portigal (1976) both believe that workers view adequate job performance as a goal. Maslow (1954) stipulated the ability to fulfill one's potential as necessary for self-actualization. Self-actualization was found to be an important factor in job satisfaction by 45% of Blai's (1964) sample of federal employees. Accomplishment was found to be the most important factor contributing to job satisfaction in studies by Wernimont, Toren and Kapell in 1970 and Cherniss and Egnatios in 1978.

A cyclic relationship between motivation and performance was stated by Lawler and Porter (1967) and later supported by Kelsey (1979). With success comes increased motivation and higher performance. From a negative perspective, lack of achievement has been found to be associated with lower satisfaction and burnout (Daley, 1979; Lattanzi, 1981; Pines & Maslach, 1978) in investigations of the helping professions.

Advancement Opportunities

Opportunity for advancement has been linked to job satisfaction historically; as early as 1935, Hoppock noted the relationship. Studies by Richardson and Blocker (1963), Graen and Hulin (1968), Ewen (1966) and Kirkpatrick (1964) in the sixties reinforced this hypothesis. This relationship was reiterated in the seventies by Barbash (1976) and Farris (1971). In that same decade, advancement opportunity, when coupled with autonomy, challenge and pay, was found to be the best predictor of job satisfaction (Katzell, Ewen & Korman, 1974; Kraut & Ronen, 1975). Conversely dissatisfaction was effected most by lack of advancement opportunity and pay (Renwick & Lawler, 1978).

Autonomy

Inquiry into job satisfaction and autonomy has supported a positive correlation between a worker's control of the methods and pace of the tasks and satisfaction with the job (Hulin, 1969; Kasl, 1977; Locke, 1976; Portigal, 1976). The negative relationship of autonomy and dissatisfaction was confirmed in a study of the American work force by Wool in 1973, while studies of helping professions by Arnett and Martin (1981), Bruhn, Bunce and Floyd (1980), Cherniss and Egnatios (1978), Dixon, Shaw, and Bensky (1980), Leonard, Margolis and Keating (1981) and Weinberger (1966) all found support for a positive relationship existing between autonomy and job satisfaction.

Co-workers

Competent, friendly, helpful co-workers were among the major factors identified as affecting job satisfaction by Billings (1978). Fellow employees were also listed by Richardson and Blocker (1963) as an important predictor of job satisfaction. Positive social interaction and interpersonal relations have been related positively with job satisfaction in studies by Barbash (1976), Cherniss and Egnatios (1978), George and Baumeister (1981), Leonard et al. (1981), Phillips and Hays (1978) and Renwick and Lawler (1978). Other authors found that the lack of interaction with others led to dissatisfaction (Daley, 1979; Lattanzi, 1981; Mattingly, 1977). A search of the literature provided no conflicting research results.

Experience

Research related to years of experience and job satisfaction indicates a complex relationship. Results have been conflicting. A 1982 study by Schultz refuted Blau's 1981 findings among bus operators that indicated a negative relationship between dissatisfaction and length of service. Beck's 1983 study agrees with Herzberg et al.'s 1957 hypothesis that tenure, like age, has a U-shaped relationship with job satisfaction; and although length of service and age appear related, each variable is sufficiently distinctive to warrant treating them separately in research. Hulin and Smith (1965) concluded that age and

tenure were so closely related that to claim age alone was related to job satisfaction may be unwise. In a sample of Georgia high school teachers, Bledsoe and Haywood (1981) found no relationship between time in teaching and job satisfaction, a conclusion in agreement with that of Martin (1981).

Job Environment

Of the factors related to job satisfaction, work environment has long been accepted and investigated as an important variable. Hazardous conditions in the work place have been reported by Fournet et al. (1966) as offsetting factors that would in other situations enhance job satisfaction. This finding was supported by Schultz's 1982 research.

Among environmental factors with negative implications are excessive hours (Zytowski, 1970). Environmental extremes have been researched and reported as correlating negatively with job satisfaction throughout the literature (Kasl, 1977; Portigal, 1976) beginning as early as 1939 (Roethlisberger & Dickson).

Salary

The issue as to the extent and nature of the relationship of remuneration and job satisfaction is raised when reviewing the literature rather than if the relationship exists. Promotion opportunity and pay were

closely related by writers in a 1983 literature review (Seepersad). Education and salary have been found to be negatively related in a study (Klein & Maher, 1976) that supports the position that salary is more related to satisfaction with pay, a component of job satisfaction, than with job satisfaction per se (Hulin, 1969; Smith et al., 1969) since their results indicated that the worker's satisfaction with pay, not overall job satisfaction, decreased with increased educational level. The existence of a relationship between job level and pay was substantiated by studies reviewed by Dehlinger and Perlman (1978). They concluded that income was only consistently related to job satisfaction in unskilled and semiskilled jobs, a position conflicting with Cooper et al. (1979) who found higher-level professionals more satisfied with their pay than those in lower-level positions.

Hoppock (1935) was unable to differentiate between satisfied and dissatisfied workers, while Schmidt (1976) found evidence that supported the two-factor theory in that pay did not enhance job satisfaction but was found to be a maintenance factor contributing to dissatisfaction. These findings conflict with the majority of research results which reports a strong positive relationship between salary and job satisfaction in numerous literature surveys (Barbash, 1976; Portigal, 1976; Scanlan, 1976; Schultz, 1982).

Supervision

Supervision, as related to job satisfaction, may be viewed in two dimensions. First, the degree to which the supervisor shares a common background in terms of experience and training was found to be related positively to job satisfaction by Dixon et al. (1980).

The other dimension of supervision involves the employee's perception of the supervisor's attitudes. These attitudes encompass supervisory support (Waters, Roach & Batlis, 1974) and supervisor's respect of worker's individuality (Kasl, 1977; Phillips & Hays, 1978). Reports by Barrett (1964), Pelz (1952) and Zander and Quinn (1962) related job satisfaction to agreement between supervisor and worker regarding both job goals and means, the supervisor's interest in the worker, and the supervisor's administrative influence.

Beginning with Hoppock's 1935 writing, authors have pointed out the important relationship between supervision and job satisfaction. Ewen's (1966) research supported the existence of a positive relationship between job satisfaction and supervision as did a later report by Barbash (1976).

Variety

The opportunity to use a variety of skills was found to have a positive correlation with job satisfaction by Brief and Aldag (1975). Although the terms task variety, skill

variety, job scope, job enrichment and job complexity have all been used synonymously to identify the same construct, there is no confusion that the meaning conveyed is the opposite of functional specialization or the performance of repetitious tasks. The negative impact upon job satisfaction for those workers performing the same task over and over has been documented by Hoppock (1935), Kasl (1977), Portigal (1976) and Ronan (1970).

Consequences of Job Dissatisfaction

Job dissatisfaction, a term describing the pole opposite job satisfaction, has been identified as correlating with negative outcomes which fall into two categories. One group of negative consequences involves the individual's personal well-being regarding health, life satisfaction and longevity. The other group clusters about the job and impacts not only upon the worker but also the employing organization.

Problems with mental and physical health as well as interpersonal relationships were all found related to job dissatisfaction by O'Toole (1973). Additionally, emotional concerns involving frustration (Heisler, 1977), anxiety (Kornhauser, 1965; O'Toole, 1973), feelings of powerlessness (Heisler, 1977), depression (Kornhauser, 1965), low self-esteem (Greenhaus, 1971; Kalanidi & Deivasenapathy, 1980; Kornhauser, 1965; Snyder & Ferguson, 1976), maladjustment (Kornhauser, 1965) and dysfunctional behavior (Portigal,

1976) correlate with job dissatisfaction. Both Kornhauser (1965) and O'Toole (1973) found job dissatisfaction related to psychosomatic illness. Physical problems identified as being correlated with job dissatisfaction include fatigue (Mortimer, 1979) and heart disease (O'Toole, 1973).

In considering the difficulties which involve the organization, the list is no less impressive. Job dissatisfaction has been associated with absenteeism in research by Block, Yuker, Campbell and Melvin (1964), Cheloha and Farr (1980), Ewen (1966), Hulin (1963), Ilgen and Hollenback (1977), Kasl (1977), Patchen (1961), Portigal (1976), Talacchi (1960) and White (1960). Hulin's 1963 study has shown that job dissatisfaction is also related to grievances. A large body of research has demonstrated that job dissatisfaction correlated positively with turnover (Block et al. 1964; Butler, 1961; Ewen, 1966; Farris, 1971; Fournet et al., 1966; Hoppock, 1935; Hulin, 1963; Kasl, 1977; Leonard et al., 1981; Peters, Bhagat & O'Conner, 1981; Portigal, 1976; Ross & Zander, 1957; Schneider & Snyder, 1975; Talacchi, 1960). Monetary losses result from increased costs of recruiting and training new employees as well as production decreases from understaffing.

Counselor Job Satisfaction

Although job satisfaction research originated in assessment of blue-collar workers in industrial environments, more recently, studies have been published

evaluating the human services workers. By 1971, one report stated almost 60% of studies reviewed were investigation of semiprofessionals and professionals (Pallone et al. 1971). In researching the relationship of several job-related variables to job satisfaction, Weinberger (1966) found that autonomy correlated with job satisfaction among welfare administrators. Other authors sought information regarding individual and job characteristics and job satisfaction in studies of nursing personnel (Mathis, 1973), mental health workers (Distefano & Pryer, 1973; Phillips & Hays, 1978; Sarata, 1974) and social workers (Weinbach, 1973). In studies directed toward determining the relationship between job satisfaction and performance, Moos and Houts (1968), Sarata (1977) and Sarata and Reppucci (1975) found a positive correlation between job satisfaction and client outcome.

Interest in counselor job satisfaction began with DiMichael's 1949 investigation of rehabilitation counselors but studies have been limited in number. Investigation of factors related to counselor job satisfaction have involved counselors from a variety of organizational environments including rehabilitation services (Eddy, 1960) and education (Hechlik, 1972). Variables examined include those associated with the job situation such as Hansen's (1967) inquiry into the relationship of various activities of school counselors and job satisfaction and those of personal

nature such as gender, age and education. Several inquiries have been made into both environmental and individual variables in the same study. Jenkins (1971) found no support for a relationship between education and job satisfaction in a study of role perception and education as they related to job satisfaction among rehabilitation counselors. Pacinelli (1968) found that age, gender, length of service and caseload of rehabilitation counselors were related to level of job satisfaction. Reporting results of a 1981 investigation of rehabilitation counselors, Tunick and Tseng (1981) found "Overall, total professionalism and total job satisfaction showed considerable high and positive association ($r = .64$; $p < .001$)" (p. 78).

A study of school counselors by Watson (1975) applied multiple regression analysis to develop a predictive equation for job satisfaction. The author suggested the possibility of using selected personal characteristics to predict future job satisfaction at the beginning of counselor preparation.

Consequences of counselor job satisfaction have been the source of several inquiries. Hansen (1968) found job satisfaction among school counselors related to the performance of certain activities. Counselor productivity was associated with job satisfaction in a study of rehabilitation counselors by Miller and Muthard (1965). More currently, in social service, drug abuse and clinics

for battered spouses, Wiggins and Moody (1983) found a significant positive relationship in job satisfaction of counselors and effectiveness as measured by both clients and supervisors. Turnover was negatively related to job satisfaction by Smits (1972) in rehabilitation counselors from 30 state agencies.

STRESS

Intense interest in stress by both the general public and the scientific community is evident from the voluminous writings in the popular press and the professional literature. The appearance of an article entitled "Combatting Job Stress" (Brown) in a syndicated newspaper column in December 1987, attests to the continued public interest in occupational stress. Books targeted at the layman, newspaper columns and articles in popular magazines have both contributed and responded to the awareness, knowledge and sensitivity of the citizenry to the antecedents and consequences of the construct. One author estimated the output of the epidemiologists, psychologists, sociologists and other medical and social scientists of over 8,000 reports on stress per annum (Peterson, 1978).

There is general agreement that stress is the manifestation of the impact of emotion on the physiological and cognitive spheres. Levine (1971) presents a forthright explanation of the process. The sympathetic division of the autonomic nervous system responds to stimulation with

changes in the glandular activity, metabolism and smooth muscle tissue. The cerebral cortex, in reaction to conscious awareness of a stressful stimulus, activates the hypothalamus which regulates involuntary bodily activities and signals the pituitary gland to release hormones into the bloodstream. These two functions cause the muscles to tighten, breathing and heart rates to increase, and the surface blood vessels to shrink. Digestion ceases, perspiration increases and salivation decreases. Sensory organs become more alert. Adrenocorticotrophic hormone (ACTH) signals the adrenals to produce corticoids which puts more sugar in the system via the liver and increases the release of red blood corpuscles from the spleen, thus enabling the blood to clot more quickly. The body is now prepared for quick decisions and strenuous physical action.

Approaches to researching stress have been divided into two spheres (Parker, 1979). Interest in physical stressors have been studied by physiological scientists. Oken (1974) has presented an array of physical stressors which include chemicals, drugs, exercise, foods, humidity, microbes, noise, radiation, temperature and trauma. The psychosocial stress factors have been investigated primarily within the realms of psychological science. Appley and Trumball (1967) edited a collection of work that explores the psychological sources of stress. Social stressors include (1) structure of the family, (2) differences in family structure from past

to present, (3) life style of family (i.e., marriage, empty nest, retirement), (4) role conflict occurring outside and inside the family, (5) interpersonal relationship failure, (6) organizational careers (i.e., lack of recognition, poor pay, unemployment), (7) task stress (i.e., job conditions, job content, job dissatisfaction), (8) organizational structure (i.e., social interaction, role conflict, isolation) (Levine & Scotch, 1970). Toffler (1970) suggests that the rapid changes taking place in so many areas of our lives overtaxes our adaptive capacity, thus causing stress.

The perception of the situation by the individual is also an important variable as to the individual's stress reaction. Any given event may elicit a very different reaction from different persons. The same howling that disturbs the sleep of one, causing very stressful reaction, delights the coon hunter who owns the hound. In 1974 Friedman and Roseman attempted to develop a profile of personality traits that could help identify those at high risk from stress. Stress has generally been given a negative connotation but Selye (1974) considered stress the "salt of life" and the total absence of stress, death. He conceptualized unpleasant or harmful stress as "distress" and healthy, positive stress as "eustress."

Definitions of Stress

The same broad interest that has brought attention to stress has also caused the word to lose a clear conceptual meaning because of misuse. Stress is not the same as stressors, the stress-producing factors that are encountered in the environment; nor is it strain, the effects that stress produce in the individual. Although there are numerous definitions, there seem to be some general themes among them.

The position that stress is "environmental conditions that require behavioral adjustment" (Benson, 1975, p. 41) does not conflict with the definition that stress is "conditions and process (a) that lead the individual to differentiate between benign and damaging conditions and (b) that determine the kind of coping behavior which ensues" (Eysenck & Arnold, 1972). These perspectives have some commonality with the Englishs' definition of "stress: noun, a force applied to a system sufficient to cause strain or distortion in the system or, when very great to alter it into a new form" (1958, p. 529), and Miller and Keane's (1972) interpretation that stress is "(1) forcibly exerted influence, pressure, (2) any condition or situation that causes strain or tension" (p. 915). These positions, which conceive of stress as a condition or pressure, are in disagreement to those definitions that proclaim stress to be either a response or a system failure. Stress has been

defined as "the state of an organism where he perceives his well-being or integrity is endangered and that he must divert all of his energies to its protection" (Swick & Hanley, 1980) and "the adaptive reaction; anything that forces us to face the unknown, whether it is happy or sad" (Toffler, 1970, p. 301). The most widely known response definition is also the broadest; stress is "the nonspecific response of the body to any demand put upon it" (Selye, 1974, p. 32). Writers who envision stress as failure include Gross (1958) who defines stress as "the failure of routine methods for managing threats" (p. 59), and Levine and Scotch (1970) who conclude "stress is not to be viewed as occurring when this or that load, pressure or stimulus is applied to the individual but instead when there is a failure of the individual's adaptive resources or capacities" (p. 283).

For the present, the most useful definition seems to be that presented by Schuler (1980) which focuses on the work environment but could be more broadly stated. "Stress is a Person-Environment (Lofquist & Dawis, 1969) or role fit or the interaction of the characteristics of the individual and the potential sources of stress in the...environment." (p. 188).

Theories of Stress

Contributions to the understanding of stress have involved the work of several theorists. A brief summary of some theories which have provided a basis for voluminous research provides a foundation for consideration of the more specific construct, occupational stress.

Walter B. Cannon

Cannon, a physiologist, performed early research on the body's physical changes in response to emotional stimuli and reported the impact anger, anxiety, fear and pleasure have on the physical characteristics of an individual first in 1929. Using surgical techniques to stimulate the hypothalamus of a cat, Cannon was able to examine the physical changes that took place in the endocrine system which resulted in observable physical changes. Rising blood pressure and rapidity of heartbeat and breathing resulting from increased secretions of the adrenal glands were recorded as the organism prepared to take action to maintain or reestablish a balance or equilibrium between the environment and itself. Cannon designated this static state "homeostatis."

Cannon is best known as the originator of the term "Fight or Flight" syndrome which is that response state the body takes on as a result of stimulation by stressors. This process, which prepares not only man but other organisms to make a quick decision (and the resulting appropriate

behavior) to either retreat from a threatening scenario or to attack and eliminate the threat, was necessary to the survival of early man. The challenges an individual met with wild animals and hostile members of one's own species required immediate and decisive action. However, the physical responses are identical today when modern men and women are faced with sustained stressors when neither physical attack or retreat may be considered appropriate by a society whose mores are in themselves stressors.

Hans Selye

An endocrinologist and the director of the University of Montreal's Institute of Experimental Medicine, the late Hans Selye is considered the "Father of Stress." He supported and expounded upon Cannon's work and developed the idea that the body reacts in the same way to both unpleasant and pleasant stressors. Regardless if the simulation is exhilaration and great joy or pain and sorrow, physiological processes are the same. Selye (1950) conceived of the General Adaptation Syndrome (GAS) to explain his three stages of stress.

1. The alarm stage is the alerting reaction that encompasses the physiological changes identified with Cannon's "fight or flight" process, which occurs when an organism is confronted with a stimulus requiring immediate adaptive response.

2. The stage of resistance is a period after the alarm stage when the body enters into a coping mode which allows it to repair damages and resist the stressor while maintaining normal functioning. It is this stage which, if not resolved by overcoming or removing the stressor, leads to the final stage.

3. The stage of exhaustion is reached when the organism encounters a stress-producing agent that it cannot overcome or avoid. The physiological signs are the same as those in the alert stage, and eventually the stressor will exhaust the adaptive resources causing damage discernible as illness and ultimately death.

Recently, some authors have questioned theories espoused by Selye, particularly his position that the stress response is non-specific. Goldberger and Breznitz in 1982 presented the viewpoint that the organism is able to differentiate between stimuli and thus respond accordingly. A similar opinion was voiced by Everly (1980) who views the response pattern as a function of the individual's predisposition and the particular stimulus. An earlier inquirer (Mason, 1975) has presented corroborating empirical evidence in support of Selye's critics.

E. N. Sokolov

Sokolov developed a model for stress which embraces the theme that the brain is responsible for the physical reactions to a presenting stressor. The brain collects data

regarding incoming stimuli. The details concerning duration, intensity, quality and sequence is stored where it is compared to information coming into the cortex regarding new stimuli. If a match is found, the organism reacts in the same manner that was successful previously. There is the application of a "learned" response. When no match is found, the Orientation Response (O. R.) begins (Sokolov, 1963). This process is similar to Selye's GAS Model. If the organism is successful in coping with the stressor, equilibrium is restored; if not, the organism eventually exhausts itself, unsuccessfully attempting to regain the static state.

Occupational Stress

Embraced by the bodies of knowledge surrounding physical, psychological and social stress, occupational stress is the most prevalent peacetime stress which modern man must confront in the industrialized world. As a result of the wealth of research on this important construct, numerous theories and definitions have been established by investigators of occupational stress.

