AN ANALYSIS OF JOB SATISFACTION OF SCHOOL PSYCHOLOGISTS PRACTICING IN WEST VIRGINIA

by

David C. Solly

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION
in
Counseling and Student Personnel
(Vocational School Psychology)

APPROVED:

Thomas H. Hohenshil, Chairman

Carolyn Maddy-Bernstein

Dennis E. Hinkle

Douglas T. Brown

Dean L. Hummel

July, 1983

Blacksburg, Virginia

AN ANALYSIS OF JOB SATISFACTION OF SCHOOL PSYCHOLOGISTS PRACTICING IN WEST VIRGINIA

by

David C. Solly

(ABSTRACT)

The issue of job satisfaction has become a prominent topic in research on the American worker and in discussions within the profession of school psychology. Recent literature and dialogue in the profession has suggested that many school psychologists are dissatisfied with their jobs. However, a 1982 study on a nationwide sample of school psychologists failed to substantiate the existence of wide spread dissatisfaction, suggesting that such dissatisfaction may be localized within specific populations of school psychologists.

The population of school psychologists practicing in West Virginia was selected for this study, based on demographic characteristics and a history of high turnover rates. The 137 school psychologists practicing in West Virginia were surveyed, with 125 (91.24%) responding. Survey materials included a Data Form, used to gather demographic information, and a modified form of the Minnesota Satisfaction Questionnaire (MSQ), used to measure levels and sources of job satisfaction.

The study was designed to answer five specific research questions regarding: (1) levels of job satisfaction, (2) sources of job satisfaction, (3) correlates of job satisfaction for school psychologists in West Virginia, and the comparability of (4) levels of job satisfaction and (5) correlates and sources of job satisfaction between school psy-

chologists in West Virginia and school psychologists in the national sample.

Frequency counts of Modified MSQ scores revealed that more than 35% of the school psychologists in West Virginia were dissatisfied with their jobs. Subscale means and 95% confidence intervals on the Modified MSQ indicated that co-workers, social service, activity, moral values, and independence were major sources of satisfaction, and that school system policies and practices, advancement opportunities, compensation, working conditions, and supervision were major sources of dissatisfaction for school psychologists practicing in West Virginia.

Multiple regression procedures were used to determine the relationships between overall job satisfaction scores and demographic variables. Two factors of the work environment, supervision and salary, emerged as significant predictors of overall job satisfaction.

A t test indicated that overall job satisfaction levels of West Virginia school psychologists were significantly lower than the levels reported for the national sample of school psychologists. Sources of satisfaction and dissatisfaction were essentially the same for West Virginia school psychologists and those of the national sample, but significant correlates of job satisfaction differed, leading to the conclusion that specific factors of different work environments have the greatest impact upon the job satisfaction levels of school psychologists.

Additionally, more than 80% of the school psychologists practicing in West Virginia (or twice the percentage reported in the national study) indicated that they plan to leave their present positions within five years.

Several implications were drawn from the results of the study, leading to recommendations for school psychologists, the State Department of Education, trainers and employers of school psychologists, and professional school psychology organizations. The recommendations focussed on revision of salary scales and supervision, development of educational and advancement opportunities, strategies for retaining school psychologists, and topics for additional research.

ACKNOWLEDGEMENTS

The author would like to express his appreciation to several individuals who helped to make this project a reality:

To , Coordinator of School Psychology, West Virginia Department of Education, for providing mailing lists and letters of support for the study, as well as tireless efforts in the interest of school psychology.

To Tom Hohenshil, who served as chairman of the doctoral committee and more importantly, as a mentor, advisor, critic, and friend.

To Dean Hummel, Dennis Hinkle, Doug Brown, and Carolyn Maddy-Bernstein, who served as members of the doctoral committee, offering continuous assistance, thought, direction, and support.

And finally, to my wife and daughter : Thank you for your patience, understanding, support, and love throughout this endeavor ..... "Daddy's home."

TABLE OF CONTENTS

Chapter		Page
I	Introduction	1
	Statement of the Problem	7
	Purpose of the Study	7
	Research Questions	8
	Significance of the Study	9
	Limitations	10
	Definitions	11
	Overview	13
II	Review of the Literature	14
	Job Satisfaction	15
	Definitions of Job Satisfaction	17
	Job Satisfaction, Motivation, and Needs	19
	Maslow's Hierarchy of Needs	20
	Alderfer's ERG Theory of Needs	22
	McClelland's Achievement Needs	23
	Hertzberg's Motivator-Hygiene Theory of Needs	24
	Job Characteristics Theory of Work Motivation	26
	Other Theories of Work Motivation and Needs	27
	Vocational Needs	28
	Measurement of Job Satisfaction	30
	Determinants of Job Satisfaction	33
	Salary	34
	Repetitive Tasks	36
	Task Variety	37
	Supervision	37
	Co-Workers	38
	Work Environment	39
	Advancement Opportunities	39
	Autonomy	40
	Achievement	41
	Personal Characteristics and Job Satisfaction	42
	Age	43
	Sex	46
	Race	47
	Education	47
	Job Experience	48
	Occupational Level	48
	Professional Affiliation	49

Chapter		Page
	Job Satisfaction, Burnout, and Turnover	49
	Job Satisfaction in Educational Settings	52
	Job Satisfaction in Mental Health Occupations	53
	Job Satisfaction Among School Psychologists	54
	The State of West Virginia	60
	School Psychology in West Virginia	63
	The Minnesota Satisfaction Questionnaire	68
	The Modified Minnesota Satisfaction Questionnaire	72
	Summary	73
III	Methodology	74
	Participants	74
	Instrumentation	74
	Data Form	75
	Modified Minnesota Satisfaction Questionnaire	76
	Data Collection	77
	Research Questions	79
	Data Analysis	80
	Treatment of Data	80
	Statistical Analysis	81
	Summary	84
IV	Results of the Study	85
	Survey Response	85
	Demographic Data	87
	Primary Role Designation	87
	Sex	89
	Age	89
	West Virginia Native	89
	Continuing Education	89
	Current Degree Status	91
	Co-workers	91
	Experience	91
	Psychologist to Student Ratio	94
	Annual Evaluation Caseload	94
	Professional Affiliation	94
	Salary	97
	Supervision	97
	Plans to Remain in Present Position	101
	Plans to Remain in the Profession	101
	Intended Direction of Movement	101
	Job Satisfaction	104
	Satisfaction with the Community	104
	Type of Community	104

Chapter		Page
	Statistical Properties of the Modified Minnesota Satisfaction Questionnaire	105
	Reliability	105
	Validity	105
	Job Satisfaction of School Psychologists in West Virginia	106
	Sources of Job Satisfaction	108
	Relationships Between Overall Job Satisfaction Scores and Selected Demographic Variables	108
	Perceived Sources of Satisfaction and Dissatisfaction	113
	Comparison of West Virginia School Psychologists and Those of a National Sample	115
	Overall Job Satisfaction	115
	Sources of Job Satisfaction	116
	Correlates of Job Satisfaction	118
	Demographic Characteristics	118
	Summary	119
V	Discussion and Recommendations	120
	Review of the Research Questions and Methods	120
	Summary of Results and Conclusions	122
	Discussion	126
	Levels of Overall Job Satisfaction	126
	Sources of Job Satisfaction and Dissatisfaction	128
	Job Satisfaction and Demographic Variables	131
	Comparison of West Virginia School Psychologists and Those of a National Sample	132
	Implications of the Study	133
	Recommendations	136
	Recommendations for the Profession	136
	Recommendations for Additional Research	138
	Summary	139
	Footnotes	140
	References	141