Definitions of Occupational Stress

Several authors produced early definitions of occupational stress almost simultaneously which have been cited by others as support for ensuing research. French, Rogers and Cobb (1974) suggest that occupational stress

occurs when there is a misfit between a person's skills and abilities and demands of the job and/or a misfit between the needs of the person and the rewards supplied by the job. Margolis, Kroes and Quinn, that same year, viewed occupational stress as "a condition at work interacting with worker characteristics to disrupt psychological or physiological homeostatis" (p. 660). Still another definition was presented in 1974 by McLean who presented an analogy with the conception of stress found in engineering. He proposed that occupational stress is a force which may produce strain or damage in the structure to which it is applied. Thus, any work-related factor which produces maladaptive response is considered a stressor. Another definition which emphasizes the factors in the work setting states occupational stress is "any characteristic of the job environment which poses a threat to the individual" (Caplan et al., 1975, p. 3). Cooper and Marshall (1976) give a similar negative connotation to occupational stress in their description that encompasses poor work conditions, role ambiguity, role conflict and work overload. Lazarus and Launier (1978) define stress as situations in which "environmental demands tax or exceed the resources of the person."

Beginning with Beehr and Newman's 1978 definition, some of the positive aspects of stress have been contained in occupational stress interpretations. They said, "Job stress

refers to a situation wherein job-related factors interact with a worker to change (i.e., disrupt or enhance) his or her psychological and/or physiological condition such that the person (i.e., mind-body) is forced to deviate from normal functioning" (p. 69-70). This positive potential, coupled with McGrath's (1976) contribution that stress contained an element of uncertainty as to the possible costs or rewards and may be formulated as a constraint, demand or opportunity, was the underpinning of Schuler's (1980) present definition:

> Stress is a dynamic condition in which an individual is
>
> a. confronted with an opportunity for being/having/ doing what (s)he desires and/or
> b. confronted with a constraint on being/having/doing what (s)he desires and/or
> c. confronted with a demand on being/having/doing what (s)he desires and for which the resolution of is perceived to have uncertainty but which will lead (upon resolution) to important outcomes. (p. 189)

Theories of Occupational Stress

Among the many theorists who have provided a rich basis for research, several are recognized in the literature as having created a groundwork upon which others have built. They appear in most major literature reviews and aid in the comprehension of the varied approaches taken in the exploration of occupational stress.

Role Theory

The 1964 publication of the work of Kahn et al. provided a model and empirical support for studying occupational stress from a role approach. A role is a set of behaviors performed by an individual in a particular job. The roles of other workers one interacts with combines with one's own role to form a role set. The other members of the worker's role set indicate their expectations to the worker in what is known as the sent role. Other workers apply role pressure to insure behavior conforming with the sent role which causes reactions by the focal worker but not necessarily behaviors desired by the role set.

Role sending sometimes produces stress. One stress-producing situation, role conflict, occurs when the pressure to conform with one sent role would make conformance to a simultaneously sent role difficult. Kahn et al. (1964) recognized five forms of role conflict. Intra-sender conflict results from conflicting expectations from a single member of the role set. Where the worker experiences role conflict as a result of conflicting pressures from more than one member, inter-sender conflict occurs. Sometimes the individual finds him/herself belonging to more than one role set because of membership in several groups. Kahn and his associates term this inter-role conflict. Person-role conflict happens when the requirements of the role rivals

the needs of that person. Role overload results when there is pressure to do more work than is possible to accomplish during available time. This form of conflict has been singled out and researched independently of other types of role conflict.

Role ambiguity is the other stress-producing factor defined in role theory. When the worker is uncertain about the expectations regarding his/her role due to lack of information, stress results. Unclear understanding concerning responsibilities, promotional opportunities, authority and evaluation contribute to role ambiguity.

Person-Environment Fit Theory

This model of stress which focuses primarily on the relationship between the worker and the work environment has been recapitulated by Caplan in 1983; however, development and research of the theory extend over the last three decades. There are two fits between the individual and the job environment that are of interest to proponents of this approach.

First, how well do the rewards of the job fit the needs of the worker? Stress occurs when needs for achievement, opportunity, salary and security are not sufficiently met by the job environment. Second, how well do the abilities and skills of the individual fit the demands and requirements of the job? If a person is unable to be competent in his/her work, stress results. Often the two types of fits interact.

If one is unable to successfully perform the tasks of a job, it is possible that the potential for the worker receiving fulfillment of his/her needs is small. There are situations in which the two are not related. Nepotism, as an example, often allows a worker adequate rewards to fit his/her needs although the abilities and skills do not meet the demands and requirements of the job.

Kasl's Five Factors

The research efforts of Kasl (1978) led him to the conclusion that occupational stress is influenced by five factors. First he cites conditions at work. These conditions involve environmental issues. Extreme temperatures, pollution, humidity, toxic substances, lighting, space and noise or any element that may diminish the desirability of the work setting would be considered in this category. The second factor Kasl lists is the work itself or content of the job. If the job overtaxes the physical body of the individual by excessive physical expenditure due to reaching, lifting, crawling, stretching, standing, sitting or other physical demands, the resulting stress is attributed to this factor. Mental and emotional investments that are part of the job content are also included in this factor. The work group is the third factor. The congeniality of co-workers is at issue here. If the interaction between the person and the other people that are encountered in the course of completing one's tasks

are disagreeable, stress is generated. Variables, such as the degree of unpleasantness, the number and importance of those who the individual has difficulty with and the amount of time in the presence of the antagonists impact upon the amount of stress this factor produces. Supervision is the fourth factor which Kasl considers as a possible source of occupational stress. The management style, friendliness and personal concern shown by the supervisor and such competencies as technical knowledge are important considerations in the stress level of a worker. The final factor that Kasl blames for occupational stress is the organization. Arbitrary management rather than participatory, closed system instead of open, policies which exclude promotion from within and responsibility without authority, all are found in this category.

These factors act singularly or in groups to create stress on the job. This model offers some specific areas to examine to determine what may be causing stress and where to intervene to alleviate the condition.

Schuler's Model of Organizational Stress

Schuler's 1980 conceptualization of stress in organizations allowed him to postulate the following propositions:

1. Three types of stress can be identified as being constraint stress, opportunity stress and demand stress....

2. An individual's total stress represents the sum of the individual's constraint stresses, opportunity stresses and demand stresses....

3. The intensity of a stress condition, whether demand, constraint or opportunity, is determined by the value of the outcomes and their respective uncertainty attached to the resolution of the stress condition....

4. Organizational qualities may be associated with constraint, demand and opportunity stress. The same organizational quality may be related to an opportunity for one individual but to a constraint for another....

5. Stress is associated with three groups of symptoms: physiological, psychological and behavioral....

5a. Opportunity, constraint and demand stresses are all positively related to the probability of the incidence of physiological symptoms....

5b. Opportunity stress is positively related to affective psychological outcomes such as satisfaction and job involvement....

5c. Demand stress, constraint stress and opportunity stress are positively related to cognitive psychological outcomes....

5d. Opportunity stress is negatively related to some behavioral symptoms such as absenteeism and turnover....

5e. Opportunity stress and constraint stress have an inverted U relationship with some behavioral symptoms such as performance. The relationships are influenced by the nature of the task and performance criterion such that:

1. The apex of the inverted U is higher under an easy task and/or with a quantity measure of performance. In addition, under these conditions, the right half of the inverted U declines very little.
2. The apex of the inverted U is lower under a difficult task and/or with a quality measure of performance.

5f. Demand stress is negatively related to some behavioral symptoms such as performance....

6. Individual strategies can be developed to reduce stress and to reduce the stress symptoms associated with stress. (p. 208- 210)

Measurement of Occupational Stress

Occupational stress measurement has raised concerns similar to those surrounding the measurement of job satisfaction. The plethora of definitions and theoretical underpinnings of the construct give substance for a broad

range of measurement approaches, each accompanied by advocates and critics.

A critique of measurement techniques used in occupational stress research was presented by Sharit and Salvendy (1982) categorizing each strategy into three major classifications. Under physiological measures, blood pressure, heart rate and telemetry are introduced, all which use changes in bodily functions as indicators of stress. Biochemical measures are a subgroup in this class and refer to cholesterol, uric acid, free fatty acids, glucose, amino acids, thyroxin, growth hormone and the catacholamines. Changes from a predetermined base rate can be interpreted as an indicator of stress. As with the other physiological indicators, there is a danger that some variable unrelated to the job may be registering a change in the indicator under observation. One of several possible unrelated stimuli may be participating in the study. The collection of data in a timely and meaningful way may also present some problems to the researcher.

Performance criteria is the second category provided by Sharit and Salvendy. The use of performance criteria is more typical in occupations involving physical effort to produce easily quantifiable results. Greater validity results from combining performance measures and physiological measures.

The last category offered in the schema was psychometric and related criteria. Self-ratings are one of several approaches included in this group. The Social Readjustment Rating Scale (Holmes & Rahe, 1967) was an attempt to measure stress directly using a self-reporting instrument. Each of 43 life changes were weighted from 1 to 100 with the sum of the weighted scores becoming a predictor of strain-related illness. The coping skills of the individual are not taken into consideration. This scale takes into account stress-producing events from the entire life spectrum, not only those related to work.

Although a number of authorities (Beehr & Newman, 1978; Cooper & Marshall, 1976; McGrath, 1976) have commented on the multidimensionality of occupational stress, presently most instruments fail to provide for that perspective. The Job Related Index (Indik et al., 1964), one of the most used instruments in stress research was criticized by Burke and Belcourt (1974) because of its failure to draw from more than two occupational stress sources. Osipow and Spokane (1983) argue that most measures of occupational stress examine only stresses in particular occupations without regarding job roles that cut across occupations and levels of employment. They believe the contextual dimension of work has been given less attention that warranted in instrument design. Sharit and Salvendy (1982) offer the following support for careful instrumentation:

> The measurement process constitutes the critical point in occupational stress analysis. Incorrect selection of measures imposes limitations that necessarily restrict any inferences that can be made about the existence of stress....The selection process requires that the measures are actually indicators of the stressor(s) under investigation and are sufficiently sensitive to these stressors. (p. 145)

Use of a multifaceted questionnaire and data sheet in the present investigation enables tapping those factors considered by researchers to be the major contributors to occupational stress.

Correlates of Occupational Stress

Interest in antecedent variables and stress has been evident in research. "Demographic Correlates to Psychological Strain" by Indik et al. (1964) followed an earlier study of psychosomatic symptoms by Gurin, Veroff and Feld (1960) which sought relationships between stress-related symptoms and demographic variables. Although there has been little empirical support found for their predictive importance, researchers have recently emphasized the valuable contributions they may make in understanding stress (Beehr & Newman, 1978; Van Sell, Brief & Schuler, 1981). Jayaratne and Chess (1983) recommended the incorporation of nonstress factors as predictor variables in the research into the relationship of stress and job satisfaction.

Age

Investigation of age in relationship to occupational stress has been included in a number of studies involving other independent variables. Helwig's 1979 research of employment counselors revealed a negative correlation between role ambiguity, one factor included in occupational stress, and age. A 1984 study by McDermott of burnout found evidence that age was not a predictor of occupational stress. However, in a study of career development professionals that same year, the authors (Forney & Wiggers) concluded that their study was support for Maslach and Jackson's (1981) position that age and experience can produce a survivor effect. Ekbom's (1985) study of burnout in Minnesota high school guidance counselors corroborated this negative relationship in an investigation that found age the only significant demographic variable among those researched. Older workers have registered less stress as a result of earlier experiences. They have survived, and the younger, more stressed workers change occupations. Theorell's (1976) evaluation of construction workers indicates that age may be a modifier of occupational stress. Rizzo et al. (1970) found inconclusive results in their studies of role ambiguity and role conflict. A study of school counselors (Redick, 1972) found no relationship between age and role ambiguity or role conflict.

Conflicting reports by Gurin et al. (1960) of a positive correlation between age and psychological strain support their contention that one becomes more vulnerable with age.

Although to date there has been conflicting evidence regarding the relationship of age to occupational stress, the importance it is given as a demographic variable is evident in the number of investigations in which age is included (Indik et al., 1964; Jayaratne & Chess, 1983; Kasl, 1973; Langner, 1962; LaRocco et al., 1980; Moracco, 1981).

Caseload

Role overload, an occupational stress factor, could be related to the size caseload for which one is responsible. Thompson (1982) included caseload as a variable in the investigation of role conflict and role ambiguity among Arizona secondary school counselors as a result of Sales' 1970 observation that perceived overload is influenced by objective overload.

Education

The relationship of education to occupational stress has met with conflicting reports in the literature. Helwig's (1979) investigation of employment counselors found no relationship between educational level and role ambiguity or role conflict. These findings failed to support the positive correlation found by Kahn et al. (1964). The national study by Gurin et al. (1960) gives support to a

positive relationship; however, Indik's et al. (1964) subsequent study did not find a relationship between age and education. Inclusion of education in research by Alutto, Hrebiniak and Alonso (1970), Beehr and Schuler (1982), Indik et al. (1964), Larocco et al. (1980) and Rizzo et al. (1970) is evidence of its importance as a variable in the study of occupational stress.

Experience

Research results are ambiguous regarding the relationship of occupational stress and experience. In an examination of stress in school counselors (Moracco et al., 1984), the two variables were found to be unrelated, a position supported by the findings of McDermott (1984) in her inquiry into professional burnout and Redick's 1972 study. Richardson and Stanton (1973) found no correlation between experience and role strain. However, Rizzo et al. (1970) found positive a relationship between role conflict and experience and negative a relationship between role ambiguity and experience. Other investigators interested in experience as a variable for the study of occupational stress include Helwig (1979), Moracco (1981) and Thompson (1982). The theory that experience can be a mediating factor in stress was proposed by McGrath (1976) who suggested that past experience with the stressor or training can modify the level of stress experienced by an individual. Studies by Farber and Spence (1956); Pronko and Leith (1956)

and Ulrich (1957) have provided empirical support for that premise.

Number of hours worked per week

Role overload, an occupational stress factor, may be evidenced by the number of hours worked per week. Both Sales (1970) and Thompson (1982) included this variable in studies of school counselors.

Professional Affiliations

In his 1979 study of role ambiguity and role conflict among employment counselors, Helwig found the number of professional organizations to positively relate to role conflict. The inclusion of this variable was intended to help differentiate the degree of professionalism of the respondent.

Race

Although race is a variable not often found in stress research, some authors have sought to uncover what, if any, relationship exists between these two variables. In a study of Mexican-American and black professionals, Ford and Bagot (1978) found blacks more stressed in some situations. Race was also included in a study of occupational stress of research and development professionals by Ramos (1975). As equal opportunity provides more occupational participation, both horizontally and vertically, for nonwhites, the importance of race in the study of occupational stress will continue to increase.

Gender

Similar to race regarding the impact of equal rights, gender, as it correlates with occupational stress, has a potential to change as more occupations and occupational levels employ women. Gupta and Jenkins (1985) cite several studies to support their position that women are more susceptible to more stressors, including overload and conflict. Terborg (1985) interpreted research on the subject as suggesting that occupational stress on women was "significant, frequently harmful, but sometimes beneficial" (p. 253). He views women as experiencing more stress from barriers to career entry, underpromotion, overpromotion, midcareer obsolescence, status incongruity, mismatches between career goals and achievement, and blocked career paths. Additionally, white-collar women are subject to a lack of objectivity in performance measures and, hence, uncertainty in self-evaluation. "Role ambiguity is likely to be a greater problem for women than men" (p. 269) according to Terborg, who envisions women as having insufficient information regarding the duties, responsibilities and objectives of their jobs as a result of fewer role models and a reluctance of co-workers to help them. Role conflict is greater for women who are often caught between "acting just like a woman" and "trying to act like a man." Women have to deal with issues such as low pay,

little opportunity for skill development, little variety and autonomy, high responsibility for people and career advancement barriers, all of which are stress producing.

Women's career experiences satisfy the three criteria for stress provided by Beehr and Bhagat (1985). Because career women are resolute, they not only attach more importance to career decisions but also find more decisions to be important. White-collar women also have more uncertainty in their careers because outcomes are often not determined for years and are often ambiguous. Duration is also a factor in career women's stress levels because of the long periods before success can be evaluated and, consequently, the long time frame over which uncertainty extends.

Research results have been inconclusive. Kahn et al. (1964) found males more stressed than females as did Indik et al. (1964). Women were found to experience greater role conflict under some conditions by Helwig (1979), and Paul (1974) found females evidenced more role ambiguity. No differences were found by McDermott (1984) or Moracco et al. (1984).

Because of the changing conformation of the work force, gender is an interesting and important variable in the study of occupational stress (Alutto et al., 1970; Beehr & Schuler, 1982; Jayaratne & Chess, 1983; Kasl, 1973; Moracco, 1981; Rizzo et al., 1970).

Consequences of Occupational Stress

Consequences of occupational stress are generally considered to be negative, but there are positive outcomes. Ardell (1981) emphasizes the right and power of the individual to view stressful events of the day as opportunities which enhance the job. This position is similar to the definition developed by Schuler (1980) which encompasses positive as well as negative aspects of stress.

Researchers have found physical consequences of occupational stress in a number of studies. In their review, Sharit and Salvendy (1982) conclude that pervasive evidence indicates a relationship is nonexistent. Cobb and Kasl (1972) found occupational stress related to peptic ulcer, uric acid levels, cholesterol level and high blood pressure. Shirom, Eden, Silberwasser and Kellerman (1973) found blood pressure, pulse rate and uric acid correlated to occupational stress. Selye (1976) suggested consequences including kidney disease, allergies, cardiovascular and rheumatic problems, ulcers, hypertension, sinusitis, insomnia, gastritis and headaches. A taxonomy developed by Cox (1978) employed as a basis for research by Shaw and Riskind (1983) encompassed heart disease, hypertension, ulcers, cirrhosis of the liver and accidental falls. The effects of stress on the heart were detailed in Friedman and Roseman's Type A Behavior and Your Heart (1974). Psychological results of occupational stress receiving

professional attention are numerous. Anxiety was found to be related to occupational stress by House (1974), House and Rizzo (1972) and Rizzo et al. (1970). Investigation of boredom, depression, irritation, job involvement, neuroticism, psychological fatigue, resentment, self-esteem and tension have been completed by numerous researchers (Beehr, 1976; Beehr, Walsh & Taber, 1976; Caplan et al., 1975; Coburn, 1975; Cooper & Marshall, 1976; Gemmil & Heisler, 1972; House & Harkins, 1975; Ivancevich, 1974; Lyons, 1971; Margolis et al., 1974; Sales, 1970; Shirom et al., 1973).

Occupational stress has been characterized by Strouse (1982) as eustress for some workers and distress for others. There are conflicting opinions on the relationship of occupational stress to job satisfaction. House and Rizzo (1972), Kahn et al. (1964) and Rizzo et al. (1970) found a negative relationship which conflicts with the findings of Burke (1976) and Hall and Lawler (1971) who found a more complex relationship in which some stressors were positively related to certain facets of job satisfaction. Job involvement related positively with pressure for quality, and autonomy was found positively correlated with financial responsibility pressure in the earlier study (Hall & Lawler, 1971). Burke's 1976 investigation found positive correlations between "work overload" and "challenging job problems," "use of present knowledge and skills," "variety

of tasks," "work that is important" and "good salary." The stressor "feeling not qualified to handle my job" related in a positive direction with "congenial co-workers," "growing and learning new knowledge and skills," "using present knowledge and skills" and "challenging job problems."

Occupational stress has been observed as it relates to behavioral consequences. Job performance was of early interest to investigators, and McGrath (1982) proposed an inverted U model to explain the relationship. When stress is at a low level, task performance is also low. As stress increases to optimal level, performance increases. As stress increases beyond the optimum, performance decreases. Sales (1969) found that while quantity increased with stress, quality decreased.

Other behaviors studied in conjunction with occupational stress include suicide (Shay & Riskind, 1983), absenteeism and turnover (Brief & Aldag, 1976; Gupta & Beehr, 1979; Parasuraman & Alutto, 1984; Van Sell et al., 1981) and smoking and escapist drinking (Caplan et al., 1975; Margolis et al., 1974; Shirom et al., 1973). House and Rizzo (1972) and Rizzo et al. (1970) found a propensity to leave positively related to occupational stress. The number of dispensory visits were correlated to occupational stress by Caplan et al. (1975).