Chapter		Page
Appendices		152
Appendix A:	Data Form	153
Appendix B:	Modified Minnesota Satisfaction Questionnaire	156
Appendix C:	Minnesota Satisfaction Questionnaire	160
Appendix D:	Cronbach Alpha Reliability Coefficients for the Modified MSQ	165
Appendix E:	Survey Letters	166
Appendix F:	Overall Correlation Matrix	169
Appendix G:	Metropolitan Areas in West Virginia	172
Appendix H:	Urban School Districts in West Virginia	174
Appendix I:	Rural School Districts in West Virginia	175
Vita		178

LIST OF TABLES

Table		Page
I	Turnover of West Virginia School Psychologists, 1974 - 1982	67
II	Survey Response Rates	86
III	Primary Role Designation	88
IV	Age Distribution	90
V	Current Degree Status	92
VI	Experience	93
VII	Psychologist to Student Ratio	95
VIII	Professional Affiliation	96
IX	Supervisor's Role Designation	98
X	Supervisor's Area of Training	99
XI	Supervisor's Level of Training	100
XII	Plans to Remain in Present Position	102
XIII	Plans to Remain in the Profession	103
XIV	Crosstabulation of Job Satisfaction Ratings and Overall Job Satisfaction Scores	107
XV	Hierarchy of Modified MSQ Scales	109
XVI	Multiple Regression Summary	111
XVII	Multiple Regression Summary	112
XVIII	Perceived Sources of Satisfaction and Dissatisfaction	114
XIX	Comparison of Overall Job Satisfaction Levels	117

CHAPTER I

INTRODUCTION

As Americans have become more and more interested in the complex workings of their world, and have increasingly focused on mental health issues, the topic of job satisfaction has gained an important place in the literature. Beginning in the specialties of industrial and organizational psychology, job satisfaction research has spread to other specialties within psychology and other disciplines as well. Subject titles such as "job satisfaction," "vocational adjustment," "work motivation," and "burnout" are found throughout Psychological Abstracts and ERIC listings and encompass research in areas such as counseling psychology, career counseling, vocational rehabilitation, and business management.

Job satisfaction has been viewed as an important variable in worker productivity (Gruneberg, 1976; 1979), personal adjustment (Coles, 1978; Vensel, 1981), and has been linked to overall mental and physical health (Gurin, Veroff and Feld, 1960; Kornhauser, 1965; O'Toole, 1973; Portigal, 1976). Job satisfaction has also been found to have significant effects on life satisfaction in general, as well as the individual worker's community and social adjustment (Hulin, 1969; Smith, Kendall, and Hulin, 1969).

Historically, the study and discussion of job satisfaction can be traced back more than a century, but the emergence of the topic

as a major focus of scientific investigation was most dramatically brought about by the Hawthorne Studies of the late 1920's (Landsberger, 1979). Roethlisberger and Dickson (1939) published extensive volumes on research conducted at the Hawthorne Works of the Western Electric Company in Chicago and Cicero, Illinois, aimed at studying the effects of environmental changes on worker attitudes, motivation, and productivity. The results of these studies convinced the researchers and their supervisors that social factors influence workers' satisfaction with their job tasks and environment, affecting productivity (Landsberger, 1979). Following the Hawthorne Studies, professionals in management and industrial psychology have researched ways to increase worker happiness, satisfaction, and productivity.

The interest in job satisfaction that was aroused by the Hawthorne Studies has not waned in recent years. Locke (1969) estimated that over 2,000 articles and books had been written before 1969. Quinn, Staines, and McCullough (1974) reported that results of fifteen national surveys or Gallop polls were published on worker satisfaction during the fifteen year period between 1958 and 1973. Schultz (1982) further reports that over two-hundred articles and books are published annually on the topic of job satisfaction.

Although there has been considerable research done on job satisfaction, there continues to be disagreement in the literature regarding the amount and significance of worker dissatisfaction. In the 1970's, estimates of the proportion of dissatisfied workers

ranged from 10% to 20% of the work force. While some authors expressed concern over the proportion of dissatisfied workers (Barbash, 1976; Fein, 1976; O'Toole, 1974; Shepard and Herrick, 1972; Strauss, 1975), others related with great optimism that a very high percentage of workers were satisfied (Gomberg, 1973; Nord, 1977; Winspinger, 1973; Wool, 1973). Most recently, Schultz (1982) reports that 10-13% of the American work force is dissatisfied, ranging from a high of 22% in non-white workers to a low of 7% in workers over the age of 50.

Although the percentages of dissatisfied workers may differ across situations, worker characteristics, and occupational types, the issue of dissatisfaction is, in itself, worthy of concern and investigation. The importance of work to the individual has been vividly illustrated by Coles (1978), Fournet, Distefano, and Pryer (1969), Lawler and Porter (1967), and Schultz (1982) in areas such as self concept, self description, social interactions, and overall physical and mental health. Gurin (1960) and Kornhauser (1965) have identified job dissatisfaction as a key mediating variable in the mental health of blue collar workers. Dissatisfaction has also been linked to high risk of heart disease, psychosomatic illness, and poor self esteem (O'Toole, 1973).

While job satisfaction research had its beginnings in industrial settings and long focused on the industrial worker, recent studies have begun to include the non-industrial worker as well. Most recently, the educational setting has become the target of job

satisfaction research. Research within the educational setting has generally focused on the topics of burnout and turnover, described by Schultz (1982) as being directly related to job dissatisfaction. However, few empirical studies have been conducted.

Considering the interest that psychologists have in job satisfaction, it could be presumed that analysis of satisfaction within this profession itself would be commonplace. However, such is not the case, particularly in educational settings. A review of the professional literature in school psychology indicates that there is great interest in, and concern over school psychologists' job satisfaction (Fagan, 1981a; Guidubaldi, 1981; Hart, 1983; Trachtman, 1981), but little research devoted to the topic. A comprehensive review of the literature yielded only five items related to job satisfaction issues in school psychology. These items included turnover rates in urban and rural settings (Hughes and Clark, 1981), burnout of school psychologists (Reiner and Hartshorne, 1982), perceived sources of satisfaction and dissatisfaction of school psychologists (Miller, Witt, and Finley, 1981), and levels and correlates of job satisfaction of members of the National Association of School Psychologists (Anderson, 1982).

The topics of job satisfaction, role limitations, and abilities utilization are regularly focal points for school psychologists in both informal discussions and professional meetings. School psychologists have often expressed their concern over inability to expand their roles beyond traditional assessment (Fagan, 1981a;

Guidubaldi, 1981; Hart, 1983). Fagan (1981b) states that some school psychologists use as little as ten percent of their 60 semester hours of professional training on the job. Trachtman (1981) reiterates this point, citing current economic factors, governmental regulation, and institutional working conditions as key variables inhibiting the scope of school psychologists' professional activity. Trachtman goes on to say that few school psychologists can ever hope to be employed in settings where all of their competencies and professional training will be required or used.

Prior to the enactment of P.L. 94-142 (The Education of All Handicapped Children Act of 1975), professional preparation programs in school psychology had begun to expand their training to include the teaching of such skills as consultation, program evaluation, parent training, and direct intervention, and to encourage students to expand their roles beyond the traditional one of individual assessment. Thus, graduates of school psychology training programs were well-trained generalists in the profession of psychology, equipped to provide a variety of services within educational settings (Guidubaldi, 1981). However, the mandates of P.L. 94-142 have served to limit the use of school psychologists' broad preparation, creating a demand for assessments and triennial re-evaluations that often exceeds the number that can reasonably be provided by existing qualified personnel. The demand for assessments has also generally superceded the demand for other services that school psychologists are prepared and willing

to provide (Guidubaldi, 1981; Hart, 1983). This under-utilization of skills has led Bardon (1981) to suggest that school psychologists in general face apathy, detachment, lack of professional commitment, and burnout; factors which Schultz (1982) links to job dissatisfaction.

Nationally, school psychology is a young profession that has experienced dramatic growth over the past two decades. In the State of West Virginia, the profession is even younger and has grown more rapidly than at the National level over the past decade. Prior to 1975, there were only five certified school psychologists practicing in the public schools of West Virginia. This number has risen to a total of 137 in December, 1982 (West Virginia State Department of Education, 1975-82).

If school psychologists across the nation face problems associated with under utilization of abilities, excessive assessment caseloads, and youthful professional identity crises, the situation is probably amplifed for those in West Virginia. Hughes (1982) reported that school psychologists practicing in rural areas face higher psychologist-student ratios, tend to be newer in their profession, and tend to remain in their positions for shorter periods of time than those in urban areas. She suggests that the issues facing school psychologists across the nation tend to be greater in rural areas. Since most school psychologists in West Virginia practice in rural areas, it is reasonable to assume that they also face issues of a greater magnitude than those found at the national level.

Statement of the Problem

While job satisfaction of school psychologists has recently become a focus of concern, few authors have directly confronted the issue. A comprehensive review of school psychology and job satisfaction literature produced only four items which directly address job satisfaction issues among school psychologists. These articles included only one empirical study which employed an in-depth criterion measure. Conversations among school psychologists in West Virginia and the rapid turnover rates emphasize the question of whether or not these individuals are satisfied. The problem is that levels and determinants of job satisfaction of school psychologists practicing in West Virginia are unknown.

Purpose of the Study

This study is designed to investigate and describe the levels, sources, and correlates of job satisfaction of school psychologists practicing in West Virginia. The study is further designed to compare school psychologists in West Virginia with those from across the nation regarding aspects of job satisfaction and demographic characteristics.

Job satisfaction has been shown to be an important factor in an individual's job performance, emotional and physical well-being, and generally quality of life. Many of the factors that have been related to lowered levels of job satisfaction appear indigenous to the role and work environment of the school psychologist. Determining

the nature and impact of these factors upon the job satisfaction of school psychologists practicing in West Virginia will aid state agencies, local school districts, and school psychologists themselves in the development and implementation of programatic changes to improve the overall quality of working life for psychologists as well as the quality of psychological service delivery to schools in the state. Comparisons of job satisfaction factors and demographic characteristics between school psychologists at the national level and those in West Virginia will add to the understanding of the commonalities and differences among psychologists practicing in different environments, and serve as a cornerstone for future research with specific populations of school psychologists.

Research Questions

The following research questions have been posed to fulfill the purpose of this study:

1. What are the levels of overall job satisfaction of school psychologists practicing in West Virginia?
2. What are the major sources of job satisfaction and dissatisfaction for school psychologists practicing in West Virginia, particularly those subfactors measured by the Modified Minnesota Satisfaction Questionnaire?
3. What is the relationship between the overall job satisfaction of school psychologists practicing in West Virginia and demographic variables that have been linked to variations in job satisfaction?

4. How do school psychologists practicing in West Virginia compare with those of a national sample, in terms of levels of overall job satisfaction (as measured by the Modified Minnesota Satisfaction Questionnaire)?
5. How do school psychologists in West Virginia compare with those of a national sample, in terms of sources and correlates of job satisfaction ?

Significance of the Study

Professional literature indicates that job satisfaction has a direct and substantial impact on the quality and quantity on work an individual produces (Fein, 1976; Gruneberg, 1976; Hoppock, 1935; Landsberger, 1979; Roethlisberger and Dickson, 1939; Schultz (1982) and on the overall health and well-being of the individual (Gurin, Veroff, and Feld, 1960; Hulin, 1969; O'Toole, 1974). It has also been suggested that an individual's job satisfaction can affect other individuals within the organization through related absenteeism (Cheloha and Farr, 1980), expressions of attitude (Pines and Maslach, 1978) and involvement with co-workers or the organization itself (Cheloha and Farr, 1980; Schultz, 1982). However, there has been little research done outside of the industrial setting, particularly in the educational environment. Specifically, research involving school psychologists is both lacking and warranted.

The central role of school psychologists in West Virginia in assessment and decision-making processes where children are concerned (Lynn, 1980; Sealy, 1982; Solly, 1978) dictates quality of thought

and job involvement. The issue of job satisfaction becomes trenchant where the quality of work and decision-making processes are affected.

The results of this study will be of value to both training programs and school systems. School systems can make use of the information of this study in their attempts to recruit and retain qualified school psychologists, by providing continuing education opportunities and more conducive working conditions. Since most school psychologists in West Virginia practice in rural areas, much of the information provided by the study may be useful to school psychologists in other rural areas. Training programs can use the information to better prepare students who will be employed in West Virginia and other rural areas for the realities of their positions. A review of job listings in several national publications reveals that more than eighty percent of the current position vacancies in school psychology exist in rural areas. Most importantly, the results of this study will be of value to school psychologists themselves, in West Virginia and other rural areas, to facilitate their understanding of their own satisfaction, to generate discussion, and to aid in the construction of professional development activities to help school psychologists deal with the potential satisfiers and dissatisfiers of their unique positions.

Limitations

The population for this study consists of practicing school psychologists in West Virginia. While the State of West Virginia shares

many characteristics with other primarily rural areas and the country as a whole, some socio-political and demographic variables must necessarily differ. Cultural and ethnic minorities are not represented in the state in proportion to those in the U.S. population. Additionally, West Virginia is the only state in the nation in which the subdivision of school districts falls exclusively along the jurisdictional lines of counties.

Therefore, the results of this study apply only to school psychologists practicing in West Virginia. However, the information provided in the comparison of West Virginia school psychologists and those of the national sample will allow for generalized discussion regarding characteristics of satisfied and dissatisfied psychologists.

Definitions

In the context of this study, the following operational definitions apply:

(1) West Virginia School Psychologists - those individuals who:

(a) designate "practitioner" as their primary role,

(b) are employed by one of the 55 county school systems, eight Regional Education Service Agencies (RESAs), or by a branch of the State Department of Education within the territorial boundaries of the State of West Virginia, and

(c) are certified (either provisionally, fully, permanently, or by permit) as school psychologists by the

West Virginia State Department of Education. (West Virginia law has no provision for licensure of school psychologists for private practice.)

(2) Job Satisfaction - the emotional state perceived by individuals when thinking about their jobs. This state is assumed to be reflected in a summated overall job satisfaction score on the Modified MSQ.

(3) Minnesota Satisfaction Questionnaire (MSQ) - an instrument designed by Weiss, Dawis, England, and Lofquist (1967) to measure overall job satisfaction and 20 specific sources of satisfaction for the worker, including: ability utilization, achievement, activity, advancement, authority, company policies and practices, compensation, co-workers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, and working conditions.

(4) Modified Minnesota Satisfaction Questionnaire (MMSQ) - a modified form of the MSQ, altered with the permission of the publisher,[1] to be more applicable to school psychologists. (The Modified MSQ is discussed in detail in Chapters II and III, and appears in Appendix B.)