Counselor Occupational Stress

As with other occupations, an abundance has been written regarding stress in the helping professions. Watkins (1983) offers some warnings to those considering the counseling field as to the hazards resulting from stress, and an article advising counselor educators how to prepare their students for coping with stress appeared in the March 1982 Personnel and Guidance Journal (Savicki & Cooley). Forney et al. (1982) found in one group of 50 counselors responding to a burnout instrument, only three scoring in the positive extreme. Two of these three were students.

The entire November/December 1981 issue of School Guidance Worker was devoted to counselor stress, with nine articles focusing on issues from college counseling to counseling counselors. Dragan (1981) stated, "Counselors must be regarded as high risk, role conflict, stress material. They manifest all the danger signs" (p. 21).

In the same year, Truch (1981) wrote, "Research indicates that those in the helping professions burn out at a higher rate than those in other occupations. Therefore, counselors, teachers, nurses, social workers and those in other supportive roles are particularly susceptible.... Counselors, for example, constantly face the emotional drain created by having to deal with personal problems that are sometimes intense" (p. 32). Again in 1981, Merino said, "It <burnout> seems to affect those deeply involved with other

people's problems, doctors, lawyers, psychiatrists, social workers, counselors. No one in the helping professions is immune" (p. 36).

However, despite the voluminous articles regarding stress amidst the helping professions, the dearth of research is also recognized. "Although much is written on the effects of stress in counseling, little has been grounded in research" (Moracco et al., 1984, p. 110). Casas et al. (1980) found that only recently have researchers begun to focus upon the stresses of those in the helping professions.

Quattrochi-Tubin, Jones, And Breedlove, in a 1983 study of counselors, found their burnout level higher than others directly and indirectly involved with clients and emphasized the need for additional research. In examining stress in human services, Cherniss (1980) points out that stress contributes to the emotional detachment and withdrawal called burnout.

> Moracco (1981) in summarizing his findings stated: A syndrome of behaviors accompanies the burned out counselor. It includes a callous attitude toward people, escapism of various sorts and reduced counselor effectiveness. Ramifications are also felt in the counselor's personal life: Deterioration in the quality of family life and personal health are just two examples. (p. 19)

Counselor Occupational Stress and Job Satisfaction

Farber and Heifetz in 1981 addressed the satisfactions and stresses of psychotherapeutic work and the problems of burnout in a study of psychologists, psychiatrists and social workers. They reviewed the literature focusing on these concerns but state that few studies of the psychotherapeutic community have been made regarding these issues. Scales were constructed to measure job satisfaction and occupational stress. The authors advised using caution in interpreting and generalizing the results because of the sample size of 60. No analysis of the relationships between the facets of job satisfaction and the components of occupational stress were reported.

Although other research has been done on both job satisfaction and occupational stress in the counseling profession, reports must be carefully evaluated as to scientific value. A 1983 study on counselor burnout by Cummings and Nall relied upon a single-item questionnaire. Lynch (1981) used an instrument without reporting any validity or reliability information, and made generalizations based on a survey with a 45% return rate.

In a study of job satisfaction and burnout involving counselors, Rigger et al (1984) determined that there was a relationship between the two variables; and although they cautioned against making causal inference from their results, they recommended additional research. Citing the

lack of research on job satisfaction and occupational stress in the human services field, Jayaratne and Chess (1983) attempted to predict job satisfaction, burnout and intent to leave using stressors as independent variables in a study of social workers. The study used a single-item, facet-free measure of job satisfaction and an altered scale borrowed from Maslach which the authors recognized was not comparable to the original Maslach scales. Although the value of the stress factors of role ambiguity, role conflict and workload as predictors of job satisfaction was found to be limited, the investigators emphasized the need to include additional predictor variables. They concluded that the worker experiencing stress may also be satisfied with the job.

Moracco (1981) wrote "Descriptive research needs to be conducted to provide information on what are specific stressors in a counselor's life" (p. 19). Thompson and Powers (1983), in a report on research of role stress and job satisfaction, recommended additional investigation regarding the personal background factors of counselors.

Although a study by Helwig (1979) of employment counselors found role stress to be a predictor of satisfaction with pay for women and not for men, the only stress components measured were role conflict and role ambiguity. Job satisfaction facets were limited to work, co-workers, pay and promotion. Farber and Heifetz (1981) found women therapists experienced higher stress in personal

depletion and patient resistance than males and greater satisfaction in promoting growth and generating a sense of revered efficacy. In his 1983 study of army education counselors, Gross (1983) found that job satisfaction was negatively correlated with both role ambiguity and role conflict. This study involved a very specific population with characteristics not prudently generalized to other counselors.

McDonald (1969) found role conflict to be a predictor of six of the nine job satisfaction dimensions investigated. Use of several variables in a multiple regression equation with 49 rehabilitation counselors as a sample leaves the results questionable.

SUMMARY

This chapter has presented a review of pertinent literature on occupational stress and job satisfaction. Both constructs have been researched in business and industry for several decades. Recently, attention to workers in human services has produced some research on helping professionals, including counselors. In addition, other variables have been investigated such as situational and personal characteristics of counselors.

The literature has yielded contradictory conclusions as a result of differences in methodology, research findings and conclusions drawn from results. Techniques in conceptualizing and measuring occupational stress and job

satisfaction lack congruency, and definitions of terms including job satisfaction and occupational stress vary among investigators.

Not withstanding the conflicting data reported, the literature has confirmed that a relationship exists between the variables, and, therefore, provides a basis for further research. To date, no studies have been conducted on the relationship of occupational stress and job satisfaction among licensed professional counselors, the purpose of the present study.

Chapter III

METHODOLOGY

The delineation of the methodological procedures used in this study is the purpose of this section. Included is a definition of the population and sample, discussion of participant selection, recapitulation of research questions, and description of instrumentation. Also presented are the procedures for survey distribution, data collection and statistical analysis of the results.

POPULATION FOR THE STUDY

The Virginia Board of Professional Counselors provided a mailing list of the 1038 licensed professional counselors in Virginia. To facilitate the sample size which insures a maximum sampling error rate of plus or minus four recommended by Fowler (1984), 400 names were selected using a table of random numbers.

RESEARCH QUESTIONS

The methodological procedures to be used in this study have been derived to answer the following research questions:

1. What are the relationships between occupational stress and job satisfaction of licensed professional counselors in Virginia?
2. What relationships are there among the following variables: occupational stress, job satisfaction,

age, level of education, gender, advancement opportunity, growth opportunity and annual income?

Data Form

The Data Form (Appendix B) was used to compile respondent demographic characteristics and aid in the recognition of relationships between job satisfaction scores and demographic variables. These variables included: primary role designation, gender, race, age, current degree status, years of experience, counselor-to-client ratio, annual income, type of organization in which they work, professional affiliations, opportunity for advancement, growth opportunity, plans to remain in their present position, plans to remain in the profession, plans to remain in the Commonwealth. They were asked to indicate their level of stress on a scale from very stressed to no stress and to list three stressful factors and three nonstressful. They were requested to indicate their personal rating of job satisfaction on a scale ranging from very satisfied to very dissatisfied. Finally, they were asked to list three primary sources of job satisfaction and three of job dissatisfaction.

INSTRUMENTATION FOR THE STUDY

The review of the literature supports the need for research of occupational stress and job satisfaction among counselors. After reviewing the merits of a number of

available occupational stress and job satisfaction measures, the Occupational Environment Scales (OES) and the Minnesota Satisfaction Questionnaire (MSQ) were employed as the most appropriate instruments for the present study.

Minnesota Satisfaction Questionnaire

Investigation into several instruments reportedly measuring job satisfaction revealed that there are primarily two approaches. One endeavors to quantify job satisfaction with a single, global score, thereby answering the question, "To what extent are you satisfied with your job?" The other approach, which is more helpful in discerning the sources of job satisfaction, measures satisfaction with a number of subfactors, each of which contributes to overall job satisfaction. Locke explains "overall job satisfaction is the sum of the discrete elements of which the job is composed" (1969, p. 330). In comparison with other instruments, the MSQ samples a broader scope of area of content than other instruments which focus on facets impacting on job satisfaction.

Twenty subscales, each of which samples a source of job satisfaction or work reinforcement, constitute the MSQ. The subscales follow:

1. Ability utilization - The chance to make use of abilities.
2. Achievement - The feeling of accomplishment one derives from a job.
3. Activity - Being able to stay busy.
4. Advancement - The chances for advancement on the job.
5. Authority - The chance to tell others what to do.
6. Company policies and practices - The way company policies are put into practice.
7. Compensation - Feelings about pay versus the amount of work performed.
8. Co-workers - The way one gets along with co-workers.
9. Creativity - The chance to try one's own methods.
10. Independence - The chance to work alone.
11. Moral values - The chance to do things which do not go against one's conscience.
12. Recognition - Being recognized for doing a good job.
13. Responsibility - The freedom to use one's judgment.
14. Security - The way a job provides for steady employment.

15. Social service - Being able to do things for others.
16. Social status - Being respected in the community.
17. Supervision-human relations - The relationship between employees and supervisors.
18. Supervision-technical - The technical quality of supervision.
19. Variety - The chance to do different things.
20. Working conditions - Physical conditions in which one works.

The Theory of Work Adjustment (Dawis, England & Lofquist, 1964) resulting from the University of Minnesota's Industrial Relation Center Work Adjustment Project is the basis for the Minnesota Satisfaction Questionnaire (Weiss et al., 1967). The theory presents job satisfaction as the result of how well a worker's vocational needs are matched by the reinforcement in the work environment. The Minnesota Satisfaction Questionnaire was developed to measure 20 sources of reinforcement which contribute to job satisfaction and to measure overall job satisfaction. The specific facets were derived from a literature review.

The MSQ long form consists of 100 items which the participant rates on a five-point Likert (1970) scale ranging from "very dissatisfied" with a value of "1" to "very satisfied" valued at "5." Self-administration time is estimated between 15 and 20 minutes.

Five items sample each facet or subscale. The sum of the points for the five questions comprising the subscale is the subscale score. A subset of 20 items, one selected from each subscale based on its correlation to that subscale, is employed to measure overall job satisfaction.

The MSQ manual section III-B and IV-B offer normative data, including conversion from raw score to percentiles in 25 occupations for the overall scale and 20 subscales.

Reliability data was determined to be quite satisfactory in a review of the MSQ by Albright (1972). Table 1, page 14 of the MSQ manual reveals the Hoyt reliability coefficients for overall job satisfaction and the 20 subscales computed for 27 occupations. Of the reported 567 coefficients, 83% were .80 or above and 2.5% were below .70.

Test-retest reliability coefficients for one-week and one-year intervals appear in Table 2, page 15 of the MSQ manual. The one-week stability coefficients ranged from co-workers .66 to working conditions .91 with a .83 median. The one-year coefficients ranged from independence .35 to ability utilization .71 with a .61 median.

Content validity of the MSQ has been supported by factor analysis. Intercorrelation matrices for overall job satisfaction and the 20 subscales computed for 14 norm groups, each of 100 or more subjects, are presented in Section III-C, pages 93 to 100 of the MSQ manual. Each of

the 20 subscales loaded upon two vectors, thereby inferring that the MSQ provides adequate sampling of job satisfaction components.

Construct validity is based upon research using the Minnesota Importance Questionnaire (MIQ). The MIQ measures the relative importance of work reinforcers. Studies involving both instruments revealed that individuals having a high need level and receiving high reinforcement by their jobs exhibit higher job satisfaction than those which have a high need level and receive low reinforcement. Evidence supporting construct validity for seven of the subscales was found.

Concurrent validity data is presented in Table 3, page 19 of the manual. A one-way analysis of variance to determine if the MSQ could discriminate between the levels of job satisfaction in 25 occupational groups revealed significant differences ($p < .001$), for overall job satisfaction and the 20 subscales. The authors concluded that concurrent validity was thereby established.

Occupational Environment Scales, Form E-2

Although stresses in various occupations have been examined, little attention has been given to the stresses that individual job roles may place upon a worker. Of the instruments used by researchers to measure job stress, work context is left unaddressed by most. The Occupational Environment Scales (OES) focuses on the various social roles

which a worker occupies in any job and measures the stress produced by that role upon the individual. The OES samples a wider variety of stressors connected with work than other instruments and has been normed on employed adult males and females in 103 occupations. The subscales follow:

1. Role Overload - Measures the extent to which job demands exceed resources (personal and institutional) and the extent to which respondent is able to accomplish expected workload.
2. Role Insufficiency - Measures the extent to which the respondent's training, education, skills and experience are appropriate to his/her work.
3. Role Ambiguity - Measures the extent to which the priorities, expectations and evaluation criteria are clear to the respondent.
4. Role Boundary - Measures the extent to which the respondent is experiencing conflicting role demands and loyalties at work.
5. Responsibility - Measures the extent to which the person has or feels a great deal of responsibility for performance and welfare of others on the job.
6. Physical Environment - Measures the extent to which the respondent is exposed to high levels of environmental toxins or extreme physical conditions.

The Occupational Environment Scales (OES) was developed by Osipow and Spokane (1983). The instrument was designed to fulfill the need described by Tung (1980):

> Review of the literature on social-psychological stress indicates that there is a plethora of analytically independent sources of stress implying the multidimensionality of the construct (Beehr & Newman, 1978; Cooper & Marshall, 1976; McGrath, 1976). However, most measures of stress available to date fail to tap the multidimensionality of the construct. (p. 345)

The OES form E-2 consists of 60 items which the respondent rates on a five-point Likert-type format. The participant is requested to rate the amount of time each item causes stress in his/her work. Responses range from "most of the time" valued at "5" to "rarely or never" having a value of "1." Time for self-administered completion is estimated at five minutes. Each source of occupational stress or subscale is sampled by 10 items. The sum of the points for the 10 items comprising the subscale is the subscale score. The sum of the six subscales yields a measure of overall occupational stress.

The OES manual Tables 12 through 17 offer normative data on the subscales in 103 occupations. Counselors, career development directors, teachers and vocational educators were included in the professional occupations sampled. Counselors made up 5.07% of the sample.

Test-retest reliability is presented for a two-week interval in Table 4 page 20 of the OES manual. The stability coefficients ranged from role ambiguity .74 to role insufficiency .91. The full-scale correlation is .90.

Internal consistency information consisting of Cronbach Alpha coefficients is presented in Table 6 page 26. Analysis performed on data from 848 respondents produced coefficients ranging from .71 for responsibility to .90 for role insufficiency. The Alpha coefficient for the full-scale OES was .89.

Factor analysis data from varimax rotation is depicted in Table 18 page 39 of the OES manual. The authors conclude that the factor structure provides evidence of the validity of the model.

DATA COLLECTION PROCEDURES

Distribution and collection of materials used in gathering data for this study was accomplished through the mail. Five steps involved in data collection included a pre-letter, initial survey distribution, postcard reminder and two follow-up mailings.

Licensed professional counselors selected for the study were asked to complete and return the demographic data form, the OES (Occupational Environment Scales, Form E-2) and the MSQ (Minnesota Satisfaction Questionnaire). Responses from these instruments were used in determining the results of the study.

Pre-Letter

All participants were sent an endorsement by the president of Virginia Mental Health Counselors Association three days prior to the initial distribution of survey materials which encouraged participation, assured confidentiality and explained the purpose of the study.

Initial Distribution

The initial survey distribution consisted of a packet containing (a) an explanatory letter again assuring confidentiality and urging a timely response; (b) the Data Form; (c) the Minnesota Satisfaction Questionnaire; (d) the Occupational Environment Scales, Form E-2; and (e) a stamped, self-addressed envelope. In addition, a pencil and a packet of coffee were included and colored paper used, to follow recommendations by Pucel, Nelson and Wheeler (1969) for assuring optimum response rates.

Postcard Reminder

A postcard thanking those who had completed and returned their surveys was mailed to all non-respondents two weeks after the initial mailing. The card also asked those who may not have received a packet to call the author collect in order to have one sent.

First Follow-up

A second survey packet containing a letter of explanation assuring confidentiality and urging immediate

response was mailed to non-respondents four weeks after the initial mailing. These packets also included the survey instruments, a stamped, self-addressed envelope, a pencil and a packet of coffee. Colored paper was again used.

Second Follow-up

Participants who had not yet responded were mailed a third, duplicate survey packet two weeks after the second mailing. At this time a letter urging participants to respond, signed by the chairman of the dissertation committee, was included.

ANALYSIS OF THE DATA

The 294 usable packets that were completed and returned were used in the data analysis. Statistical procedures specifically selected on the basis of their ability to provide appropriate analysis to answer the research questions included multiple regression procedures and product moment coefficient of correlation. Computer services of Virginia Polytechnic Institute and State University were used to accomplish the statistical analysis of the data.

Data Form

Responses to the Data Form were treated as follows: gender, race, decision to remain in Virginia, role, organization type, educational plans and curriculum were treated as nominal variables; current degree and degree of

supervisor were treated as ordinal data; all others were treated as interval.

Statistical Analysis

A Pearson Product Moment correlation was used to determine the relationship between global occupational stress and global job satisfaction. Multiple regression procedures were used in determining the relationships between job satisfaction, occupational stress and the demographic variables among licensed professional counselors in Virginia. Job satisfaction was the dependent variable, and the six subscales of the Occupational Environment Scales and the demographic characteristics were entered in a step-wise multiple regression to evaluate the extent to which the demographics enhance the prediction of job satisfaction over and above that which is based upon the six stress subscales.

Examination of the results permitted an identification of which stress factors have negative relationships with various job satisfaction factors supporting the generally accepted notion that occupational stress and job satisfaction are negatively correlated and further identified which occupational stress factors and job satisfaction factors have positive relationships, indicating that some types of stress-producing stimuli on the job, in fact, enhance certain job satisfaction facets.

SUMMARY

The research methods used in this study were reported in this chapter. The research questions were reviewed, a population identified, and the randomization of sample described. Instrumentation was discussed and data collection presented. Data analyses have also been defined.

Chapter IV

RESULTS OF THE STUDY

The results of the data analysis procedures presented in Chapter III are described in this chapter. The response rates for the study are included. The sample is described by examination of demographic data. Job satisfaction and occupational stress of licensed professional counselors in Virginia is presented, and the results of data analysis regarding each hypothesis is related.

SURVEY RESPONSE

The steps in data collection included (a) a pre-letter, (b) the initial mailing to participants, (c) a postcard reminder, (d) a follow-up mailing of survey materials to non-respondents, (e) a final follow-up mailing of complete materials to remaining nonrespondents. There were 400 pre-letters and survey packets in the original mailing to the randomly selected sample. The Postal Service returned 14 packets which were undeliverable, thereby limiting the number of possible respondents to 386.

Table 1 portrays the response rates for each collection procedure. The 327 responses received represent 81.75% of the selected sample, including 33 which were incomplete and unused in the analysis. Response rates vary with different questions because participants sometimes fail to answer all questions.

Table 1

Survey Response Rates

Step	Number Returned	Percent of Total
Initial Mailing	267	66.75
First Follow-up	39	9.75
Final Follow-up	21	5.25
Total	327	81.75

Note: There were 400 possible participants. The Postal Service returned 14 as undeliverable.

DEMOGRAPHIC DATA

The sample characteristics were described through the use of the respondents' answers to the items on the data form. Additionally, certain demographic variables, including education, income and age, were used in regression analysis with occupational stress subscales from the OES, Form 2 in an attempt to enhance the explanation of job satisfaction.

There follows a profile of a "typical" respondent and tables of demographic data with accompanying narrative interpretation. Next will be a description of the results found regarding occupational stress of LPC's. Then, counselor job satisfaction findings will be addressed. Finally, results of the study regarding the hypotheses will be presented.

Description of Licensed Professional Counselors

By combining the demographic data generated in this study, a description can be developed of LPC's in Virginia. Of 281 counselors identifying their organizational type, 40.2% specified they were employed in education. Practitioner was the selection chosen by 49.1% of the respondents to disclose their present role. Ninety-three percent of the counselors were white and 55.8% were female. Experience was indicated as over 10 years for 74.4% of those responding and 54.7% of the sample have been licensed from 5 to 10 years. Workload of the participants was demonstrated

in 43.6% working over 40 hours per week and a case load of more than 11 clients for 7% of the counselors. Between $20,000 and $40,000 annual income is earned by 54.1% on their present job, where 65.5% of the 177 counselors responding have worked for 10 years or less and almost 65% of the respondents plan to stay for at least five years, although 71.6% of those responding plan to continue counseling for over 10 years. Additional education is being pursued by 24.3% of the LPC's surveyed and 57.5% hold masters degrees, the educational level of 47.4% of the supervisors of the 234 respondents. Those considering themselves satisfied or very satisfied represented 78.9% of the 290 counselors who responded. Of the 290 respondents, 46.9% saw opportunity for advancement or expansion as good or excellent.

Ninety percent of the counselors belonged to two or more professional organizations. Of the 177 counselors responding, 51 held teaching certificates and 27 would teach if they changed professions. More counselors feel stressed by time demands than any other factor and least stressed by their colleagues who are the most satisfying factor on the job. The most dissatisfying factor is paperwork. Job stress is felt to impact on life stress by 81 of the 244 respondents to the query, "In what way do you feel stress on your job relates to stress in the rest of your life?" Below are sections detailing the findings upon which this profile was based.

Stress with Present Position

Table 2 presents the analysis of the participant's responses to the question, "In general, how do you rate your stress with your present position?" Of the 276 licensed professional counselors answering this item, 42.0% (n = 116) selected stressed and 45.7% (n = 126) selected slightly stressed, displaying a bimodal distribution.

Opportunity for Expansion or Advancement

Respondents were asked, "To what extent do you perceive opportunity for advancement or expansion of opportunity in your practice, agency or institution?" Of the 290 participants that responded, more responded "Good" or "Excellent" than any other choice with a rate of 46.9% (n = 136). A complete analysis of this item appears in Table 3.

Satisfaction with Present Position

Each participant was requested to select one of five responses to the question, "In general, how do you rate your satisfaction with your present position?" The responses chosen by 78.9% (n = 229) was "satisfied" or "very satisfied". Table 4 presents all the responses generated by this question.

Present Degree

The majority of the 294 responses to this item fell into the category "Masters." Over half, 57.5% (n = 169), of

Table 2

Stress with Present Position

Response	Number	Percent
No Stress	10	3.6
Slightly Stressed	126	45.7
Can't Decide	6	2.2
Stressed	116	42.0
Very Stressed	18	6.5
Total	276	100.0

Table 3

Opportunity for Expansion or Advancement

Response	Number	Percent
None	29	10.0
Very little	70	24.1
Fair	55	19.0
Good	80	27.6
Excellent	56	19.3
Total	290	100.0

Table 4

Satisfaction with Present Position

Response	Number	Percent
Very dissatisfied	8	2.8
Dissatisfied	35	12.1
Can't decide	18	6.2
Satisfied	137	47.2
Very satisfied	92	31.7
Total	290	100.0

LPCs in Virginia reported this as their highest degree. A complete breakdown of the responses to this item appears in Table 5.

Curriculum of Highest Degree

In answer to the item inquiring as to the curriculum in which their highest degree was obtained, 167 (57.0%) of the 293 respondents answering this question chose "counselor education." Other categories and their respective tallies are shown in Table 6.

Education Pursuits

Of the 292 respondents answering this item, only 24.3% (n = 71) were continuing their education or pursuing a degree, leaving 75.7% (n = 221) answering "no."

Supervisor's Educational Level

Only 234 participants responded to this questions, probably reflecting, in part, those who are self-employed without supervision. The answer chosen by the largest number, 111 (47.4%) was "Masters." Table 7 represents all responses tallied.

Experience in Counseling

The responses to the item regarding each licensed professional counselor's years of counseling experience are

Table 5

Present Degree

Response	Number	Percent
BS/BA	1	0.3
Masters	169	57.5
CAGS or EDS	23	7.8
Doctorate	101	34.4
Total	294	100.0

Table 6

Curriculum of Highest Degree

Response	Number	Percent
Counselor Education	167	57.0
Psychology	34	11.6
Social Work	1	0.3
Other	91	31.1
Total	293	100.0

Table 7

Supervisor's Educational Level

Response	Number	Percent
BA/BS	11	4.7
Masters	111	47.4
CAGS or EDS	3	1.3
Doctorate	97	41.5
Unknown	12	5.1
Total	234	100.0

displayed in Table 8. Of the 293 licensed professional counselors responding 218 (74.4%) have more than 10 years experience.

Years Licensed

Responses to an item designed to ascertain the length of time the individual has been licensed are presented in Table 9. More responses were recorded in the range of 5 to 10 years than any other. There were 146 (54.7%) counselors who had been licensed between 5 and 10 years.

Hours per Week

Licensed Professional Counselors in Virginia who indicated they worked over 40 hours a week numbered 125 (43.6%), the category having the largest response rate. All response rates are displayed in Table 10.

Expected Continuance in Position

The response rates presented in Table 11 are indicative of the number of years respondents plan to stay in their present position. Nearly 65% of the respondents indicated they planned to continue in their jobs for at least five years.

Planned Continued Work in Virginia

The response "Yes" was made by 244 (88.1%) participants to the question, "Do you plan to continue working in Virginia?" Only 33 (11.9%) answered "no."

Table 8

Experience in Counseling

Response (in years)	Number	Percent
1 - 5	14	4.8
6 - 10	61	20.8
11 - 15	91	31.1
16 - 20	69	23.5
21 - 25	32	10.9
Over 25	26	8.9
Total	293	100.0

Table 9

Years Licensed

Response	Number	Percent
Less than 5 years	69	25.8
5 to 10 years	146	54.7
Over 10 years	52	19.5
Total	267	100.0

Table 10

Hours per Week

Response	Number	Percent
0 - 10	12	4.2
11 - 20	18	6.3
21 - 30	29	10.1
31 - 40	103	35.8
Over 40	125	43.6
Total	287	100.0

Table 11

Expected Continuance in Present Position

Response (in years)	Number	Percent
Less than 5	97	35.5
5 to 10	71	26.0
11 to 20	45	16.5
21 to 30	15	5.5
Over 30	45	16.5
Total	273	100.0

Years Planned to Continue Counseling

Most respondents planned to continue in the counseling profession for over 10 years. There were 197 counselors who elected to continue for this time frame, representing 71.6% of those responding to this item. The data analysis in Table 12 presents information on all responses.

Number of Professional Affiliations

The number of professional affiliations each counselor claimed is illustrated in Table 13. Of the 259 counselors responding, 90% (n = 232) belonged to two or more professional organizations.

Organization Type

Table 14 is a summary of the types of organizations in which LPC's are employed. Of the 281 counselors responding to this item, 40.2% (n = 113) signified that they were employed in education. The next largest category were those employed in private businesses which offer counseling to the public. This answer was chosen by 30.2% (n = 85) of those responding to the item.

Table 12

Years Planned to Continue Counseling

Response (in years)	Number	Percent
Less than 5	23	8.4
5 to 10	55	20.0
11 to 20	79	28.7
21 to 30	35	12.7
Over 30	83	30.2
Total	275	100.0

Table 13

Number of Professional Affiliations

Response	Number	Percent
1	27	10.4
2 - 3	99	38.2
4 - 5	72	27.8
6 - 7	44	17.0
Over 7	17	6.6
Total	259	100.0

Table 14

Organization Type

Response	Number	Percent
Education	113	40.2
Governmental Agency	37	13.2
Private Business which offers Counseling to Public	85	30.2
Private Business, the purpose of which is not to provide counseling	11	3.9
Other	35	12.5
Total	281	100.0

Present Role

The item, included to provide the present role of the participants, is analyzed in Table 15. Private practitioner was selected by 29.1% (n = 83) as their present role. This represented the single most chosen response for this question. "Practitioner employed by others" was selected by 57 (20.0%) of those responding to the item as the best denotation of their present position. Totaling the two responses suggests that 49.1% (n = 140) of the counselors answering this question consider themselves practicing counselors.

Caseload

Table 16 furnishes information about the response rates regarding caseload. One hundred sixty nine (70%) LPC's have 11 or more in their case load.

Race

The racial division among those Licensed Professional Counselors submitting answers to this item was minimum. White counselors made up 93.6% (n = 267) of the respondents. The analysis of all responses to this question is supplied in Table 17.

Income

The response rates for the item exploring income indicated 152 (54.1%) earn between $20,000 and $40,000. All response rates are provided in Table 18.

Table 15

Present Role

Response	Number	Percent
Private Practitioner	83	29.1
Practitioner employed by others	57	20.0
Counselor Educator	49	17.2
Supervisor/Administrator	54	19.0
Other	42	14.7
Total	285	100.0

Table 16

Caseload

Response	Number	Percent
0 - 10	71	29.6
11 - 20	50	20.8
21 - 30	44	18.3
31 - 80	28	11.7
200 and over	47	19.6
Total	240	100.0

Table 17

Race

Response	Number	Percent
Hispanic	1	0.4
White	267	93.6
Black	13	4.5
Asian	---	----
Native American	3	1.1
Other	1	0.4
Total	285	100.0

Table 18

Income

Response	Number	Percent
Less than 12,999	18	6.4
13,000 to 19,999	23	8.2
20,000 to 29,999	69	24.6
30,000 to 39,999	83	29.5
40,000 and over	88	31.3
Total	281	100.0

Probability of Growth

The response rates for the question on the data form designed to provide information concerning the respondent's view of the probability of practice growth is furnished in Table 19. Of the 246 responses received for this item, 56.1% (n = 138), representing the largest response rates for this item, were tallied for "good" or "better".

Gender

Respondents to this item totaled 285, of which 55.8% (n = 139) were women.

Age

Ages for those counselors answering this item were grouped into ranges demonstrated in Table 20. Although the age spread was from 30 to 76, a span of 46 years, only 25 counselors representing 15% were over age 60.

Time on Present Job

Of the 177 respondents to this item, 65.5% (n = 116) have worked between 1 and 10 years on their present job. The response data for this item is produced in Table 21.

Most Stressful Factors of Present Position

There were 288 responses to the inquiry, "Please list the most stressful factors of your present position." The response most often listed was "time demands," cited by 71

Table 19

Probability of Growth

Response	Number	Percent
None	21	8.5
Very little	50	20.4
Fair	37	15.0
Good	80	32.5
Excellent	58	23.6
Total	246	100.0

Table 20

Age

Response	Number	Percent
30 to 40	49	29.3
41 to 50	63	37.8
51 to 60	30	17.9
61 to 76	25	15.0
Total	167	100.0

Table 21

Time on Present Job

Response (in years)	Number	Percent
1 - 10	116	65.5
11 - 20	44	24.9
21 - 30	12	6.8
31 - 40	5	2.8
Total	177	100.0

respondents. The second leading factor causing stress was "workload" which was mentioned 59 times, followed by "clients" with 46 entries.

Least Stressful Factors of Present Position

The three answers supplied most often by the 281 counselors responding to, "Please list the least stressful factors of your present position" was led by "colleagues" which was reported 80 times. The response with the next largest tally was "working conditions" which 65 participants indicated. The third most mentioned factor was "the work of counseling" which was cited 64 times.

Most Dissatisfying Factors of Present Position

The 283 participants replying to the item, "Please list the three most dissatisfying factors of your present position" selected "paperwork" as the leading dissatisfying factor with 46 responses. The number of times the next most chosen factor, "lack of time," was mentioned numbered 43, followed by 41 participants noting "income."

Most Satisfying Factors of Present Position

Of the 287 respondents answering the question, "Please list the three most satisfying factors of your present position," more specified "colleagues" than any other factor, registering 61 notations. "Autonomy" was next with 55 responses followed by "clients" which was enumerated 54 times.

What Profession Would You Enter?

Participants were asked, "If you change professions, what profession do you plan to enter?" Teaching was the profession which 27 of the 177 respondents reported. The second largest group (n = 23) indicated they would go into business, followed by retirement proffered by 15.

Other Licenses or Certifications

In response to the request, "Please list other licenses or certifications you hold," 177 LPCs shared their credentials. More counselors held teaching certificates (n = 51) than any other credential. Forty-one claimed to be National Certified Counselors, and the third item most often listed was Certified Rehabilitation Counselor (n = 12).

Relationship of Job Stress to Life Stress

Counselors numbering 244 replied to the query, "In what way do you feel stress on your job relates to stress in the rest of your life?" "Stress at work impacts on stress in the rest of life" was expressed by the largest number of respondents (n = 81). The next largest category, "It is related," dropped to a total of 27, followed by "Very little" with 19 notations. Other responses included 13 each for "Transfers both ways" and "None". Only four counselors believed that home stress impacted upon their jobs.

OCCUPATIONAL STRESS OF LICENSED PROFESSIONAL COUNSELORS IN VIRGINIA

The occupational stress levels of the counselors responding to the survey was obtained for six stressors through the Occupational Environment Scales, Form E-2, described earlier in Chapter III. To determine the major sources of occupational stress for licensed professional counselors in Virginia as measured by the OES, a hierarchy of the six subscales has been constructed using means and standard deviations which is shown in Table 22. Based on the response options of the scales, LPC's are stressed often by role overload with a mean of 25.00. Four subscales, responsibility, role insufficiency, role ambiguity and role boundary have means which are in the range designated "occasionally". Physical environment caused the least stress for the sample with a mean score of 13.98. Overall stress score for the sample 117.17 arrived at by compiling the scores of the six subscales was in the second lowest level "occasionally".

JOB SATISFACTION OF LICENSED PROFESSIONAL COUNSELORS IN VIRGINIA

The job satisfaction levels of the participating counselors was derived for 20 facets through the Minnesota Satisfaction Questionnaire previously reviewed in Chapter III. To establish the major sources of job satisfaction for licensed professional counselors in Virginia as quantified

Table 22

Hierarchy of Occupational Environment Scales, Form E-2

Scale	n	Mean	Standard Deviation
Role Overload	290	25.000	7.344
Responsibility	288	23.246	7.288
Role Insufficiency	288	20.406	8.180
Role Ambiguity	288	18.010	6.441
Role Boundary	288	17.160	7.612
Physical Environment	288	13.982	4.069

by the MSQ, a hierarchy of the 20 subscales has been constructed using means and standard deviations which is submitted in Table 23. Based on the response options of the scales, LPC's are satisfied in 15 of the subscales: social service, moral values, creativity, achievement, ability utilization, responsibility, activity, independence, variety, working conditions, co-workers, social status, authority, recognition and security. Five subscales, supervision - technical, supervision - human relations, compensation, advancement and company policies and practices have means which are in the range designated neither satisfied or dissatisfied. The overall job satisfaction of LPC's as measured by the MSQ score was 77.68 which is in the category designated "satisfied".

OCCUPATIONAL STRESS AND JOB SATISFACTION OF LICENSED PROFESSIONAL COUNSELORS IN VIRGINIA

The comparison of each participant's scores on the subscales of the Minnesota Satisfaction Questionnaire with the corresponding scores on the Occupational Environment Scales gives an indication of the relationship between occupational stress and job satisfaction among licensed professional counselors in Virginia. Table 24 is a presentation of the correlation coefficients between the subscales of the MSQ and the subscales of the OES. Of the 147 correlations, 121 were significant ($p < .05$). Three of these were positive. Role overload correlated with

Table 23

Hierarchy of Minnesota Satisfaction Questionnaire

Scale	Mean	Standard Deviation
Social service	22.422	3.182
Moral values	22.254	2.814
Creativity	21.302	3.877
Achievement	21.279	3.189
Ability utilization	21.107	4.175
Responsibility	21.038	3.064
Activity	20.786	3.270
Independence	20.503	3.125
Variety	20.379	3.519
Working conditions	19.838	4.810
Co-workers	19.440	4.504
Social status	19.124	3.892
Authority	18.481	3.838
Recognition	18.438	4.835
Security	18.376	4.687
Supervision-technical	17.468	5.035
Supervision- human relations	17.262	5.629
Compensation	17.203	5.416
Advancement	16.344	5.347
Company policies and practices	16.179	5.321

Table 24

Correlations Between OES Subscales and MSQ Subscales

	Role Overload	Role Insufficiency	Role Ambiguity	Role Boundary	Responsibility	Physical Environment	Full Scale
Ability	-.26	-.74	-.45	-.56	-.13	-.09*	-.57
Achievement	-.29	-.67	-.51	-.57	-.16	-.06*	-.55
Activity	-.04*	-.43	-.29	-.27	.01*	-.04*	-.23
Advancement	-.19	-.66	-.39	-.45	-.05*	-.26	-.44
Authority	.13	-.25	-.13	-.06*	.40	-.04*	.02*
Company	-.17	-.44	-.43	-.50	-.08*	-.24	-.43
Compensation	-.16	-.37	-.27	-.24	-.03*	-.26	-.27
Co-workers	-.12	-.24	-.20	-.19	-.10*	-.22	-.16
Creativity	-.22	-.70	-.48	-.58	-.14	-.07*	-.56
Independence	-.21	-.41	-.29	-.35	-.14	-.10*	-.36
Moral Values	-.14	-.31	-.41	-.42	-.12	-.13	-.35
Recognition	-.25	-.52	-.48	-.48	-.11*	-.19	-.48
Responsibility	-.15	-.57	-.44	-.42	.03*	-.12	-.40
Security	-.01*	-.21	-.12	-.05*	.18	-.28	-.07*
Social Service	-.19	-.50	-.35	-.37	-.05*	-.09*	-.39
Social Status	-.19	-.58	-.33	-.43	.02*	-.15	-.41
Supervision-human relations	-.15	-.31	-.52	-.43	-.09*	-.20	-.42
Supervision-technical	-.22	-.40	-.59	-.51	-.14	-.18	-.52
Variety	-.14	-.60	-.37	-.45	-.10*	-.08*	-.43
Working Conditions	-.23	-.38	-.31	-.42	-.19	-.39	-.42
General job satisfaction	-.19	-.63	-.47	-.48	-.02*	-.27	-.43

* - not significant at the $p < .05$ level

authority r = .13. The stress subscale responsibility related with authority .40, and security .18.

Multiple regression procedures were performed on the data. Table 25 lists each of the criterion variables, the independent variables that contribute to the variance in each and the amount of variance explained.

When the results of the multiple regressions were reviewed, for which the 20 MSQ subscales and general job satisfaction were criterion variables, certain relationships were revealed. Of the independent variables included in the equations, three, role insufficiency, role ambiguity and role boundary, contributed only in a negative direction to the subscales they impacted upon. As the scores for these stressors increased, the scores for the job satisfaction subscales declined. Two of the independent variables, responsibility and experience, made only positive contributions to the subscales in which they were included. As scores in these variables increased, so did the job satisfaction subscales of which they were a significant contributor. Females were more satisfied than males in the subscales in which gender contributed. Five of the independent variables made positive contributions in some of the equations and negative contributions to other subscales in which they were included as significant. These variables include physical environment, role overload, education, income, and advancement opportunity. Of the independent

Table 25

Predictors for Criterion Variables

Criterion Variable	Predictors												R
	RI	RA	RB	RE	PE	RO	EX	ED	IN	GE	AO	GO	
General Job Satisfaction	-	-		+	-		+						.53
Ability Utilization	-		-		+						-		.61
Achievement	-	-	-		+	-	+						.55
Activity	-	-				+	+			+			.27
Advancement	-				-		+				+		.62
Authority	-			+			+						.27
Company Policies and Practices	-		-		-		+						.40
Compensation	-					-		+	+		+		.35
Co-workers					-				-				.11
Creativity	-		-							+			.54
Independence	-					-							.21
Moral Values		-	-				+						.23
Recognition	-	-				-	+						.40
Responsibility	-	-		+									.40
Security	-			+	-		+	-	+				.29
Social Service	-	-									-		.31
Social Status	-			+			+						.46
Supervision Human Relations		-		+	-		+						.33
Supervision Technical		-	-	+			+						.41
Variety	-		-				+			+			.41
Working Conditions	-		-		-								.33

p > .05
- = negative influence on criterion
+ = positive influence on criterion
Gender: Females = 1 Males = 0

RI = Role Insufficiency
RA = Role Ambiguity
RB = Role Boundary
RE = Responsibility
PE = Physical Environment
RO = Role Overload
EX = Experience
ED = Education
IN = Income
GE = Gender
AO = Advancement Opportunity
GO = Growth Opportunity

variables included, only growth opportunity provided no assistance in explaining variance in any subscale or general job satisfaction.