(5) Selected Demographic Variables - those variables responded to by study participants on the Data Form, including: pri-

mary role designation, sex, age, current degree status, co-workers, psychologist to student ratios, annual evaluation caseload, salary, years experience as a school psychologist, years experience in current position, teaching experience, plans to remain in current position and the profession of school psychology, role designation, area, and level of training of primary supervisor, type of community, professional organization affiliations, satisfaction with the community, and personal rating of job satisfaction.

Overview

This study is intended to provide information on the job satisfaction of school psychologists in West Virginia. Chapter I presents a description of the problem, the purpose of the study, and its potential value to trainers, employers, state organizations, and school psychologists. Limitations of the study are discussed and principal terms are defined. Chapter II provides a review of the professional literature regarding historical perspectives, current trends, and determinants of job satisfaction, as well as reviews of job satisfaction issues in educational settings, mental health occupations and school psychology. Chapter III details the methodology of the study, including research questions, descriptions of the population, instrumentation, and data collection and analysis procedures. Results of the data analysis are included in Chapter IV. Chapter V consists of discussion of the results, conclusions, and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

The issue of job satisfaction of school psychologists has been the subject of much speculation in recent years. The profession's literature is frequented by inferences to the discrepancies between school psychologists' competencies and role functions, leading to job dissatisfaction. Discussions among school psychologists tend to reinforce these views. Intuitively, disparities between school psychologists' role functions and their competencies and role desires would be expected to lead to conflict and job dissatisfaction. However, prior to Anderson's (1982) study, empirical evidence on the amount of satisfaction or dissatisfaction within the profession was most limited. While Anderson's landmark research is most certainly a harbinger of investigative need, it can be argued that such a study, conducted with a random national sample of the membership of a professional organization falls short of providing all of the necessary information on sources of satisfaction and dissatisfaction of school psychologists. In fact, the inclusion of such a diverse sampling may tend to mute the effects on overall job satisfaction of the various demographic and regulatory features which are unique to specific locales and job situations. It then follows that studies of job satisfaction within specific populations of school psychologists are required to fully understand the situational variables

which determine the nature and extent of job satisfaction within the profession.

Literature pertinent to the investigation of job satisfaction of school psychologists in West Virginia is summarized in this chapter. An overview and definitions of job satisfaction are presented, and job satisfaction is discussed in relation to human needs and motivation. Issues involving the measurement and determinants of job satisfaction are detailed. Additionally, job satisfaction is surveyed in educational settings, mental health occupations, and school psychology. The final section of the chapter details characteristics of the State of West Virginia and provides a perspective on the profession of school psychology within the state.

Job Satisfaction

An individual's work has been viewed as a critical role and central life activity in American society (Kasl, 1977). Beck (1983) and Schultz (1982) indicate that, for most individuals, work is the major source of income, consumes more of one's life than any single activity other than sleep, and is the most significant source of social contact and self-concept. Many individuals are more commonly identified by their occupations than by their names. Coles (1978) states that most people find it difficult to describe themselves without including a statement of what they do for a living.

Job satisfaction issues first gained extensive professional attention as a result of Roethlisberger's and Dickson's (1939) Hawthorne Studies. Work and environmental factors were related to

productivity and work efficiency, arousing the interest of industrial management. Within the industrial community, job satisfaction became a topic of research which was both encouraged and supported by management. While earlier research had focussed primarily on the effects of working conditions and salaries on worker productivity, the Hawthorne Studies added the dimensions of worker expectations and the influence of social factors to the study of job satisfaction. The inclusion of co-workers, supervisors, type of work, and other personality factors in the investigation of job satisfaction prompted Hoppock (1935) to conclude that individuals vary in their personal degree of satisfaction with work.

Beginning as research to improve the efficiency of blue collar workers, job satisfaction research has developed through several stages. Social and personality factors were viewed as significant influences on job satisfaction and included as research variables. Studies moved beyond blue collar workers to include technical and managerial personnel, and have most recently expanded past the industrial setting to include workers in all types of occupations (Beck, 1983; Schultz, 1982).

More pungent terminology has recently permeated professional literature relating to job satisfaction. Possibly a sign of the times, or more probably an indicator of the maturity and gravity of the issue itself, current studies report on burnout, turnover rates, and loss of involvement in work itself. Irregardless of terminology, research involving the issues in job satisfaction has served to

heighten the awareness of the importance of work in everyday life.

Definitions of Job Satisfaction

There have been many views and definitions of job satisfaction, with researchers commonly defining the term to suit their own purposes. Because of the high interrelationship between job satisfaction, work motivation, and morale, these terms are frequently used interchangeably. Carroll (1973) suggests that more precision is required in defining the specifics of job satisfaction. Schultz (1982) views job satisfaction as simply "a measure of the quality of working life" (p. 287), while Locke (1969) reports job satisfaction to be the converse of dissatisfaction, defined as a negative emotional state associated with a combination of tasks required for financial or other material remuneration. Beck (1983) suggests that job satisfaction consists of the sense of achievement or fulfillment individuals derive from their work. Cooper, Morgan, Foley, and Kaplan (1979) state that the concept of job satisfaction has changed, from the traditional view that higher pay means higher satisfaction to a more contemporary hierarchy of social influences and personal fulfillment. In support, they cite a study in which workers who had initially reported satisfaction with their jobs revealed major discontent with factors such as quality of leadership and ability to grow on the job, when questioned in more detail.

Job satisfaction has been conceptualized as both a general construct and a composite grouping of several needs. Bockman (1971), Hoppock (1935), Lofquist and Dawis (1975), and Mortimer (1979) are

among those who assume the existence of a global or general factor of job satisfaction. Hinrichs' (1969) factor analysis of job satisfaction lends support to this position.

Other theoretical models of job satisfaction view the construct as additive, in which the effects of factors composing job satisfaction are summed to provide an overall feeling or perception within the individual. This position is supported by research which illustrates that workers can reliably differentiate between the specific components of work, attaining a subjective rating of their satisfaction with each factor (Cooper, et al., 1979; Hinrichs, 1968; Hoppock, 1935; Hulin, 1963; Locke, 1969; 1976; Weiss, Dawis, England, and Lofquist, 1967).

Traditionally, job satisfaction has been viewed as existing on a continuum, with high and low levels of satisfaction (or dissatisfaction) at opposite ends. Degrees of job satisfaction or dissatisfaction are assumed to be determined by interactions of work and environmental factors, leading to positive and negative emotions. Such a bipolar model includes a neutral or balancing point, with various factors presumably impacting differently upon the balance.

Hertzberg (1966) and Schultz (1982) present two unconventional approaches to the definition of job satisfaction. Hertzberg's model places job satisfaction and dissatisfaction on two unipolar, parallel continua, assuming that factors contributing to job satisfaction are qualitatively different from those contributing to dissatisfaction, with the relative balance arising from the weights of the two

continua. Schultz (1982) suggests that there exists a hierarchy of job satisfaction, based on three distinct occupational levels. Between these levels exist hierarchy gaps, with inherently higher levels of satisfaction at increasing occupational levels. Schultz states that at each occupational level, traditional factors have varying effects, and suggests that, in many cases, different types of factors come into play.

Although job satisfaction has been conceptualized in many ways, a central theme can be synthesized from the various researchers. Job satisfaction depends on a large number of factors, ranging from salary, to where workers must park their cars, to the sense of achievement and fulfillment individuals experience in their work. Basically, job satisfaction refers to a set of attitudes and feelings that individuals have about their jobs.

Job Satisfaction, Motivation, and Needs

Job satisfaction is frequently associated with the degree to which workers needs are fulfilled and the degree to which workers are motivated to perform their jobs. Jackson and Mindell (1980) state that there is a new breed of American worker, with different work values. The focus of the individual traditionally was outside the self, on the family, possessions by which success was measured, respectability, and loyalty to the organization, leading to pride in product or service. In the 1960's and 1970's the focus shifted to within the self; to self-fulfillment, self-actualization, and personal growth. Jackson and Mindell (1980) indicate that American

organizations in large part have not responded to the needs of the new breed of worker, leading to low worker motivation and satisfaction. Yankelovich (1979) states that an individual's needs and motivation cannot be separated.

The motivation for work is generally associated with a model of needs fulfillment which relates to needs satisfaction and job satisfaction (Atkinson and Feather, 1966; Castellano, 1975; Kornhauser, 1965; Pietrofesa and Splete, 1975; Zytowski, 1970). Essentially, when individuals' needs are met, they are happier. Career guidance is based on such a premise of needs fulfillment. Theoretically, an individual experiences high levels of job satisfaction when there is a match between personality needs and job characteristics (Blai, 1964; Kuhlen, 1963; Schaffer, 1953). Needs associated with job satisfaction fall into a number of categories. The major classifications of these needs are described below.

Maslow's Hierarchy of Needs

Abraham Maslow (1954; 1976) proposed a theory of motivation in which human needs are arranged in a hierarchy of importance. Five levels are included in the hierarchy, and according to Maslow, needs must be met in the order presented:

1. Physiological Needs - The basic human needs of food, oxygen, water, sleep, sex, and activity.
2. Safety Needs - Security, stability, order, and physical safety in one's environment.

3. Belongingness Needs - The need for affiliation, identification, affection, and social interaction.
4. Esteem Needs - Self-respect, self-esteem, success, and prestige.
5. Self-Actualization Needs - The need for self-fulfillment; the need to realize one's full potential and capabilities.

Maslow states that people constantly desire better circumstances; they always want those things that they do not have. Consequently, needs that have been met no longer motivate behavior. Since most workers can easily satisfy physiological and safety needs, and since family and work relationships often supply belongingness needs, individuals turn to the work environment for the alleviation of esteem and self-actualization needs. Within the higher level occupations, a certain degree of esteem is inherent. Psychologists often enjoy prestige simply associated with the mystique of the title (Ahrens, 1977). Thus, for occupations perceived to be at higher levels, the need for self-actualization becomes predominant.

Research on the topic of job satisfaction employing Maslow's hierarchy has been conducted, yielding conflicting results. Blai (1964) found that the major determinants of job satisfaction in a sample of federal employees consisted of job security and self-actualization. Following Maslow's hierarchy, job security would not be considered a higher order need. Wofford (1971) studied the relationship between need fulfillment and job satisfaction, concluding that the two are related. Wofford's results suggest, however, that a

positive correlation exists between ascending occupational levels and need strength. Wofford suggests that higher order needs have a greater effect on job satisfaction when lower order needs are thwarted, rather than fulfilled. This is in direct contrast to Maslow's postulate that when lower order needs go unfulfilled, higher order needs have less impact. Other researchers (Ramser, 1973; Roberts, Walter, and Miles, 1971) report mixed support for the use of Maslow's hierarchy in structuring a measure of job satisfaction.

Alderfer's ERG Theory of Needs

Because of the shortcomings of Maslow's hierarchy in applications to organizational settings, Clayton Alderfer (1972) proposed the ERG theory of work motivation. Alderfer postulates three levels of need, rather than five, that fully encompass Maslow's hierarchy. Each of the needs can be satisfied by some aspect of a job or work environment.

1. Existence Needs are at the lowest level and encompass physical survival. Included are the needs for food, water, shelter, and physical safety, which can be satisfied by employers through salary, fringe benefits, a safe working environment, and job security.
2. Relatedness Needs are those social needs involving interactions with other people. These needs for respect, emotional support, recognition, and a sense of belonging can be satisfied on the job by social relationships with co-workers and off the job by friends and family.

3. Growth Needs focus on the self and include the need for personal growth and development. Encompassing Maslow's esteem and self-actualization levels, these needs can only be satisfied by using one's capabilities to the fullest. Both esteem and growth needs must be satisfied. A job can satisfy these needs only if it involves challenge, autonomy, and creativity.

In contrast to Maslow's theory, Alderfer (1972) sees needs operating in different ways. The ERG Needs are not rigidly hierarchical; more than one need can operate at the same time. Satisfaction of one need does not automatically lead to the emergence of another. Frustration of one of the higher ERG needs can lead to reversion to a lower need. Alderfer also disagrees with Maslow's belief that once a need is satisfied, it no longer motivates behavior, suggesting in contrast that satisfaction of a need may in fact increase its intensity.

While Alderfer's (1972) theory presents promise, particularly in explaining motivation and needs in the work environment, its direct application to job satisfaction has yet to be proven. To date, there has been little research on the theory, and its true value remains to be determined.

McClelland's Achievement Needs

The desire to accomplish something, to do a good job, or to be the best typlifies many people in American society. Individuals who possess this need to achieve derive great satisfaction from their achievements. McClelland and Burnham (1953) measured and classified

the need to achieve in various individuals. Their studies revealed that individuals with higher educational levels, in positions of greater authority, and individuals who were required to make more decisions generally possessed a greater amount of the achievement need. Atkinson and Feather (1966) postulate that individuals possessing higher levels of this achievement need require greater autonomy, challenge, and task variety from the work environment to be satisfied with their jobs.

Hertzberg's Motivator-Hygiene Theory of Needs

Frederick Hertzberg (1966) proposed the notion that job satisfaction and dissatisfaction are produced by two distinct, mutually exclusive sets of needs. Motivator needs are those which stimulate the worker to the highest possible level of performance. These motivators are an integral part of the job itself and include the nature of the work as well as the individual's sense of achievement, level of responsibility, personal development, and advancement. The motivator needs can only be satisfied by stimulating, challenging, and absorbing work. Under Hertzberg's (1966) two dimensional classification system, motivator needs serve as the source of job satisfaction.

Hertzberg, Mauser, Peterson, and Capwell (1957) found that certain needs must be met by one's job to avoid dissatisfaction, leading Hertzberg (1966) to include a second dimension to his theory of job satisfaction and dissatisfaction. The Hygiene (or maintenance) needs are the factors that produce job dissatisfaction, and have little power to produce satisfaction. They involve features of the work

environment such as company policies, administrative practices, type of supervision, interpersonal relations, company benefits, and working conditions, and have little to do with the nature of the work itself. Hygiene needs are similar to Maslow's lower order needs, and failure to meet these needs leads to job dissatisfaction.

Hertzberg (1966) points out that satisfaction of hygiene needs will not produce job satisfaction, but merely an absence of dissatisfaction. Conversely, only higher order needs such as self-actualization are capable of producing job satisfaction, but failure to meet these needs does not necessarily produce dissatisfaction. The two sets of needs are separate; the presence or absence of one does not produce the opposite condition of satisfaction.

While the factors included in Hertzberg's system bear a striking resemblance to those of Maslow (1954) and Alderfer (1972), the two dimension system is the area of significant departure from the more traditional approaches. According to Hertzberg (1966), only motivator needs can produce job satisfaction, and only hygiene needs can produce job dissatisfaction.