An examination of the variables making only negative contributions reveals that role insufficiency contributed to the variance in more job satisfaction subscales than any other independent variable. In 16 of the 20 subscales, role insufficiency was responsible for explaining a portion of the variance and in 12 of these subscales it made the largest contribution to the variance in the criterion. Of the variables making a significant contribution to the explained variance in general job satisfaction, role insufficiency was the most important.

Role insufficiency explained a portion of the variance in the job satisfaction subscales ability utilization, achievement, activity, advancement, authority, company policies and practices, compensation, creativity, independence, recognition, responsibility, security, social service, social status, variety and working conditions. In all of these equations except for authority, company policies and practice, security and working conditions, role insufficiency was responsible for more of the variance than any of the other variables in the model.

Role ambiguity was included as a variable explaining variance in general job satisfaction and in eight of the subscales. In each case as role ambiguity increased

satisfaction decreased. Although in achievement, activity, moral values, recognition, responsibility, social service, supervision - human relations and supervision - technical, a significant amount of variance was explained by role ambiguity, only in moral values, supervision - human relations and supervision - technical does role ambiguity contribute more to variance than any other independent variable.

The other independent variable having only negative relationships with the dependent variables for which it explained a significant part of the variance was role boundary. Role boundary was included in the models for ability utilization, achievement, company policies and practices, creativity, moral values, supervision - technical, variety and working conditions. In the model for company policies and practice, role boundary accounts for more variance than any other included variable.

Responsibility was the single stress variable explaining variance in only a positive direction in the equations for job satisfaction subscales in which it was included. Responsibility contributed to general job satisfaction and six of the subscales including authority, responsibility, security, social status, supervision - human relations and supervision - technical. In each model, as the stress of responsibility increased so also did the satisfaction scores of the aforementioned subscales.

Responsibility stress subscale explained more variance in the job satisfaction facet authority than any other independent variable included in the model.

Another variable responsible for variance in only a positive direction in those job satisfaction subscales in which it was included was a situational variant, experience. Experience explained a significant amount of variance in general job satisfaction and in 12 of the job satisfaction subscales. The equations for achievement, activity, advancement, authority, company policies and practices, moral values, recognition, security, social status, supervision - human relations, supervision - technical and variety include experience as an independent variable revealing a significant amount of variance.

Examination of the influence gender had in accounting for variance in the regression equations for job satisfaction subscales revealed females were more satisfied than males with activity, creativity and variety. In these three job satisfaction subscales gender explained less variance than any other independent variable included. No significant differences due to gender were found in the other job satisfaction subscales.

In considering those independent variables that explain variance in a positive direction for some job satisfaction facets and in a negative direction for others, only two are stress subscales. Physical environment has the most

influence on job satisfaction of the two, contributing negatively to general job satisfaction and 6 job satisfaction subscales. As physical environment stress increases, satisfaction with advancement, company policies and practice, co-workers, security, supervision - human relations and working conditions decrease. Physical environment is responsible for explaining more variance than any other variable in the equations for co-workers, security and working conditions. For the job satisfaction facets ability utilization and achievement, physical environment contributed significantly to the explanation of variance in a positive direction. As physical environment stress increased, satisfaction with ability utilization and achievement increased.

The other stress subscale providing explanation of variance in a positive direction in some job satisfaction subscale models and impacting in a negative direction in others was role overload. Role overload made a negative contribution in accounting for variance in achievement, compensation, independence and recognition. In the equation for the job satisfaction facet, activity, role overload contributes in a positive direction. Increase in role overload stress is accompanied by increases in activity satisfaction.

Education made a positive contribution in the equation for compensation while making a negative contribution for

the variance in the job satisfaction subscale security. For LPC's in Virginia, the higher their education level the more satisfied they were with their remuneration, but the less satisfied they were with job security.

Income was responsible for making a positive contribution to the explanation of variance in the two job satisfaction facets compensation and security while contributing negatively to satisfaction with co-workers. The greater the income level of the respondent, the less satisfaction co-workers provided, although satisfaction with compensation and security increased.

Advancement opportunity explained variance in a negative direction in satisfaction with ability utilization and social service. However, advancement and compensation were contributed to in a positive direction by advancement opportunity. Thus, the greater the opportunity for advancement was perceived by the LPC, the higher the scores on the compensation and advancement satisfaction subscales, but the lower the scores on ability utilization and social service.

DISCUSSION

The two research questions upon which this study was based examined different issues of job satisfaction among licensed professional counselors in Virginia. Discussions related to these questions follow:

Demographic Data

Of the licensed professional counselors included, 74.4% have over 10 years experience in counseling and 74.2% have been licensed five years or longer. The opportunity for expansion or advancement is believed to be good by 46.9%, while 56.1% think there is a good probability for growth. Although 78.9% of this group, of which 67.1% are under 50 years of age, are satisfied with their present positions, 61.5% of them expect to work 10 years or less in their present job, where 65.5% have had 10 years or less experience. However, 71.6% plan to continue counseling for more than 10 years, a profession in which only 14.6% make less than $20,000.00 annually. Speculation regarding these facts is not unwarranted. Counselors seem to have substantial experience in the profession and a positive outlook regarding their professional future. They view their positions as mobile, but stable regarding their occupational choice. Moreover, they are young enough to make the moves they feel are advantageous in a profession that has proven potential for financial remuneration.

The self-evaluation of 48.5% of the LPC's as "stressed" was the second highest value on a Likert scale. In the global self-rating for job satisfaction for which 78.9% selected "satisfied", the fourth position on a scale of five, parallels the Minnesota Satisfaction Questionnaire results for general job satisfaction which rated the

counselors as "satisfied", the second highest rating on a five point scale. These findings substantiate that LPC's are both stressed and satisfied, but not to the extreme in either.

In response to an inquiry as to the most satisfying aspects of their jobs, more counselors (61) listed colleagues than any other response. Colleagues was also the answer given by more LPC's (80) to the question regarding the least stressful factors of their jobs. Of the 20 satisfaction subscales of the Minnesota Satisfaction Questionnaire, the subscale co-workers was the eleventh highest in a hierarchy of mean scores. It seems apparent that among licensed professional counselors, colleagues are a positive part of their work.

Autonomy, the second largest response (55) to the most satisfying job factor, is similar to eighth place independence on the MSQ hierarchy. The third most numerous response to the same question was clients, which was entered 54 times. Clients was also the third most often enumerated response (46) to the question asking for the most stressful factors of the job. This hints at the potential for some stress producing components to also be sources of job satisfaction. The second place position of the stressor responsibility on the hierarchy of the Occupational Environment Scales, combined with the positive relationship between job satisfaction and responsibility, adds credence to the supposition.

Working conditions was mentioned the second most often, 65 times, in replies concerning the least stressful job factors. Physical environment was the subscale of the Occupational Environment Scales with the lowest mean score. The Minnesota Satisfaction Questionnaire subscale working conditions held the 10th position on the hierarchy of mean scores. Working conditions seem confirmed as producing little stress on LPC's in Virginia.

The most stressful factors listed were time demands (71) and workload (59). These responses which can be viewed as closely related seem in agreement with the second largest answer to the query regarding the most dissatisfying factors of the counselors' jobs, lack of time. The stressor with the highest mean score on the Occupational Environment Scales was overload. These findings suggest that counselors view workload as both a major source of stress and dissatisfaction.

Relationship of Occupational Stress and Job Satisfaction

The relationship of occupational stress to job satisfaction has been a concern of researchers for some time (House & Rizzo, 1972; Kahn et al., 1964; Rizzo et al., 1970). Although the generally held position has been that the two constructs are negatively related, studies by Burke (1976) and Hall and Lawler (1971) take issue with that position. In examining components of the two concepts, they found several positive correlations.

The relationship of occupational stress and job satisfaction in the helping professions has been the subject of some scientific investigation (Gross, 1983; Farber & Heifetz, 1981; Helwig, 1979; McDonald, 1969; Rigger et al., 1984). However, no studies of licensed professional counselors nor studies encompassing the broad spectrum of job satisfaction components included in the MSQ and stressors included in the OES have been reported.

The present study found that while social service as a job satisfaction component rated highest among the sample, only company policies and practices, compensation, advancement, supervision-human relations and supervision-technical fell below "satisfied". Company policies and practices (the component that counselors were least satisfied with) still ranked above the "dissatisfied" level. All other satisfaction components were within the "satisfied" range; no component was rated "very satisfied."

Physical environment was the only subscale of the OES which had a mean value rated "rarely." All the other stressors were in the "occasionally" category except role overload. Although role overload was the highest ranking stressor and the only one in the "often" category, followed by responsibility and then role insufficiency in rank order of means, role insufficiency contributed to the variance of 16 job satisfaction subscales in regression analysis as well as making a significant contribution to the regression model

for general overall job satisfaction. Role overload explained part of the variance in only three of the subscale regression procedures. Responsibility accounted for a significant portion of the variance in six of the job satisfaction subscales in addition to being responsible for a significant amount of the variance in the regression model for general job satisfaction. In all cases, responsibility had a positive relationship to the criterion variable.

The evidence gathered in this study also supports the position that occupational stress is negatively related to job satisfaction is true for counselors. Global occupational stress correlated negatively with global job satisfaction; $r = -.29$ ($p < .05$).

In assessing the impact of the stress subscales on each of the facets of job satisfaction, grouping of the job satisfaction facets is helpful. The variance in job satisfaction subscales ability utilization, achievement, activity, advancement, compensation, creativity, independence, recognition, responsibility, social service, social status and variety was explained more by scores on the occupational stress subscale role insufficiency than by any other factor. Role insufficiency influenced these job satisfaction facets in a negative direction in every equation. Thus, as role insufficiency stress increased, satisfaction with the above 12 job satisfaction facets declined. Role insufficiency measures the extent to which

the respondent's training, education, skills and experience are appropriate to his/her work.

> High scorers may report a poor fit between their talents, skills, etc., and the job they are performing. They may also report that their career is not progressing and has little future. Needs for recognition and success are not being met, and they report boredom and/or underutilization. (Osipow & Spokane, 1983, p. 14)

As the stress of role insufficiency increases, LPC's become less satisfied with their chances to use their abilities. The feeling of accomplishment derived from their job decreases. Perhaps as a result of a mismatch between their job requirements and their professional preparation, LPC's are less satisfied with their opportunity for staying busy as their scores on role insufficiency increase. As may be expected, the satisfaction with chances to advance on the job also decline with increased role insufficiency stress. Satisfaction with pay for the work performed decreases with rising scores on the role insufficiency subscale. Counselors' scores regarding the chance to use their own methods on the job were inverse to their role insufficiency scores. If the counselor viewed his training to be inappropriate for his job duties, clearly there could be a

feeling that he was unable to apply methods he had learned to the tasks of the job.

Other job satisfaction facets for which role insufficiency explained the most variance in a negative direction include independence, the chance to work alone. Because counseling often involves a single professional, counseling training prepares one to work independently. In situations where an LPC is not working independently to the extent desired, a mismatch of training and job requirement is likely to be concluded. In situations that the respondents view as less satisfying regarding recognition for doing a good job, an accompanying higher score on role insufficiency seems likely. Lack of recognition may be accompanied by training inappropriate for the job.

Satisfaction with responsibility or the freedom to use one's judgement diminishes as the role insufficiency scores become greater. The participants feel less satisfied with their opportunity to exercise their judgement as they feel more stress from being inappropriately prepared for their work role.

As the role insufficiency scores increases, licensed professional counselors scored lower on satisfaction with social service, a measure of being able to do something for others. If the counselor perceives himself as inadequately prepared, he also is less satisfied with his ability to be a helper. Social status satisfaction also declines with

increased role insufficiency; the counselors feel less respected by their communities as their perception regarding the inappropriateness of their training rises. Satisfaction with task variety also declines as the scores on the role insufficiency increases.

More variance of the job satisfaction facets moral values, supervision - human relations and supervision - technical is explained by the stress subscale role ambiguity than any other independent variable. Prediction is in a negative direction in the regression equations for moral values, supervision - human relations and supervision - technical. Role ambiguity measures the extent to which the priorities, expectations and evaluation criteria are clear to the respondent.

> High scorers may report a poor sense of what they are expected to do, how they should be spending their time, and how they will be evaluated. They seem not to know where to begin on new projects, and experience conflicting demands from supervisors. They may also report no clear sense of what they should do to "get ahead". (Osipow & Spokane, 1983, p. 14)

As the role ambiguity scores increase, counselors' satisfaction with the moral values facet of job

satisfaction, the chance to do things which do not go against one's conscience, declines. As participants stress regarding clarification of their duties increased, correspondingly, their satisfaction that they were doing things that agreed with their conscience declined. Perhaps confusion about their work roles led to doubts about their taking the morally correct actions.

LPC's satisfaction with the relationships between employees and supervisors and with the technical quality of supervision declined as the stress scores of role ambiguity increased. The less clear counselors were regarding job expectation, the less satisfied they were with supervision in both relationship and technical qualification dimensions.

The job satisfaction facet authority had more variance explained by the occupational stress subscale responsibility than any other independent variable. Responsibility explained satisfaction with authority in a positive direction. As responsibility stress scores increased, so also did authority scores. Responsibility measures the extent to which the person has, or feels, a great deal of responsibility for others on the job.

> High scorers may report high levels of responsibility for the activities and work performances of subordinates. They are worried that others will not perform well. They are sought out for

> leadership and have to respond to others problems. They may also have some poor relationships with people at work, or feel pressure from working with angry or difficult employers or the public. (Osipow & Spokane, 1983, p. 14)

With increasing scores on responsibility stress, an accompanying increase occurred in scores on satisfaction with the opportunity to tell others what to do.

The variable responsible for explaining more variance in the job satisfaction facet company policies and practices was the stress subscale role boundary. Role boundary influences satisfaction with company policies and practices in a negative direction. Role boundary measures the extent to which the respondent is experiencing conflicting role demands and loyalties at work.

> High scorers may report feeling caught between conflicting supervisory demands and factions. They may report not feeling proud of what they do, or in having a stake in the enterprise. They may also report being unclear about authority lines, and having more than one person telling them what to do. (Osipow & Spokane, 1983, p. 14)

Any increase in the counselors' scores for role boundary explained a decrease in the score for satisfaction with the way company policies are put into practice. A counselor experiencing a higher stress score regarding the boundaries of the job would also have less satisfaction with the policies and practices of the organization than a counselor having less role boundary stress.

Variance in the job satisfaction facets co-workers, security and working conditions is explained more by the occupational subscale physical environment than any other independent variable. Physical environment acts in a negative direction on co-workers, security and working conditions. Physical environment measures the extent to which the respondent is exposed to high levels of environmental toxins or extreme physical conditions.

> High scorers may report being exposed to high levels of noise, wetness, dust, heat, light, cold, poisonous substance, or unpleasant odors. They may also report having an erratic work schedule or being personally isolated. (Osipow & Spokane, 1983, p. 14)

Higher scores on physical environment stress are recorded in conjunction with lower scores on co-worker satisfaction. As the stress of the physical environment increases, counselors are less satisfied with the way they

get along with co-workers. Personal isolation and erratic work schedules would make it less likely to achieve and maintain good work relations with others. The increased stress of physical environment also is accompanied by lower satisfaction with security, the way a job provides for steady employment. For some LPC's, particularly in private practices, less than a full caseload may parallel both erratic hours and low security. Because the job satisfaction facet working conditions is defined as the physical condition in which one works, it is understandable that an increase in the stress subscale physical environment would be reflected by a lower score on working conditions.

The greatest amount of variance in general job satisfaction is explained by the occupational stress subscale role insufficiency. The variables explaining the next largest amount of general job satisfaction variance are experience and role ambiguity. The occupational stress subscale physical environment is second only to the occupational stress subscale responsibility in providing the least explanation of variance in general job satisfaction.

Counselors' scores on role insufficiency are more important than any other factor investigated in explaining job satisfaction. The extent to which a counselor feels the training received is poorly matched to job duties will impact on that individual's general job satisfaction score in a negative direction. The longer an LPC has been in the

counseling profession, the higher the score on general job satisfaction will be. The less clear the counselor is regarding job expectations, the lower the score will be on general job satisfaction. General job satisfaction scores decrease as the counselors physical environment stress rises. The more responsibility for others felt by the counselor, the higher the score on general job satisfaction.

Although the occupational stress factor responsibility received higher scores than role insufficiency, the importance of role insufficiency in explaining variance in job satisfaction was greater than that of responsibility. Role insufficiency explained the greatest amount of variance in general job satisfaction and 12 subscales. The subscales were ability utilization, achievement, activity, advancement, compensation, creativity, independence, recognition, responsibility, social service, social status and variety. In addition, role insufficiency contributed to variance in job satisfaction subscales authority, company policies and practices, security and working conditions. In each equation, role insufficiency explained variance in a negative direction.

Responsibility explained the greatest portion of variance in the job satisfaction subscale authority. In general job satisfaction and in the job satisfaction subscales responsibility, security, social status, supervision - human relation and supervision - technical,

the occupational stress subscale responsibility provided an explanation for part of the variance. In each regression equation, responsibility explained variance in a positive direction.

The stress that counselors registered from responsibility while contributing positively to job satisfaction was of less importance than the negative contribution made by role insufficiency in explaining job satisfaction. Counselors' perception of having inappropriate training for their jobs contributed negatively to their job satisfaction more than their perception of being responsible for others contributed in a positive direction.

Demographics as Job Satisfaction Explanation Enhancers

Job satisfaction as it relates to age has been studied by Barbash (1976) and Sheppard and Herrick (1972) as well as others. Inquiries by Klein and Maher (1976) and Phillips and Hays (1978) included education in their designs. Salary and job satisfaction have been the subject of studies by Barbash (1976), Ewen (1966), Kasl (1977) and Ronan (1970). In the present study when these three factors were included with the OES subscales in a regression procedure to enhance the explanation of general job satisfaction, only age made a significant contribution beyond the variance explained by the OES subscales.

Experience and age have been regarded as closely related by Hulin and Smith (1965) and Wild and Dawson (1976). A model substituting experience for age and including income, gender, advancement opportunity, growth opportunity and education with the OES subscales in a regression procedure resulted in only experience making a significant contribution to the explanation of variance in general job satisfaction beyond that explained by the OES subscales.

Of demographic variables included in the regression models, experience was the only factor that contributed to the explanation of general job satisfaction. As with the 12 subscales of job satisfaction to which experience made a contribution, the direction was positive. This corroborated findings reported by Schultz (1982). The positive explanation of variance in job satisfaction subscales achievement, activity, advancement, authority, company policies and practices, moral values, recognition, security, social status, supervision-human relations, supervision - technical, and variety give credence to speculation that counselors either leave the profession to find other occupations which better satisfy their needs or adjust their expectations to more closely coincide with the realities of the rewards of counseling as their experience in the profession increases. The counselors having the most years in counseling feel most satisfied with achievements on the

job, their opportunity to stay busy, and their chances for advancement. They were more satisfied with the implementation of the policies of the organization for which they work and the recognition they received than those counselors with fewer years experience. More experienced counselors were more satisfied with their authority over others and their work closer paralleled their conscience than did those counselors who were newer to the profession. The status held in the community as well as the confidence in supervisors' knowledge and inter-relationships was more satisfactory to the counselors with the most experience. Counselors with less experience were less satisfied with the variety of tasks they performed and their job security than those counselors with more experience.