Hertzberg's theory has been the source of much controversy. Although it has been influential in the world of work, leading to the redesign of many jobs, it has been both supported and contradicted by research. The primary criticism of the theory has been directed toward the assumption of mutual independence of motivator needs and hygiene needs (Graen and Hulin, 1968; Hackman, 1975; King, 1976).

A major impact of Hertzberg's theory has been in the redesign of

many jobs to maximize the motivational factors leading to job satisfaction (Hackman, 1980). Hertzberg (1974) pioneered the concept of job enlargement or job enrichment, and suggested six ways to enlarge a job:

1. Removal of controls over employees to increase personal accountability and responsibility for their own work.
2. Providing employees with complete or natural units of work wherever possible.
3. Giving employees additional authority and freedom over their work.
4. Providing reports on productivity directly to workers on a regular basis.
5. Encouraging workers to attempt new and more difficult tasks.
6. Assigning highly specialized tasks so that workers may become expert in a particular operation.

Several large industrial firms that have implemented job enlargement programs report increases in productivity and worker satisfaction, and decreases in operational costs (Hackman, 1980; Schultz, 1982).

Job Characteristics Theory of Work Motivation

Hackman and Oldham (1976) found evidence suggesting that certain job characteristics influenced both behavior and attitudes at work, but that these characteristics did not affect all workers in the same way. Hackman and Oldham believed that individuals differ in their need for growth, and that the presence of positive job characteristics leads employees to a positive emotional state when they perform

well on the job. This emotional state motivates employees to continue to perform well.

Hackman and Oldham (1976) have defined five Core Job Dimensions: Skill variety, task identity, task significance, autonomy, and feedback that lead to Critical Psychological States, including experiencing the meaningfulness of work, experiencing responsibility for the outcomes of work, and knowledge of actual results of work activities, that in turn produce Personal and Work Outcomes, consisting of high internal work motivation, high quality work performance, high satisfaction, and low turnover and absenteeism. The Job Characteristics Theory provides a definition of the direct substantive and emotional impact of specific dimensions of jobs and has the potential to produce a multidimensional viewscope of job satisfaction (Schultz, 1982).

Other Theories of Work Motivation and Needs

Adams (1976), Locke (1968), and Vroom (1964) present process theories of work motivation. While not as comprehensive as the content oriented theories presented above, they are worthy of note in any consideration of job satisfaction.

Vroom's (1964) Expectancy Theory of Motivation postulates that individuals make choices based on their perceived expectancy that certain rewards follow certain behaviors. In the work situation, employees will perform at the level resulting in the greatest personal benefit or payoff. Individuals will work hard with the expectancy of rewards such as increased pay or promotion. The employee's

expectancy of the value of the outcome determines the strength of the motivation and the job satisfaction.

Locke's (1968) Goal Setting Theory of Motivation states that an individual's primary motivation in the work situation can be defined in terms of one's desire to achieve a particular goal. Goals are viewed as important in motivating work behavior and in establishing a criteria to determine satisfaction.

Adams (1965) proposes that an individual's motivation is influenced by how equitably the person feels he or she is treated at work. In any work situation, an individual weighs both inputs and outcomes of effort. A balanced state, or heavily weighted outcome leads to increased motivation and job satisfaction within the Equity Theory of Motivation.

Vocational Needs

Researchers at the University of Minnesota developed the Theory of Work Adjustment as the conceptual framework for the study of job satisfaction. The model proposes that work adjustment outcomes can be predicted from knowledge of the interactions between worker personalities and work environments (Weiss, Dawis, England, and Lofquist, 1967). Within this model, worker personalities are defined as the combination of individuals' vocational abilities and vocational needs. Vocational needs are individual preferences for specific work reinforcements, including salary, variety, and working conditions (Lofquist and Dawis, 1975). Ability requirements and levels of work reinforcement then characterize work environments, and job

satisfaction becomes the primary indicator of work adjustment (Weiss, Dawis, England, and Lofquist, 1967). Within the model of work adjustment, degrees of job satisfaction directly reflect the degrees of correspondence between work personalities and work environments (Lofquist and Dawis, 1975).

The vocational needs model of job satisfaction incorporates the key principles of both Alderfer's (1972) ERG Needs Theory and the Job Characteristics Theory proposed by Hackman and Oldham (1976). Individual differences are recognized in the preference of work reinforcers, and the interaction of personality and work factors, leading to psychological or emotional states related to job satisfaction is acknowledged. The model proposed by Weiss, et al. (1967) goes beyond the theoretical level of either Maslow's (1954) hierarchy of needs or Hertzberg's (1966) motivator-hygiene theory, extending to the practical application within the work environment. Job satisfaction is viewed as a function of the interaction between intrinsic vocational needs and extrinsic work reinforcers, rather than as a product of the fulfillment of esteem and self-actualization needs. The Theory of Work Adjustment (Weiss, et al., 1967) bridges the gap in the debate within the literature over whether the significant determinants of job satisfaction are inherent within jobs or within individuals.

Mixed support has been provided for the vocational need approach. Weiss, et al. (1967) indicate that satisfaction can be predicted in a variety of work environments from the correspondence of measured vocational needs and estimated reinforcer systems. Fournet, Distefano,

and Pryer (1969) state that, because of worker-work characteristics interactions, job satisfaction can be consistently measured across a variety of occupations. Graen, Dawis, and Weiss (1968) report that individuals with different preferred reinforcers placed in the same job will experience different levels of job satisfaction. They conclude that workers seek fulfillment of different needs, since the same sources of satisfaction are available to all. Novak (1975) reports a positive correlation between preferred job reinforcers and job satisfaction for a group of vocational educators. Other authors, however, fail to support the vocational needs-work reinforcer interaction as a predictor of job satisfaction (Olson, 1975; Vessey, 1973; Warren, 1971).

Measurement of Job Satisfaction

There are a number of methods available for measuring job satisfaction. Because of the disagreements in the literature pertaining to the definition and nature of job satisfaction, considerable disagreement also exists as to how it should be measured. A major issue in the debate over how job satisfaction should be measured concerns the question of whether job satisfaction measures an individual's satisfaction with his or her career choice or specific position (Fournet, Distefano, and Pryer, 1969; Hulin, 1969; Schultz, 1982; Zytowski, 1970). Several authors suggest, however, that the two issues are interrelated, and often inseparable. Harmon (1966) was unable to measure position satisfaction and career satisfaction independently. Fournet, Distefano, and Pryer (1969) indicate that the

two constructs have an equivalent impact on overall job dissatisfaction. Beck (1983) suggests that while position dissatisfaction does not necessarily lead to career dissatisfaction the individual who is disenchanted with his or her career choice is rarely satisfied with a specific position within that career area. Hulin (1969) found that satisfaction with specific aspects of job, career, and community variables had a significant effect on satisfaction with life in general, as well as on each of the other variables.

Job satisfaction is an attitude; a collection of feelings and perceptions individuals have about their work, and thus cannot be directly measured (Lemon, 1973). Researchers attempting to measure job satisfaction must identify specific criteria which reflect the construct to make generalizations among individuals. The literature generally supports the position that the work environment is capable of fulfilling the needs that individuals attempt to satisfy through work. Individuals differ in their specific needs, and likewise, work environments differ in their capabilities to meet the needs of individual workers. A single work environment can be expected to provide the same opportunities for need satisfaction to all individuals within a position (Graen, Dawis, and Weiss, 1968), and specific occupations can be expected to attract workers with similar need patterns (Pietrofesa and Splete, 1975). The commonalities mentioned above provide a basis for the measurement of job satisfaction. Differences between workers in one specific work environment can be attributed only to individual differences in need patterns and emotions.

Differences across identical positions in different work environments add the dimension of work environment characteristics. To fully interpret any measurement of job satisfaction, individual differences must be considered and the impact of situational variables must be determined.

The personal interview has frequently been used in the measurement of job satisfaction. This technique allows the worker to discuss various aspects of the work environment with a researcher or interviewer. The major strength of the personal interview is that it allows the inclusion of variables that might not have been considered by the researcher. However, Kasl (1977) and Schultz (1982) report very low reliability and validity for this procedure, while pointing out that it is also time consuming and costly.

More recent methods used in the measurement of job satisfaction include the sentence-completion test and the critical-incidents technique. In the sentence completion test, workers are asked to associate freely and complete phrases about their jobs. The critical incidents technique requires workers to recall times that they felt extremely good or bad about their jobs and to associate these feelings with specific job incidents, which they are asked to describe. While providing a structured forum for the qualitative interpretation of work environment variables, such techniques are difficult to quantify, creating difficulties in measurement and data analysis (Beck, 1983; Schultz, 1982).

The most commonly used technique in the measurement of job

satisfaction is the questionnaire (Schultz, 1982). This technique allows a large number of workers to be surveyed and compared on a number of common variables that are of interest to the researcher. The questionnaire provides ease in measurement and has proven to be both reliable and valid (Beck, 1983). However, there are shortcomings to the technique. Only those variables selected by the researcher can be included in data analysis, and since questionnaire responses are usually voluntary and anonymous, the researcher cannot control which workers will complete the questionnaire. For example, satisfied workers may be more apt to respond than dissatisfied workers (Schultz, 1982).

Since there is neither an agreed upon definition of job satisfaction, nor a standard measurement technique, the direction taken by Hulin (1963) and Anderson (1982) is followed in this study. While recognizing the limitations to generalization, job satisfaction is defined in terms of measures. Job satisfaction is measured through the use of a questionnaire. Procedures used to assure maximum questionnaire return and effectiveness are discussed in chapter three.

Determinants of Job Satisfaction

Characteristics of the work itself and of the context or situation in which the work is performed have been determined to strongly influence job satisfaction (Schultz, 1982). While authors agree that situational factors are important in job satisfaction, they disagree on which of these factors are of the greatest importance. Situational factors are generally viewed as sources of reinforcement, or

reinforcers for the work performed. The patterns of preferred reinforcers and their effectiveness vary between individuals, occupational groups, and occupational levels (Beck, 1983; Ronan, 1970; Schultz, 1982).

A question also exists as to the nature of the relationships among situational variables and their effect on job satisfaction. Some authors have viewed these variables independently, measuring the simple relationships between singular variables and job satisfaction (Ivanovich and Donnely, 1968). Others have created regression models to account for the additive and exponential effects of combinations of variables (Hulin, 1963; Schwab and Heneman, 1977). Additionally, Hulin (1969) and Lawler and Porter (1967) reported that job satisfaction is related to satisfaction within the community and with life in general.

Salary

Salary is the most frequently reported determinant of job satisfaction in the professional literature. Traditionally, salary was viewed as being the major factor influencing employees' attitudes toward their work and productivity (Schultz, 1982). Barbash (1976), Portigal (1976), and Scanlan (1976) report that there is a clear relationship between salary and job satisfaction. Kasl (1977) states that an inadequate income leads to low levels of job satisfaction. Ewen (1966) linked pay to job satisfaction of personnel workers, and Phillips and Hays (1978) found a high correlation between the salary and level of satisfaction of mental health supervisors. Ronan (1970)

cited salary as being the major reason forwarded by administrative, professional, and clerical workers for leaving their jobs.

Conversely, Hoppock (1935) found no differences regarding pay between satisfied and dissatisfied workers. Hulin (1969) and Smith, Kendall, and Hulin (1969) suggest that salary is more closely related to a component of job satisfaction; satisfaction with pay, than to overall job satisfaction.

The overwhelming concensus, however, is that salary and job satisfaction are related. The issue is more one of the nature and extent of the relationship. Following the Hawthorne Studies, researchers began looking at factors other than salary in determining job satisfaction. The current view is that salary combined with other characteristics of the work environment and personal characteristics of the individual worker serve as strong determinants of job satisfaction (Landsberger, 1979, Schultz, 1982). Schwab and Wallace (1976) found relationships between other job variables and satisfaction with pay. Weaver (1980) suggests that salary becomes a more important determinant of job satisfaction when workers are dissatisfied with other characteristics of their jobs. Factors such as good working conditions, task variety, opportunities for advancement and self-esteem can outweigh salary level in determining job satisfaction. Friend and Burns (1977) report similar views. Klein and Maher (1976) found a relationship between educational level and pay. The more highly educated seemed less likely to be satisfied with their earnings. In contrast, Cooper, Morgan, Foley, and Kaplan (1979) found

that employees at higher professional levels tended to be more satisfied with their pay than those at lower levels, although the differences were not large. Cooper, et al. (1979) add that employees tend to be more satisfied with their pay and their jobs during difficult economic times. While the full extent of the relationship between salary and job satisfaction remains in question, it is apparent that salary is an important variable to include in the prediction and measurement of job satisfaction.

Repetitive Tasks

Type of work has frequently been associated with job satisfaction. In general, it is believed that workers who must perform the same task over and over will lose interest in their work (Hoppock, 1935; Kasl, 1977; Portigal, 1976; Ronan, 1970). Scanlan (1976) suggests that this loss of interest will ultimately result in lower productivity. Freudenberger (1977) and Pines and Kafry (1978) link the occupational teduim associated with repetitious tasks to emotional detachment from the job, leading to job dissatisfaction and burnout. Garson (1975) relates routine, frequently repeated work to a loss of self-esteem by the worker, resulting in lower levels of satisfaction. Dixon, Shaw, and Bensky (1980) state that employees should be allowed to perform tasks using all of their professional competencies to maintain satisfaction. Further, Blai (1970) found that interesting duties were reported as a major source of job satisfaction by 53% of the federal employees sampled.

Task Variety

In general, task variety can be viewed as the opposite of repetitiveness of tasks, with the corresponding effect on job satisfaction. Varied and interesting job tasks are seen as maintaining worker interest and productivity, and provide the basis for Hertzberg's (1974) paradigm of job enrichment. Studies by Phillips and Hays (1978) and Sarata and Jeppesen (1977) indicate that the number of tasks performed by human service workers is positively correlated with job satisfaction. Kasl (1977) further reports that disparities between skill training and job demands lead to lowered job satisfaction.