In all of these facets of job satisfaction, it is likely that senior counselors would be most satisfied. Longevity normally accompanies a stronger relationship with the community, the employing organization and those responsible for one's supervision. As a bond of mutual trust and respect grows with time, so does recognition and status both within the organization and the larger community. Individuals are generally given more authority and feel more secure in their work as their tenure lengthens. It should be remembered, however, that compared to role insufficiency experience revealed a small amount of variance in general job satisfaction. In all but three of

the subscales which were contributed to by experience, role insufficiency made the major contribution. For moral values, supervision-human relations and supervision-technical, role ambiguity made the greatest contribution in the explanation of variance and did so in a negative direction.

Education was not a contributor to general job satisfaction. This may have resulted from the fact that education levels were not widely distributed. Because of the requirements for credentialing LPC's educational levels are restricted. Two subscales of job satisfaction were partially explained by education. Compensation satisfaction was positively contributed to by education. This result conflicted with findings by Klein and Maher (1976) who found a negative relationship between salary and education. Because 34.4% of the participants indicated they hold a doctorate degree, they may also feel better compensated than those with less education. Education contributed negatively to security, which indicates that those with higher degrees are less satisfied with their job security. Perhaps those with less education in less paying jobs are employed in relatively secure though less lucrative jobs, while those higher educated LPC's receiving greater incomes are in job situations which are more susceptible to changing economic fluctuation. LPC's in agency settings probably make less money than many in private practice, but feel relatively

secure compared to some private practitioners who realize their security depends on the flow of new clients.

The variable income made no contribution to general job satisfaction, in contrast to the bulk of the literature which reports a strong relationship between salary and job satisfaction. It is possible that other variables which were included in the regression equation may have overshadowed any portion of the variance that could have been explained by income. Three subscales of job satisfaction were contributed to by income. As may be expected in both the equation for compensation and security, income had a positive relationship with the criterion. Those counselors having larger incomes also had greater satisfaction with their job security and compensation. Income explained variance in satisfaction with co-workers in a negative direction. One may speculate that the higher income levels LPC's are more isolated and have less opportunity to nurture relationships with fellow workers than do those LPC's at lower income levels. It is prudent to remember that even in these three satisfaction subscales to which income made a significant contribution to explaining variance, that the portion of the variance explained by income was small compared to the total explained variance of each of the three subscales. The majority of the literature reports a strong positive relationship between salary and job satisfaction (Barbash,

1976; Portigal, 1976; Scanlan, 1976; Schultz, 1982). There is a possibility that in the specific population of licensed professional counselors there are factors that have priority over income in providing overall job satisfaction. It is reasonable that individuals who choose licensed professional counselor as a career goal may have value hierarchies that place less importance on income than the value systems of the general population.

Gender made no contribution to general job satisfaction, but did contribute to three job satisfaction subscales. In activity, creativity, and variety, women were more satisfied than men. Perhaps the most poignant information revealed is the lack of differences in both general job satisfaction and 17 subscales. LPC's seem to be one group in which both women and men share similar feeling of job satisfaction towards a majority of factors. Perhaps that the organizational setting for a large proportion (40.2%) is in education, one in which women have been traditionally accepted, has some bearing on the similarities in satisfaction of men and women counselors. Perhaps because of the required investment of time, money, effort and commitment needed to become a licensed professional counselor, females are more similar to males in career orientation and share similar attitudes and values, thus making the genders more alike than different regarding job satisfaction in counseling.

Consideration of the differences in job satisfaction regarding activity suggests that women may have a different concept of what activity means than men. Men have traditionally been more physically active in work than women. Male LPC's may feel that their jobs do not satisfy need for physical activity as much as is desirable, while female LPC's may regard the tasks surrounding the work of counseling as an opportunity to keep busy.

The difference in traditional orientations between the genders may be responsible for female LPC's having a greater satisfaction in the creativity factor. While men have been oriented toward more concrete expression of creativity, female LPC's find the opportunities for creative counseling interventions more satisfying then their male counterparts.

Licensed professional counselors of the female gender were more satisfied with the variety of tasks their work afforded them than were male LPC's. It may be supposed that here again traditional orientation may have impacted on the perceived differences. Males have historically had a broader range of acceptable career activities from which to choose than female. Therefore, the variety of tasks performed as a counselor may be viewed by females as more satisfying in comparison to the narrower range of activities traditionally offered to females.

Although gender provided an explanation of variance in satisfaction with activity, creativity, and variety, in each

case the portion of variance was small compared to other variables. Role insufficiency contributed the largest amount of explained variance in these three subscales. Although findings vary in research reports regarding the relationship of gender to job satisfaction, there is a consensus that the genders do not differ in their levels of job satisfaction.

Advancement opportunity was included in the regression model to determine if the counselors' perception of their chance for advancement would explain some of the variance in their scores on general job satisfaction and the 20 subscales. No contribution was made towards the explanation of general job satisfaction, however, in four subscales advancement opportunity explained a minor portion of variance. In satisfaction with compensation and, understandably, advancement, advancement opportunity contributed in a positive direction to the explanation of variance. The greater the LPC's perceived advancement opportunity potential, the higher were scores on compensation and advancement subscales of job satisfaction. It may be presumed that those counselors recording higher ratings on advancement opportunity are either receiving higher incomes with which they are pleased or feel satisfied with their present incomes in anticipation of advancement.

Regarding the job satisfaction subscales ability utilization and social service, advancement opportunity made

a negative contribution to the explanation of variance. Counselors having higher ratings on advancement possibilities had lower scores on satisfaction with the use of their skills on the job. Perhaps they feel that advancement will bring a greater opportunity to apply more of their abilities, while those who see less opportunity for advancement are more satisfied with the abilities they are able to operationalize in their present situation. Consideration of social service satisfaction in relationship to rating of advancement opportunity indicates that LPC's with higher advancement opportunity perceptions are less satisfied with the services they are able to provide others. This relationship suggests that those with lower advancement opportunity scores feel they have attained their maximum potential and are providing services at a more satisfying level than the LPC's who see more advancement opportunity and a corresponding opportunity to be of greater service to others.

RESULTS RELATED TO SPECIFIC HYPOTHESES

Hypothesis 1. Global occupational stress as measured by item 1 on the data form will be negatively related ($p < .05$) to global job satisfaction as measured by item 5 on the data form.

A Pearson Product Moment correlation coefficient was calculated for LPC's scores on item 1 of the data form and their corresponding scores on item 5 of the data form. A

negative relationship $r = -.29$ ($p < .05$; $n = 272$) was found between occupational stress as measured by item 1 and job satisfaction as measured by item 5. For hypothesis 1 the null is rejected.

Hypothesis 2. The independent variables role overload, role insufficiency, role ambiguity, role boundary, and physical environment as measured by the subscales of the Occupational Environment Scales, Form E-2, will negatively explain a significant ($p < .05$) amount of the variance in the dependent variables job satisfaction components as measured by the subscales of the Minnesota Satisfaction Questionnaire.

Each of the 20 subscales of the Minnesota Satisfaction Questionnaire was regressed on the subscales of the Occupational Environment Scales (role insufficiency, role boundary, responsibility and physical environment) and level of education, experience, income, gender, advancement opportunity and growth opportunity. Examination of Tables 27 through 40 in Appendix E reveals that a significant amount of variance in each of the 20 job satisfaction subscales of the MSQ has been explained in a negative direction by one or more subscales of the OES, including role insufficiency, role ambiguity, role boundary, physical environment, and role overload. Null hypothesis 2 is rejected.

Hypothesis 3. The independent variable responsibility as measured by the subscale of the Occupational Environment Scales, Form E-2, will positively explain a significant ($p < .05$) amount of variance in the dependent variables job satisfaction facets as measured by the Minnesota Satisfaction Questionnaire.

The subscale responsibility of the Occupational Environment Scales was included as an independent variable in regression models using each of the subscales of Minnesota Satisfaction Questionnaire and general job satisfaction as criterion variables. Responsibility made a positive contribution to the explanation of variance for six subscales of job satisfaction and general job satisfaction as measured by the MSQ. Regression equations for authority (Table 31), responsibility (Table 39), security (Table 40), social status (Table 42), supervision - human relations (Table 43), supervision - technical (Table 44) and general job satisfaction (Table 26) include the stress subscale responsibility as a positive predictor of the criterion variable. For hypothesis 3, the null is rejected.

Hypothesis 4. Inclusion of level of education, annual income, age, gender, advancement opportunity and growth opportunity with the independent variables occupational stresses will enhance the explanation of the amount of variance in overall job satisfaction.

General job satisfaction, the scale on the Minnesota Satisfaction Questionnaire that measures overall job satisfaction, was regressed on level of education, age, income, gender, advancement opportunity, growth opportunity and the subscales of the Occupational Environment Scales. Because of the small numbers of cases included, the number of responses to each of the items upon which the variables were based was scanned, disclosing the variable age had only 167 responses. This gave rise to the concern that there may be meaningful difference between the participants choosing to reveal their age and those who did not. The variable experience was then considered as a possible alternative to age, recalling Hulin and Smith's (1965) conclusion that tenure and age are closely related. The responses to item 12 on the data form, designed to ascertain experience, numbered 292.

Thus another regression model was processed for the dependent variables general job satisfaction and the 20 subscales of the MSQ using the six subscales of the OES, educational level, income, gender, advancement opportunity, growth opportunity and substituting experience for age. Table 26 discloses that a significant amount of variance in general job satisfaction has been explained in a positive direction by experience. Null hypothesis 4 is rejected.

RESULTS REGARDING RESEARCH QUESTIONS

The first research question asked, "What is the relationship between occupational stress and job satisfaction of licensed professional counselors of Virginia?" The relationship of occupational stress to job satisfaction is negative. When a Pearson Product Moment correlation coefficient was calculated on item 1 of the data form, which measured global occupational stress, and item 5, which measured global job satisfaction, a negative relationship $r = -.29$ ($p < .05$) was found. However, when multiple regression procedures were performed using 20 subscales and general job satisfaction as measured by the MSQ as criterion variables and the six stress subscales of the OES as independent variables, more complex relationships were revealed.

Although role insufficiency and role ambiguity stress subscales each related only negatively to general job satisfaction and certain job satisfaction subscales, the stress subscale responsibility related only positively with general job satisfaction and some job satisfaction subscales. The stress subscale physical environment was negatively related to general job satisfaction and some job satisfaction subscales, but positively related to other subscales. While the stress subscale role overload was related positively to one job satisfaction subscale and negatively to others, it was not related to general job

satisfaction. The stress subscale role boundary related only in a negative direction with several job satisfaction subscales but was not related to general job satisfaction.

The second research question asked, "What relationships are there among the following variables: occupational stress, job satisfaction, age, level of education, gender, advancement opportunity, growth opportunity and annual income?" Occupational stress is negatively related to job satisfaction. Age and experience is positively related to job satisfaction. Level of education, gender, advancement opportunity, growth opportunity and annual income are not related to job satisfaction. A multiple regression procedure was performed using general job satisfaction as the criterion variable and the others as independent variables including six occupational stress subscales. The stress subscales role insufficiency, role ambiguity and physical environment related negatively to general job satisfaction, with role insufficiency explaining more variance in general job satisfaction than any other independent variable. The stress subscale responsibility and age both related in a positive direction to general job satisfaction. When age was replaced by experience because of few responses to the item measuring age, experience was positively related to general job satisfaction. Education, income, gender, advancement opportunity and growth opportunity were not significantly related to general job satisfaction.

In multiple regression performed using the 20 job satisfaction subscales as criterion variables, additional information was revealed. Females were more satisfied with activity, creativity and variety than males. Education, income and advancement opportunity each related positively to some job satisfaction subscales and negatively to others. Growth opportunity was not related to any subscale.

SUMMARY

This chapter has described the results of this study. The first section described the response rates, including the overall response of 81.75%. The second section presented demographic data. A total of 48.5% of the sample indicated they were stressed with their present position. Those indicating they were satisfied represented 78.9% of the respondents. The last section addressed the hypotheses tested by the research. The variance in general job satisfaction and the 20 subscales as measured by the Minnesota Satisfaction Questionnaire was explained by the subscales of the Occupational Environment Scales. The OES subscale responsibility related positively to the MSQ subscales authority, responsibility, security, social status, supervision-human relations, and supervision-technical. Inclusion of age or experience with income and education enhance the explanation of job satisfaction. Although a number of regression models were developed in an attempt to find demographic variables that could further

enhance the explanation of job satisfaction when combined with OES subscales, none were found that explained as much variance as either the model including age or the one which substituted experience for age.

Chapter V

DISCUSSION AND RECOMMENDATIONS

In this chapter, the results of the study will be interpreted and discussed. First, the research questions and methodology will be reviewed, followed by a summary of the findings. Conclusions regarding the results of the study will then be presented. Next, a discussion will include data regarding the respondents, the relationship of occupational stress and job satisfaction, the impact of demographic variables on the explanation of job satisfaction and a comparison of the present study with that of Burke.

A section on the implications of this study will precede recommendations for future research. The chapter will end with some suggestions for those involved in the profession of counseling.

REVIEW OF THE RESEARCH QUESTIONS AND METHODOLOGY

Investigation of the relationship of occupational stress and job satisfaction among licensed professional counselors was the purpose of this study. To facilitate this inquiry, these two research questions were posed:

1. What is the relationship between occupational stress and job satisfaction of licensed professional counselors in Virginia?
2. What relationships are there among the following variables: occupational stress, job satisfaction,

age, level of education, gender, advancement opportunity, growth opportunity and annual income?

To provide a basis for the analysis, four hypotheses were developed:

1. Global occupational stress as measured by item 1 on the data form will be negatively related ($p < .05$) to global job satisfaction as measured by item 5 on the data form.
2. The independent variables role overload, role insufficiency, role ambiguity, role boundary and physical environment as measured by the subscales of the Occupational Environment Scales, Form E-2, will negatively explain a significant ($p < .05$) amount of variance in the dependent variables job satisfaction components as measured by the subscales of the Minnesota Satisfaction Questionnaire.
3. The independent variable responsibility as measured by the subscale of the Occupational Environment Scales, Form E-2, will positively explain a significant amount of variance in the dependent variables job satisfaction facets as measured by the Minnesota Satisfaction Questionnaire.
4. Inclusion of level of education, annual income, age, gender, advancement opportunity and growth opportunity with the independent variables

occupational stresses will enhance the explanation of the amount of variance in overall job satisfaction.

A survey of 400 licensed professional counselors selected at random from the mailing list provided by the Virginia Board of Professional Counselors was accomplished using the mail service. A data form, a copy of the Minnesota Satisfaction Questionnaire (MSQ) and a copy of the Occupational Environment Scales, Form E-2, (OES) were provided each participant. Demographic information was collected by the data form while occupational stress data and job satisfaction data was supplied by the Occupational Environment Scales and Minnesota Satisfaction Questionnaire, respectively.

Of the 327 licensed professional counselors responding, representing a response rate of 81.75%, 33 responses were unusable. Statistical analyses were performed on the 294 completed responses using computers at Virginia Polytechnic Institute and State University.

Responses to the MSQ provided the basis for scores on the 20 job satisfaction subscales and overall job satisfaction level. Responses to the OES provided the basis for scores on the six occupational stress subscales and the overall occupational stress level. Pearson Product Moment Correlation was used to determine the relationship between global occupational stress and global job satisfaction. To

ascertain the relationships between each of the subscales of the MSQ and the subscales of the OES, multiple regression procedures were performed with the OES subscales entered as independent variables and each MSQ subscale entered as the criterion variable. Additional variables were included in the regression model to determine the influence of experience, annual income, gender, advancement opportunity, growth opportunity and education level in enhancing the amount of job satisfaction variance accounted for by the OES subscales.

SUMMARY OF FINDINGS

The structure for summarizing the results and conclusions of the study will be the hypotheses upon which this research was founded. The results of this study indicated that global occupational stress and global job satisfaction were negatively related as expected. This allowed, in hypothesis 1, the rejection of the null.

The 20 multiple regressions performed with the job satisfaction facets measured by the MSQ defined as the criterion variables produced 16 models in which role insufficiency was negatively related to the dependent variable. The variable role ambiguity impacted negatively with eight of the MSQ subscales. Role boundary was found to be negatively related to eight of the job satisfaction facets as physical environment was to seven. Role overload related negatively to four of the dependent variables.

These findings resulted in the rejection of null hypothesis 2. The regression procedure resulted in the independent variable responsibility relating positively to five of the dependent variables. This permits the rejection of null hypothesis 3.

Neither annual income nor education level contributed to the explanation of general job satisfaction variance; however, both age and experience made significant contributions in their respective equations. Thus null hypothesis 4 was rejected. No contribution was made by the variables gender, advancement opportunity and growth opportunity.

RESEARCH QUESTION FINDINGS

The first research question was, "What is the relationship between occupational stress and job satisfaction among licensed professional counselors in Virginia?" The relationship between occupational stress and job satisfaction is negative. When components of the two constructs are examined, both positive and negative relationships are found. See Chapter IV for more details.

"What are the relationships among the following variables: occupational stress, job satisfaction, age, level of education, gender, advancement opportunity, growth opportunity and annual income?" was the second research question. Occupational stress is negatively related to job satisfaction. Age and experience are positively related to

job satisfaction. Level of education, gender, advancement opportunity, growth opportunity and annual income are unrelated to job satisfaction as are occupational stressors role boundary and role overload. Occupational stressor responsibility is positively related to job satisfaction while stressors physical environment, role ambiguity and role insufficiency are negatively related to job satisfaction. A detailed discussion can be found in Chapter IV.

CONCLUSIONS

This study's findings led to the following conclusions:

1. Global occupational stress and global job satisfaction are negatively related. This result corroborates results reported by Gross (1983), House and Rizzo (1972), Jayaratne and Chess (1983), Kahn, Wolfe, Quinn, Snack and Rosenthal (1964), Rigger, Godley and Hafer (1984) and Rizzo, House and Lirtzman (1970).
2. Three of the stress variables--role insufficiency, role ambiguity and role overload--contributed to the variance in general job satisfaction and to a number of job satisfaction subscales. The contribution of these three stress components was always negative.
3. Role insufficiency explained a greater amount of variance than any of the other independent

variables in the equation for general job satisfaction and 12 of the job satisfaction subscales.

4. The stress variable responsibility contributed in a positive direction to explanation of variance in general job satisfaction and six of the job satisfaction subscales.
5. While the stress variable role insufficiency made the major contribution to the explanation of variance in general job satisfaction and most of the equations for subscales in which it was included, responsibility explained a very minor amount of explained variance in general job satisfaction and the equations for subscales of job satisfaction in which it was included. Stress from role insufficiency had a much greater negative influence on counselor job satisfaction than did responsibility stress have a positive influence.
6. Role overload, the stress subscale with the highest rating by counselors, had very little value in explaining counselor job satisfaction. Although counselors ranked role overload as the highest stress producer, stress from this variable was related only slightly to a few job satisfaction subscales and not at all to general job satisfaction. This supports Likert's (1961)

criticism with rank order methodology; although an item may be ranked first in overall attitudes it may not be the most important.

7. The variable experience explains variance in general job satisfaction and 12 of the job satisfaction subscales. In each of the equations for which it is included, the contribution is in a positive direction. The more experienced counselors have higher job satisfaction scores; this supports research reported by Blau (1981).
8. The variables best explaining variance in general job satisfaction were role insufficiency, role ambiguity, physical environment, responsibility and experience.
9. The variables role overload, role boundary, income, education, gender, and advancement opportunity made no contribution to general job satisfaction and only minor contributions to a few job satisfaction subscales. Growth opportunity made no contribution to the explanation of any job satisfaction variances.

DISCUSSION

This study supported the position that global occupational stress is negatively related to global job satisfaction as advanced by Gross (1983), House and Rizzo (1972), Jayaratne and Chess (1983), Kahn, Wolfe, Quinn,

Snack and Rosenthal (1964), Rigger, Godley and Hafer (1984) and Rizzo, House and Lirtzman (1970). However the research also corroborated findings by Burke (1976) and Hall and Lawler (1971) who found that when components of occupational stress and components of job satisfaction were examined, a more complex situation emerged. While some occupational stressors do relate negatively to some job satisfaction components, other occupational stressors have a positive relationship to certain job satisfaction components and, in this study, to overall job satisfaction.

In addition, experience was found to be positively related to over all job satisfaction and 12 of the job satisfaction components agreeing with research reported by Schultz (1982). A more detailed discussion of results appears in Chapter IV.

A Comparison with Burke's Study

To comprehend the similarities and differences between the present investigation and Burke's (1976) inquiry, a clarification of some differences in the approaches may be helpful. Burke's all male sample of accountants and engineers contrasts to the licensed professional counselors in at least two particular aspects. In the present study, 55.8% of the sample are women, and the difference in professions would indicate a likely difference in interests, values and aptitudes in those successfully pursuing careers as counselors, as contrasted to those who were successful

engineers and accountants, according to career education literature.

The choice of data analysis varied between Burke's research and the present investigation. Burke employed Pearson Product Moment correlation coefficients to determine the relationships between total job satisfaction and overall occupational stress and also used that technique to ascertain the relationships of the job satisfaction components to those of occupational stress. In an effort to provide a better understanding of the relationship of the two constructs and their components, the present study incorporated multiple regression procedures to determine if overall job satisfaction and the components thereof could be explained by a measure of occupational stress components. In addition, demographic variables of income, gender, advancement opportunity, growth opportunity, experience and education, long considered related to both occupational stress and job satisfaction, were included to determine if they could enhance the explanation of job satisfaction.

The present study corroborates Burke's hypotheses that overall job satisfaction is negatively related to overall occupational stress, but that while certain components of occupational stress are negatively related to job satisfaction facets, other occupational stress components have a positive relationship to some job satisfaction components. Moreover, the present study also found evidence

that one stress component, responsibility, made a positive contribution to the explanation of overall job satisfaction. In addition, both samples indicated on global measures that the respondents were satisfied with their jobs.

Examination of the details of the results of the two studies reveals some difference. In investigating the number of correlations between the items on the occupational stress index and the items on the job satisfaction index, Burke reported that nine components of the occupational stress items had only negative correlations with job satisfaction items, and four had mainly positive correlations. One had positive correlations with all the job satisfaction items; three with eleven of the job satisfaction items. One occupational stress item "can't satisfy demands of others" had six positive and six negative correlations with items on the job satisfaction index.

Items on the occupational stress index that had only positive correlations with satisfaction index items include:

1. too much responsibility
2. too heavy a workload
3. feeling not fully qualified
4. having to make decisions that effect the lives of others

As the scores on these stress items increased, so did certain job satisfaction items. There were nine significant positive correlations. The stress item "too heavy a

workload" related positively with five job satisfaction items. These correlations were "challenging job problems," r = .18; "use present knowledge and skills," r = .15; "a wide variety of tasks and activities," r = .13; "work that is important," r = .13; "good salary," r = .13. Also reported were four positive correlations with the stress item "feeling not qualified to handle my job". These correlations were "congenial co-workers," r = .16; "growing and learning new knowledge and skills," r = .15; "using present knowledge and skills," r = .15; and "challenging job problems," r = .15. No table of correlations for the items on each of the scales is shown in the Burke study.

In examining correlations between the scores for the MSQ subscales and the scores for the OES subscales, the OES subscale responsibility was significantly positively related to two job satisfaction subscales. These subscales were authority, r = .40, and security, r = .18. In addition, there were four positive correlations between responsibility and subscales of the MSQ that lacked significance. These job satisfaction subscales were social status, responsibility, compensation and activity.

Burke did not report the use of multiple regression technique on his data; however, the use of regression procedures on the data generated by the present study revealed a significant positive relationship between the occupational stress subscale responsibility and four

additional subscales of job satisfaction, responsibility, social status, supervision - human relations, and supervision - technical, as well as to general job satisfaction.

One final difference in the studies methodologies and consequently the ensuing results was the inclusion of various demographics in the present study which revealed that experience contributed to general job satisfaction and 12 of the subscales including achievement, activity, advancement, authority, company policies and practices, moral values, recognition, security, social status, supervision - technical, and variety.

The differences in the instrumentation, samples, and data analysis make any speculation spurious as to why the positive relationships among components of the two instruments of the Burke study differ from the positive relationships between the components of the two instruments in the present study. Both studies substantiate the position that some occupational stresses have a positive influence on some job satisfaction components. and in the present study there is evidence that some occupational stresses have a positive influence on overall job satisfaction.

IMPLICATIONS OF THE STUDY

Some implications for counselor educators, counselor affiliations, counselors and the organizations that supervise and/or employ them may be drawn from this study:

1. Most counselors seem satisfied with their jobs. The subscales which had means below "satisfied" were advancement, company policies and practices, compensation, supervision-human relations and supervision-technical. The positive relationship of the stressor responsibility to other job satisfaction subscales and to overall job satisfaction suggests that more input in organizational decisions may enhance the counselor's satisfaction with company policy and practices. Development of career ladders which enable counselors to progress and the explanation of these ladders by counselor educators and organizations using counselors may enable counselors to perceive their advancement opportunities from a more satisfied perspective. At least an orientation of the limitations for advancement by counselor educators would enable counselor trainees to have realistic expectations regarding this issue. Likewise, the potential for financial remuneration needs to be presented to would-be counselors by counselor educators, thereby enabling them to make adjustments in their expectations or in their career plans, thus perhaps increasing the level of satisfaction with compensation. The orientation of most counselors towards human relationships

and the lengthy and intense training required for those pursuing licensure signals the need for careful selection of those who have responsibility for their supervision as well as sending a message to counselor supervisors to concern themselves both with their own professional expertise and growth and with which management and supervision strategies they select regarding their counselors.

2. The stress levels of licensed professional counselors in Virginia appear to be moderate. Only role overload reached the "often" category. Role overload did not contribute to general job satisfaction and impacted on only three subscales, and in two of these, there was a positive relationship. At the present for licensed professional counselors in Virginia, role overload is of no major concern. Role insufficiency,, however, impacted negatively on 16 of the job satisfaction subscales and general job satisfaction and was responsible for the largest amount of the explained variance in most regression models. Role insufficiency measures the extent to which the respondent's training, education, skills and experience are appropriate to his/her work.

Although the means for role insufficiency fall into the "occasionally" category, the negative impact on general job satisfaction and subscales suggests the need for concern. The low percentage of respondents (24.3%) continuing their education, combined with these role insufficiency findings

indicate that licensed professional counselors in Virginia may decrease their stress and increase their job satisfaction. The professional organizations with which they are affiliated may be of service by both encouraging their membership to participate in additional training and educational ventures and in providing meaningful educational opportunities for members. The counselor educators and their educational institutions can seek input from licensed professional counselors in modifying their programs to best meet the needs of their future graduates. Organizations utilizing the services of licensed professional counselors can encourage and reward their counselors for continuing their professional development and provide time and sponsorship of growth experiences.

3. Licensed professional counselors in Virginia mean scores on the OES subscale responsibility was second only to role overload. The mean was within the category "occasionally" and had a positive relationship with general job satisfaction and six subscales. Responsibility measures the extent to which the person has or feels a great deal of responsibility for the performance and welfare of others on the job.

Licensed professional counselors may find seeking and accepting greater responsibility enhancing to their job satisfaction though heightening their occupational stress. The organizations in which they work may increase the

utilization of their expertise while increasing the job satisfaction of their counselors by offering and encouraging them to accept more responsibility.

RECOMMENDATIONS FOR FUTURE RESEARCH

1. Future studies of the relationship of occupational stress and job satisfaction of licensed professional counselors should encompass variables not included in this study. Examples are personality types, organizational structure, management orientation and job setting. Furthermore, it would be useful to assess those who work full-time as counselors in various settings in contrast to those who have jobs primarily in other areas (such as in teaching or administration).
2. Longitudinal studies regarding licensed professional counselors' occupational stress and job satisfaction would be helpful as the criteria for licensing of the group changes and legislative issues impact on the profession.
3. Occupational stress and job satisfaction studies on licensed professional counselors outside of Virginia would either confirm these findings as being more generalized or expose differences in other geographical and political areas.
4. The extension of similar research to other helping professions would provide some understanding of the

differences and similarities among the job satisfactions and occupational stress of those employed in related fields of endeavors.

5. Research on other occupations with both vertical and horizontal differences to licensed professional counselors would reveal a more complete understanding of the relationships between occupational stress, job satisfaction and other variables.

RECOMMENDATIONS FOR THE PROFESSION

The results of this investigation provide a foundation for recommendations to counselors, their trainers and their professional associations.

1. Licensed professional counselors, although generally satisfied and feeling only occasional stress, are inclined to be least satisfied with the policies and practices of their employing organizations and impacted upon most negatively by role insufficiency. Counselors should improve these areas by using their counseling skills within their organizations. Education of those in management positions as to the value of their wide range of expertise could be instrumental in acceptance of their input in decisions surrounding policy. Counselors should also take opportunities to make their diverse services available to the

organizations for which they work. Speaking engagements provide counselors the chance to educate, both their own organizations and the general public, regarding their full array of abilities.

2. Counselor educators need to be constantly evaluating their program of study and presenting their students with realistic vantages of the career potentials in counseling. The content of their curriculum should be focused on the needs of the counselor in practice. Role insufficiency results from the individual perceiving a poor fit between the job and their training.
3. Counselor associations should take a leadership role in gaining control of the profession. By definition, a profession controls the training and regulation of its members. Through continuing political action, counselor associations can influence legislation to increase the input counselors have in the education and credentialing of their peers. This will also provide greater authority in defining their role and functions.

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APPENDICES

APPENDIX A

Survey Letters

VMHCA Virginia Mental Health Counselors Association

May 23, 1987

I am writing to encourage your participation in a study being conducted by Sam Clemons, a licensed professional counselor and doctoral candidate at Virginia Tech.

This study is designed to determine job stress and job satisfaction of licensed professional counselors in Virginia and investigate relationships between certain demographic variables and job satisfaction levels. Since all analysis will be of group data only, your individual responses will be kept in strict confidence.

I urge you to assist Sam by taking 15-20 minutes to complete and return the materials you will receive in a few days. His study will produce information helpful in the development of the profession of counseling.

Thank you for your cooperation and assistance.

Sincerely yours,

, M.Ed., LPC
President
VMHCA

VIRGINIA TECH

Division of Administrative
and Educational Services

University City Office Building
Blacksburg, VA 24061

May 26, 1987

Respond to:

Covington, Virginia 24426

A few days ago you received a letter from President Sidley of Virginia Mental Health Counselors Association regarding my study. I am investigating occupational stress and job satisfaction of licensed professional counselors in Virginia for my dissertation at Virginia Tech, and I am requesting your assistance. Your name has been selected at random from a current list of licensed professional counselors.

The materials that are enclosed--two questionnaires and an information form--will require 15 to 20 minutes to complete. Please have a cup of coffee and take time out to respond. Please complete the green data form first. I urge you to return your completed packet in the enclosed envelope by return mail.

You may be assured of complete confidentiality. The number on the forms is to keep the forms together, to check your name off when your response is received, and for follow-up of non-respondents. Your name will never be placed on the materials, and only group scores will be reported.

The results of this research will be made available to counselor educators and organizations in Virginia. Your response is needed for the success of this study. I will be glad to answer any questions you may have; please write or call . Please mail your completed materials by Tuesday, June 2, 1987.

Thank you for your help.

Sincerely,

Clell R. Clemons, Jr.
Licensed Professional Counselor

tla

Enclosures

June 9, 1987

A few days ago a questionnaire seeking your input on occupational stress and job satisfaction of licensed professional counselors in Virginia was mailed to you.

I sincerely thank you if you have already completed and returned it. If not, please do so today. Because of the small but representative sample, it is extremely important that yours be included if the results are to accurately represent the licensed professional counselors in Virginia.

If you did not receive the materials or they got misplaced, please call me right now collect - , and I will mail another to you today. Thank you!

Sincerely,

Clell R. Clemons, Jr.
Licensed Professional Counselor

VIRGINIA TECH

Division of Administrative
and Educational Services

University City Office Building
Blacksburg, VA 24061

June 23, 1987

Respond to:

About three weeks ago I wrote to you seeking your input on occupational stress and job satisfaction of licensed professional counselors in Virginia as part of my dissertation research at Virginia Tech. As of today, your completed questionnaire has not yet been received.

I am writing to you because of the importance your questionnaire has to the usefulness of this project. Your name was drawn as a result of a scientific sampling in which every licensed professional counselor in Virginia had an equal chance of being selected. In order for the results of this research to be truly representative of all licensed professional counselors in Virginia, it is essential that each person in the sample return his/her questionnaire. Perhaps the activities of the past few weeks have caused you to overlook, misplace, or put the materials aside for a less busy time. For your convenience, I have enclosed a duplicate set of materials and a stamped return envelope. Please take a few minutes from your busy schedule to have a cup of coffee and complete and return the survey to assure the validity of the study.

Again, your individual responses will remain strictly confidential. Please reply by Friday, July 3, 1987. If you have any questions, call me collect at (

I look forward to hearing from you. Thank you for your cooperation.

Sincerely,

Clell R. Clemons, Jr.
Licensed Professional Counselor

tla

Enclosures

VIRGINIA TECH

Division of Administrative
and Educational Services

University City Office Building
Blacksburg, VA 24061

July 7, 1987

A month ago a sample of 400 licensed professional counselors in Virginia were requested to participate in a study by Sam Clemons. The response rate of 75% to date best expresses the enthusiastic cooperation of Virginia's licensed professional counselors.

Sam's records indicate he has not yet received your completed materials. I will appreciate it very much if you will assist Sam because your responses are vital to his study, the results of which will provide data on occupational stress and job satisfaction of licensed professional counselors in Virginia. Individual responses are held in strictest confidence.

Won't you please take a few minutes to complete the enclosed survey forms and forward them to Sam in the stamped return envelope.

Thank you for your assistance.

Sincerely yours,

Carl McDaniels, Professor
Program Area Leader
Counselor Education

tla

Enclosures

APPENDIX B

Data Form

Data Form

1. In general, how do you rate your stress with your present position? (Please circle number of your answer.)
   1. VERY STRESSED 2. STRESSED 3. CAN'T DECIDE 4. SLIGHTLY STRESSED 5. NO STRESS

2. Please list the most stressful factors of your present position.
   1. _____ 2. _____
   3. _____

3. Please list the least stressful factors of your present position.
   1. _____ 2. _____
   3. _____

4. To what extent do you perceive opportunity for advancement or expansion of opportunity in your practice, agency, or institution? (Circle number.)
   1. NONE 2. VERY LITTLE 3. FAIR 4. GOOD 5. EXCELLENT

5. In general, how do you rate your satisfaction with your present position? (Please circle number of your answer.)
   1. VERY DISSATISFIED 2. DISSATISFIED 3. CAN'T DECIDE 4. SATISFIED 5. VERY SATISFIED

6. Please list the three most dissatisfying factors of your present position.
   1. _____ 2. _____
   3. _____

7. Please list the three most satisfying factors of your present position.
   1. _____ 2. _____
   3. _____

8. What is your current degree status? (Circle number.)
   1. BS/BA 2. MASTERS 3. CAGS or EDS 4. DOCTORATE

9. In which curriculum did you receive your highest degree?
   1. COUNSELOR EDUCATION 2. PSYCHOLOGY 3. SOCIAL WORK
   4. OTHER _____ (Please specify.)

10. Are you presently pursuing a degree or continuing your education? (Circle number.) 1. YES 2. NO

11. What is the educational level of your immediate supervisor? (Circle number.)
    1. BA/BS 2. MASTERS 3. CAGS or EDS 4. DOCTORATE 5. UNKNOWN

12. How many years experience do you have as a counselor? (Circle number.)
    1. 1-5 2. 6-10 3. 11-15 4. 16-20 5. 21-25 6. OVER 25 _____

13. In what year were you licensed as a professional counselor in Virginia?

_____

14. How many hours a week do you work? (Circle number.)
1. 0-10 2. 11-20 3. 21-30 4. 31-40 5. OVER 40

15. How long do you plan to stay in your present position? _____ YEARS

16. Do you plan to continue working in the Commonwealth of Virginia?
(Circle number.) 1. YES 2. NO

17. How many years do you plan on staying in the counseling profession?

_____ YEARS

18. If you change professions, what profession do you plan to enter?

_____

19. Please list other licenses or certifications you hold. _____

_____

20. Please circle the numbers indicating professional organizations with which you are affiliated. 1. VIRGINIA COUNSELORS ASSOCIATION
2. AMERICAN PSYCHOLOGICAL ASSOCIATION 3. NATIONAL EDUCATION ASSOCIATION
4. VIRGINIA EDUCATIONAL ASSOCIATION 5. NATIONAL BOARD FOR CERTIFIED COUNSELORS 6. AMERICAN ASSOCIATION FOR COUNSELING AND DEVELOPMENT
7. AMERICAN MENTAL HEALTH COUNSELORS ASSOCIATION 8. OTHERS (Please specify) _____

21. Please circle the number of the type organization for which you work.
1. EDUCATION 2. GOVERNMENTAL AGENCY 3. PRIVATE BUSINESS WHICH OFFERS COUNSELING SERVICES TO THE PUBLIC 4. PRIVATE BUSINESS, THE PURPOSE OF WHICH IS NOT TO PROVIDE COUNSELING SERVICES 5. OTHER (Please specify)

_____

22. Which best describes your present role? (Circle number.)
1. PRIVATE PRACTITIONER 2. PRACTITIONER EMPLOYED BY OTHERS
3. COUNSELOR EDUCATOR 4. SUPERVISOR/ADMINISTRATOR 5. OTHER (Please specify) _____

23. What is your average caseload? _____

24. Your race. (Circle number.) 1. HISPANIC 2. WHITE 3. BLACK
4. ASIAN 5. NATIVE AMERICAN 6. OTHER (Please specify) _____

25. Your approximate income. (Circle number.)
1. LESS THAN $12,999 2. $13,000 TO $19,999 3. $20,000 TO $29,999
4. $30,000 TO $39,999 5. $40,000 AND OVER

26. In the near future, what is the probability for growth in your practice? (Circle number.) 1. NONE 2. VERY LITTLE 3. FAIR 4. GOOD 5. EXCELLENT

27. In what way do you feel stress on your job relates to stress in the rest of your life?

_____

_____

Is there anything else you would like to say about your stress and satisfaction with your position? If so, please use this space for that purpose.

Also, any comments you wish to make that you think may help in future efforts to understand what licensed professional counselors in Virginia want to increase job satisfaction or reduce stress will be appreciated, either here or in a separate letter.

Your contribution to this effort is greatly appreciated. If you would like a summary of results, please mail a post card with your request and your return address.

APPENDIX C

Minnesota Satisfaction Questionnaire

minnesota satisfaction questionnaire

Vocational Psychology Research

UNIVERSITY OF MINNESOTA

minnesota satisfaction questionnaire

The purpose of this questionnaire is to give you a chance to tell **how you feel about your present job,** what things you are **satisfied** with and what things you are **not satisfied** with.

On the basis of your answers and those of people like you, we hope to get a better understanding of the things people **like and dislike about their jobs.**

On the following pages you will find statements about your **present** job.

- Read each statement carefully.
- Decide **how satisfied you feel about the aspect of your job** described by the statement.

  Keeping the statement in mind:

  — if you feel that your job gives you **more than you expected,** check the box under **"Very Sat."** (Very Satisfied);

  — if you feel that your job gives you **what you expected,** check the box under **"Sat."** (Satisfied);

  — if you **cannot make up your mind** whether or not the job gives you what you expected, check the box under **"N"** (Neither Satisfied nor Dissatisfied);

  — If you feel that your job gives you **less than you expected,** check the box under **"Dissat."** (Dissatisfied);

  — if you feel that your job gives you **much less than you expected,** check the box under **"Very Dissat."** (Very Dissatisfied).

- Remember: Keep the statement in mind when deciding **how satisfied you feel about that aspect of your job.**
- Do this for **all** statements. Please answer **every** item.

Be frank and honest. Give a true picture of your feelings about your **present job.**

*Ask yourself: How **satisfied** am I with this aspect of my job?*

***Very Sat.** means I am very satisfied with this aspect of my job.*

***Sat.** means I am satisfied with this aspect of my job.*

***N** means I can't decide whether I am satisfied or not with this aspect of my job.*

***Dissat.** means I am dissatisfied with this aspect of my job.*

***Very Dissat.** means I am very dissatisfied with this aspect of my job.*

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
1. The chance to be of service to others.	☐	☐	☐	☐	☐
2. The chance to try out some of my own ideas.	☐	☐	☐	☐	☐
3. Being able to do the job without feeling it is morally wrong.	☐	☐	☐	☐	☐
4. The chance to work by myself.	☐	☐	☐	☐	☐
5. The variety in my work.	☐	☐	☐	☐	☐
6. The chance to have other workers look to me for direction.	☐	☐	☐	☐	☐
7. The chance to do the kind of work that I do best.	☐	☐	☐	☐	☐
8. The social position in the community that goes with the job.	☐	☐	☐	☐	☐
9. The policies and practices toward employees of this company.	☐	☐	☐	☐	☐
10. The way my supervisor and I understand each other.	☐	☐	☐	☐	☐
11. My job security.	☐	☐	☐	☐	☐
12. The amount of pay for the work I do.	☐	☐	☐	☐	☐
13. The working conditions (heating, lighting, ventilation, etc.) on this job.	☐	☐	☐	☐	☐
14. The opportunities for advancement on this job.	☐	☐	☐	☐	☐
15. The technical "know-how" of my supervisor.	☐	☐	☐	☐	☐
16. The spirit of cooperation among my co-workers.	☐	☐	☐	☐	☐
17. The chance to be responsible for planning my work.	☐	☐	☐	☐	☐
18. The way I am noticed when I do a good job.	☐	☐	☐	☐	☐
19. Being able to see the results of the work I do.	☐	☐	☐	☐	☐
20. The chance to be active much of the time.	☐	☐	☐	☐	☐
21. The chance to be of service to people.	☐	☐	☐	☐	☐
22. The chance to do new and original things on my own.	☐	☐	☐	☐	☐
23. Being able to do things that don't go against my religious beliefs.	☐	☐	☐	☐	☐
24. The chance to work alone on the job.	☐	☐	☐	☐	☐
25. The chance to do different things from time to time.	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

Ask yourself: How ***satisfied*** *am I with this aspect of my job?*

Very Sat. *means I am very satisfied with this aspect of my job.*

Sat. *means I am satisfied with this aspect of my job.*

N *means I can't decide whether I am satisfied or not with this aspect of my job.*

Dissat. *means I am dissatisfied with this aspect of my job.*

Very Dissat. *means I am very dissatisfied with this aspect of my job.*

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
26. The chance to tell other workers how to do things.	☐	☐	☐	☐	☐
27. The chance to do work that is well suited to my abilities.	☐	☐	☐	☐	☐
28. The chance to be "somebody" in the community.	☐	☐	☐	☐	☐
29. Company policies and the way in which they are administered.	☐	☐	☐	☐	☐
30. The way my boss handles his/her employees.	☐	☐	☐	☐	☐
31. The way my job provides for a secure future.	☐	☐	☐	☐	☐
32. The chance to make as much money as my friends.	☐	☐	☐	☐	☐
33. The physical surroundings where I work.	☐	☐	☐	☐	☐
34. The chances of getting ahead on this job.	☐	☐	☐	☐	☐
35. The competence of my supervisor in making decisions.	☐	☐	☐	☐	☐
36. The chance to develop close friendships with my co-workers.	☐	☐	☐	☐	☐
37. The chance to make decisions on my own.	☐	☐	☐	☐	☐
38. The way I get full credit for the work I do.	☐	☐	☐	☐	☐
39. Being able to take pride in a job well done.	☐	☐	☐	☐	☐
40. Being able to do something much of the time.	☐	☐	☐	☐	☐
41. The chance to help people.	☐	☐	☐	☐	☐
42. The chance to try something different.	☐	☐	☐	☐	☐
43. Being able to do things that don't go against my conscience.	☐	☐	☐	☐	☐
44. The chance to be alone on the job.	☐	☐	☐	☐	☐
45. The routine in my work.	☐	☐	☐	☐	☐
46. The chance to supervise other people.	☐	☐	☐	☐	☐
47. The chance to make use of my best abilities.	☐	☐	☐	☐	☐
48. The chance to "rub elbows" with important people.	☐	☐	☐	☐	☐
49. The way employees are informed about company policies.	☐	☐	☐	☐	☐
50. The way my boss backs up his/her employees (with top management).	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

Ask yourself: How ***satisfied*** *am I with this aspect of my job?*

Very Sat. *means I am very satisfied with this aspect of my job.*

Sat. *means I am satisfied with this aspect of my job.*

N *means I can't decide whether I am satisfied or not with this aspect of my job.*

Dissat. *means I am dissatisfied with this aspect of my job.*

Very Dissat. *means I am very dissatisfied with this aspect of my job.*

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
51. The way my job provides for steady employment.	☐	☐	☐	☐	☐
52. How my pay compares with that for similar jobs in other companies.	☐	☐	☐	☐	☐
53. The pleasantness of the working conditions.	☐	☐	☐	☐	☐
54. The way promotions are given out on this job.	☐	☐	☐	☐	☐
55. The way my boss delegates work to others.	☐	☐	☐	☐	☐
56. The friendliness of my co-workers.	☐	☐	☐	☐	☐
57. The chance to be responsible for the work of others.	☐	☐	☐	☐	☐
58. The recognition I get for the work I do.	☐	☐	☐	☐	☐
59. Being able to do something worthwhile.	☐	☐	☐	☐	☐
60. Being able to stay busy.	☐	☐	☐	☐	☐
61. The chance to do things for other people.	☐	☐	☐	☐	☐
62. The chance to develop new and better ways to do the job.	☐	☐	☐	☐	☐
63. The chance to do things that don't harm other people.	☐	☐	☐	☐	☐
64. The chance to work independently of others.	☐	☐	☐	☐	☐
65. The chance to do something different every day.	☐	☐	☐	☐	☐
66. The chance to tell people what to do.	☐	☐	☐	☐	☐
67. The chance to do something that makes use of my abilities.	☐	☐	☐	☐	☐
68. The chance to be important in the eyes of others.	☐	☐	☐	☐	☐
69. The way company policies are put into practice.	☐	☐	☐	☐	☐
70. The way my boss takes care of the complaints of his/her employees.	☐	☐	☐	☐	☐
71. How steady my job is.	☐	☐	☐	☐	☐
72. My pay and the amount of work I do.	☐	☐	☐	☐	☐
73. The physical working conditions of the job.	☐	☐	☐	☐	☐
74. The chances for advancement on this job.	☐	☐	☐	☐	☐
75. The way my boss provides help on hard problems.	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

Ask yourself: How ***satisfied*** *am I with this aspect of my job?*

Very Sat. *means I am very satisfied with this aspect of my job.*

Sat. *means I am satisfied with this aspect of my job.*

N *means I can't decide whether I am satisfied or not with this aspect of my job.*

Dissat. *means I am dissatisfied with this aspect of my job.*

Very Dissat. *means I am very dissatisfied with this aspect of my job.*

On my present job, this is how I feel about . . .	Very Dissat.	Dissat.	N	Sat.	Very Sat.
76. The way my co-workers are easy to make friends with.	☐	☐	☐	☐	☐
77. The freedom to use my own judgment.	☐	☐	☐	☐	☐
78. The way they usually tell me when I do my job well.	☐	☐	☐	☐	☐
79. The chance to do my best at all times.	☐	☐	☐	☐	☐
80. The chance to be "on the go" all the time.	☐	☐	☐	☐	☐
81. The chance to be of some small service to other people.	☐	☐	☐	☐	☐
82. The chance to try my own methods of doing the job.	☐	☐	☐	☐	☐
83. The chance to do the job without feeling I am cheating anyone.	☐	☐	☐	☐	☐
84. The chance to work away from others.	☐	☐	☐	☐	☐
85. The chance to do many different things on the job.	☐	☐	☐	☐	☐
86. The chance to tell others what to do.	☐	☐	☐	☐	☐
87. The chance to make use of my abilities and skills.	☐	☐	☐	☐	☐
88. The chance to have a definite place in the community.	☐	☐	☐	☐	☐
89. The way the company treats its employees.	☐	☐	☐	☐	☐
90. The personal relationship between my boss and his/her employees.	☐	☐	☐	☐	☐
91. The way layoffs and transfers are avoided in my job.	☐	☐	☐	☐	☐
92. How my pay compares with that of other workers.	☐	☐	☐	☐	☐
93. The working conditions.	☐	☐	☐	☐	☐
94. My chances for advancement.	☐	☐	☐	☐	☐
95. The way my boss trains his/her employees.	☐	☐	☐	☐	☐
96. The way my co-workers get along with each other.	☐	☐	☐	☐	☐
97. The responsibility of my job.	☐	☐	☐	☐	☐
98. The praise I get for doing a good job.	☐	☐	☐	☐	☐
99. The feeling of accomplishment I get from the job.	☐	☐	☐	☐	☐
100. Being able to keep busy all the time.	☐	☐	☐	☐	☐
	Very Dissat.	Dissat.	N	Sat.	Very Sat.

APPENDIX D

Occupational Environment Scales, Form E-2

OCCUPATIONAL ENVIRONMENT SCALES, FORM E-2

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This measure is called the Occupational Environment Scales. It is designed to measure different kinds of stresses people experience in their work. On the answer sheet you'll notice that 5 stands for most of the time, and 1 for rarely. Read each statement and circle whichever of the five responses seems to fit you best for each statement. Notice that responses 2, 3, and 4 also have descriptive labels. Please be sure to respond to all 60 items, even if it is difficult to do so. Circle the most appropriate response.

Name: OMIT

Employer: _____ Job Title: _____

Birth Date: _____ Sex: _____ Male _____ Female

Today's Date: _____

How Long Employed in Present Work: _____ Years _____ Months

Most of the Time	Usually	Often	Occasionally	Rarely or Never
5	4	3	2	1

1. At work I am expected to do too many different tasks in too little time.	5	4	3	2	1
2. I feel that my job responsibilities are increasing.	5	4	3	2	1
3. I am expected to perform tasks on my job for which I have never been trained.	5	4	3	2	1
4. I have to take work home with me.	5	4	3	2	1
5. I have the resources I need to get my job done.	5	4	3	2	1
6. I feel competent in what I do.	5	4	3	2	1
7. I work under tight time deadlines.	5	4	3	2	1
8. I wish that I had more help to deal with the demands placed upon me at work.	5	4	3	2	1
9. My job requires me to work in several equally important areas at once.	5	4	3	2	1
10. I am expected to do more work than is reasonable.	5	4	3	2	1
11. I feel that my career is progressing about as I hoped it would.	5	4	3	2	1
12. I feel that my job fits my skills and interests.	5	4	3	2	1
13. I am bored with my job.	5	4	3	2	1
14. I feel I have enough responsibility on my job.	5	4	3	2	1
15. I feel my talents are being used on my job.	5	4	3	2	1
16. I feel my job has a good future.	5	4	3	2	1
17. I am able to satisfy my needs for success and recognition in my job.	5	4	3	2	1
18. I feel overqualified for my job.	5	4	3	2	1
19. I learn new skills in my work.	5	4	3	2	1
20. I have to perform tasks that are beneath my ability.	5	4	3	2	1

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

21. My supervisor provides me with useful feedback about my performance.	5	4	3	2	1
22. It is clear to me what I have to do to get ahead.	5	4	3	2	1
23. I am uncertain about what I am supposed to accomplish in my work.	5	4	3	2	1
24. When faced with several tasks I know which should be done first.	5	4	3	2	1
25. I know where to begin a new project when it is assigned to me.	5	4	3	2	1
26. My supervisor asks for one thing, but really wants another.	5	4	3	2	1
27. I understand what is acceptable personal behavior on my job (e.g., dress, interpersonal relations, etc.).	5	4	3	2	1
28. The priorities of my job are clear to me.	5	4	3	2	1
29. I have a clear understanding of how my boss wants me to spend my time.	5	4	3	2	1
30. I know the basis on which I am evaluated.	5	4	3	2	1
31. I feel conflict between what my employer expects me to do and what I think is right or proper.	5	4	3	2	1
32. I feel caught between factions at work.	5	4	3	2	1
33. I have more than one person telling me what to do.	5	4	3	2	1
34. I feel I have a stake in the success of my employer (or enterprise).	5	4	3	2	1
35. I feel good about the work I do.	5	4	3	2	1
36. My supervisors have conflicting ideas about what I should be doing.	5	4	3	2	1
37. I am proud of what I do for a living.	5	4	3	2	1
38. It is clear who really runs things where I work.	5	4	3	2	1
39. I have divided loyalties on my job.	5	4	3	2	1
40. The work I do has as much payoff for me as for my employer.	5	4	3	2	1
41. I feel I deal with more people during the day than I prefer.	5	4	3	2	1

REMEMBER—5 is most of the time, 4 is *usually,* 3 is *often,* 2 is *occasionally,* and 1 is *rarely or ne-*

42. I spend time concerned with the problems others at work bring to me.	5	4	3	2	1
43. I am responsible for the welfare of subordinates.	5	4	3	2	1
44. People on the job look to me for leadership.	5	4	3	2	1
45. I have on the job responsibility for the activities of others.	5	4	3	2	1
46. I worry about whether the people who work for/with me will get things done properly.	5	4	3	2	1
47. People who work for/with me are really hard to deal with.	5	4	3	2	1
48. If I make a mistake in my work, the consequences for others can be pretty bad.	5	4	3	2	1
49. My job demands that I handle an angry public.	5	4	3	2	1
50. I like the people I work with.	5	4	3	2	1
51. On my job I am exposed to high levels of noise.	5	4	3	2	1
52. On my job I am exposed to high levels of wetness.	5	4	3	2	1
53. On my job I am exposed to high levels of dust.	5	4	3	2	1
54. On my job I am exposed to high temperatures.	5	4	3	2	1
55. On my job I am exposed to bright light.	5	4	3	2	1
56. On my job I am exposed to low temperatures.	5	4	3	2	1
57. I have an erratic work schedule.	5	4	3	2	1
58. On my job I am exposed to personal isolation.	5	4	3	2	1
59. On my job I am exposed to unpleasant odors.	5	4	3	2	1
60. On my job I am exposed to poisonous substances.	5	4	3	2	.

APPENDIX E

Multiple Regression Summaries

Tables 26 through 46

Table 26

General Job Satisfaction

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.72	-.45	0.08	.44	86.10
Experience	1.85	.20	0.40	.49	21.57
Role ambiguity	-0.36	-.20	0.10	.51	14.27
Physical environment	-0.37	-.13	0.13	.52	7.65
Responsibility	0.18	.06	0.07	.53	5.85

$p > .05$

Table 27

Ability Utilization

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role Insufficiency	-Ø.36	-.69	Ø.Ø3	.58	15Ø.Ø1
Role Boundary	-Ø.11	-.15	Ø.Ø3	.6Ø	16.Ø8
Physical Environment	Ø.Ø9	.Ø3	Ø.Ø4	.61	4.14
Advancement Opportunity	-Ø.32	-.Ø8	Ø.16	.61	3.95

Table 28

Achievement

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.19	-.53	0.02	.46	69.90
Role ambiguity	-0.07	-.17	0.03	.51	5.28
Role boundary	-0.07	-.13	0.03	.52	5.18
Experience	0.26	.11	0.11	.53	5.57
Physical environment	0.09	.07	0.04	.54	5.56
Role overload	-0.04	-.11	0.02	.55	3.94

Table 29

Activity

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.14	-.35	0.03	.18	28.44
Experience	0.54	.19	0.14	.23	14.09
Gender	0.84	.12	0.38	.25	4.78
Role overload	0.07	.13	0.03	.26	4.55
Role ambiguity	-0.07	-.20	0.03	.27	6.42

Table 30

Advancement

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.34	-.49	0.03	.53	105.87
Advancement opportuniry	1.32	.32	0.21	.58	38.95
Experience	0.64	.13	0.17	.61	14.64
Physical environment	-0.15	-.08	0.06	.62	7.00

Table 31

Authority

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Responsibility	0.23	.38	0.03	.14	51.90
Role insufficiency	-0.15	-.27	0.03	.25	29.82
Experience	0.58	.18	0.17	.27	11.79

Table 32

Company Policies and Practices

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role boundary	-0.27	-.32	0.05	.28	28.29
Role insufficiency	-0.17	-.21	0.04	.35	15.50
Experience	0.71	.22	0.22	.38	10.91
Physical environment	-0.19	-.11	0.07	.40	6.48

Table 33

Compensation

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-Ø.18	-.26	Ø.Ø5	.22	15.45
Income	1.13	.23	Ø.28	.3Ø	16.19
Advancement opportunity	Ø.87	.24	Ø.28	.32	9.29
Experience	Ø.57	.16	Ø.23	.34	6.7Ø
Role overload	-Ø.12	-.14	Ø.Ø5	.35	5.81

Table 34

Co-Workers

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Physical environment	-0.21	-.21	0.07	.09	9.21
Income	-0.61	-.11	0.24	.11	6.84

Table 35

Creativity

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.24	-.50	0.03	.48	81.12
Role boundary	-0.14	-.21	0.03	.53	26.35
Gender	0.77	.14	0.35	.54	4.87

Table 36

Independence

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.14	-.31	0.02	.18	38.52
Role overload	-0.05	-.11	0.03	.20	4.22

Table 37

Moral Values

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role boundary	-0.09	-.21	0.03	.18	11.12
Experience	0.32	.14	0.11	.21	8.46
Role ambiguity	-0.08	-.24	0.03	.23	5.75

Table 38

Recognition

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.20	-.35	0.04	.33	22.95
Role ambiguity	-0.17	-.19	0.05	.37	12.75
Experience	0.52	.12	0.19	.38	7.27
Role overload	-0.09	-.13	0.04	.40	4.70

Table 39

Responsibility

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.18	-.42	0.02	.35	58.09
Role ambiguity	-0.12	-.21	0.03	.38	15.81
Responsibility	0.06	.08	0.02	.40	6.17

Table 40

Security

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Income	0.70	.20	0.25	.09	7.48
Physical environment	-0.26	-.25	0.07	.16	14.14
Experience	0.78	.21	0.21	.22	14.45
Education	-0.93	-.18	0.31	.24	9.28
Role insufficiency	-0.12	-.18	0.03	.27	11.86
Responsibility	0.10	.16	0.04	.29	6.38

Table 41

Social Service

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.16	-.52	0.03	.27	42.52
Role ambiguity	-0.08	-.17	0.03	.29	9.35
Advancement opportunity	-0.34	-.18	0.14	.31	5.92

Table 42

Social Status

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.26	-.47	0.03	.41	73.24
Experience	0.47	.18	0.15	.43	9.88
Responsibility	0.07	.12	0.03	.46	4.24

Table 43

Supervision - Human Relations

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role ambiguity	-0.36	-.42	0.07	.26	26.58
Experience	0.81	.17	0.25	.30	10.69
Physical environment	-0.20	-.13	0.08	.32	6.21
Responsibility	0.10	.08	0.05	.33	3.93

Table 44

Supervision - Technical

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role ambiguity	-0.36	-.45	0.06	.38	39.36
Role boundary	-0.11	-.20	0.05	.39	5.05
Responsibility	0.11	.10	0.05	.40	6.13
Experience	0.42	.12	0.20	.41	4.32

Table 45

Variety

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.21	-.50	0.03	.37	58.33
Experience	0.46	.15	0.14	.39	11.13
Role boundary	-0.07	-.18	0.03	.40	5.60
Gender	0.86	.14	0.37	.41	5.53

Table 46

Working Conditions

Multiple Regression Summary

Variable	b	Beta	Standard Error	R^2	F
Role insufficiency	-0.11	-.20	0.04	.21	5.75
Physical environment	-0.33	-.32	0.07	.29	25.15
Role boundary	-0.14	-.20	0.04	.33	11.53

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