Supervision

Supervision has increasingly been reported as a major determinant of job satisfaction. Interpersonal relationships between supervisors and employees as well as their perceptions of each other and congruence of background and training have been shown to be important determinants of job satisfaction. Barbash (1976), Ewen (1966), and Hoppock (1935) found positive interpersonal relationships to be related to overall job satisfaction. Considerate supervision in which supervisors viewed employees as individuals are cited as strongly associated with high levels of satisfaction (Kasl, 1977; Phillips and Hays, 1978). Kasl (1977) further reported that ambiguity in employee-supervisor roles resulted in job dissatisfaction. Employees who viewed their supervisors as considerate and effective exhibited consistently higher levels of job satisfaction (Distefano

and Pryer, 1973; Pacinelli, 1968). Additionally, employees who were viewed as knowledgeable, competent, and independent by their supervisors tended to be more satisfied with their jobs than those who were not (Dixon, Shaw, and Bensky, 1980; Fournet, Distefano, and Pryer, 1969; Phillips and Hays, 1978). Dixon, et al. (1980) further found a significant relationship between the amount of congruence between worker and supervisor background, in terms of training and experience, and job satisfaction. They conclude that supervisors should be experienced in the same areas as their subordinates to be able to understand their problem and needs. Such congruence leads to higher levels of job satisfaction and productivity.

Co-Workers

The opportunity to interact socially with co-workers has been frequently related to workers needs for affiliation and esteem. The needs for belongingness, affiliation, and relatedness postulated by Maslow (1954) and Alderfer (1972) are frequently related to job satisfaction. Several authors have presented evidence that the inability of workers to interact with others on the job leads to job dissatisfaction, burnout, and turnover (Daley, 1979; Ilgen and Hollenback, 1977; Kasl, 1977; Lattanzi, 1981; Mattingly, 1977). Daley (1979) and Mattingly (1977) both report that major sources of stress and dissatisfaction in special service roles include a lack of opportunity to interact and share successes and frustrations with peers. Farris (1971) found that the congeniality of colleagues was negatively related to employee turnover. Barbash (1976), Phillips and Hays

(1978), and Ronan (1970) all report results of studies in which interaction with co-workers is significantly related to job satisfaction.

Work Environment

Characteristics of the work environment have long been associated with job satisfaction and productivity. Roethlisberger and Dickson (1939) first reported results of extensive studies of the effects of factors within the work environment. Kasl (1977) and Portigal (1976) conducted extensive literature reviews, concluding that working conditions are important components of job satisfaction. Hazardous working conditions and extremes in working hours were cited as major factors associated with low satisfaction. Hazards to physical safety are viewed as abridging Maslow's lower order needs and supplanting other potential sources of satisfaction associated with the job (Fournet, Distefano, and Pryer, 1969; Schultz, 1982). Zytowski (1970) states that excessive time demands negatively affect job satisfaction. Presumably, excessive time spent on the job leads to conflict in family and community relationships (Hulin, 1969).

Advancement Opportunities

Both Maslow (1954) and Alderfer (1972) discussed the importance of esteem as a motivating force. Alderfer (1972), Beck (1983), and Schultz (1982) link esteem to overall job satisfaction and report that the major sources of esteem in one's job are relative position and opportunities for advancement. Barbash (1976) and Graen and

Hulin (1968) associated job satisfaction with promotions and perceived opportunities for advancement. Farris (1971) reported that opportunity for advancement is negatively related to employee turnover. Hoppock (1935) and Ewen (1966) established this relationship for both teachers and personnel workers. In a study of a national sample of school psychologists, Anderson (1982) reported limited advancement opportunities as one of two significant negative correlates of job satisfaction. In a similar study, Miller, Witt, and Finley (1981) cite lack of advancement opportunities as one of the major sources of dissatisfaction reported by school psychologists in an urban setting.

Autonomy

The individual worker's ability to experience some control over his or her job has been viewed as an important source of the fulfillment of esteem needs. Brayfield and Crockett (1955) rated autonomy on the job equivalent to position and advancement opportunities in determining job satisfaction. Hulin (1969), Kasl (1977), Locke (1976), and Portigal (1976) list autonomy as a major source of reinforcement in the work environment and of overall job satisfaction. Research has demonstrated a positive relationship between autonomy, job satisfaction, and productivity (Hulin, 1969; Locke, 1976; Schultz, 1982). Dixon, Shaw, and Bensky (1980) suggest that a primary concern of administrators in special service organizations should be the awareness of worker's needs for independence, success, and control over their work. The need for autonomy has been

demonstrated for administrators in social welfare settings (Weinberger, 1966) as well as for direct service providers in human service occupations (Phillips and Hays, 1978; Sarata and Jeppesen, 1977). Additionally, Wool (1973) cited the lack of autonomy as the major source of job dissatisfaction within the American work force.

Achievement

Most individuals seek some sense of accomplishment or success in their endeavors. Lack of success in work or leisure activities can lead to frustration and discontinued effort (Beck, 1983). The ability to succeed and to reach one's full potential is central in the definition of self-actualization (Maslow, 1954). Achievement, accomplishment, and success are terms frequently used in describing the goals of human endeavor. The absence of these outcomes is indicative of failure to meet human goals and needs, leading to frustration, dissatisfaction, and lowered motivation. Research has shown that lack of achievement affects both satisfaction and productivity.

Daley (1979) reports that burnout in helping professions is caused by the lack of any adequate measure of success, especially in institutional settings or complex organizations. In such situations, little control over, or knowledge of the outcomes of cases were reported as primary causes of dissatisfaction and burnout. Pines and Maslach (1978) found that workers' feelings of helplessness and non-effectiveness were significantly related to lowered levels of satisfaction, burnout, and often, turnover. Lattanzi (1981) concluded that the less power the worker has over the outcome of the job, the

lower the satisfaction and the higher the burnout risk. Kelsey (1979) suggests that lack of current success on the job can be related to lowered motivational levels, stemming from previous failures. This cyclic relationship is extended by Lawler and Porter (1967) who state that satisfaction derives from the fulfillment of human needs. If work provides this fulfillment, then individuals can reinforce themselves by increasing or improving their levels of performance. While feelings of good performance increase satisfaction, satisfaction also leads to increased performance and likelihood for success.

Personal Characteristics and Job Satisfaction

While situational factors and characteristics of the work itself have been shown to strongly influence job satisfaction, personal characteristics of workers have also been shown to be of importance in the determination of job satisfaction. While the interpretation of needs satisfaction depends, in large part, upon the personality characteristics of individuals, levels of demographic and sociological variables have also been found to be related to job satisfaction. Research has shown that satisfaction in work can be influenced by age, sex, race, level of education, and length of job experience. Although these factors cannot be altered in the work environment, they can be used to predict the relative levels of satisfaction that can be expected within different groups of workers.

Age

Research indicates that, in general, job satisfaction increases with age. Wright and Hamilton (1978) found that the lowest levels of job satisfaction are reported by the youngest workers. Schultz (1982) reports that the level of dissatisfaction of young workers has increased over the past decade, and suggests that this trend reflects the new breed of workers' greater expectations about their jobs as compared to past generations of young workers. Schultz (1982) further states that while 10-13% of the workforce is dissatisfied, the number of workers reporting dissatisfaction ranges from nearly twenty percent in those entering the workforce to a low of 7% in workers over fifty years of age. Schultz (1982) presents three possible explanations for the differences in job satisfaction at varying age levels. First, young dissatisfied workers may change jobs so rapidly or lose motivation so quickly that they may not have the chance to find fulfillment in a job. Secondly, as workers grow older, a sense of reality or resignation may set in, causing workers to diminish the vigor in their attempts to find fulfillment. Third, Schultz suggests that age and experience on the job generally carry with them greater competence, self-confidence, esteem, and higher levels of responsibility, leading workers to feel a greater sense of accomplishment.

Sheppard and Herrick (1973) cite a study in which older workers tended to be more satisfied with their jobs, irregardless of income level. Thirteen percent of the workers, aged 30-44, expressed negative feelings about their jobs, while only 11% of those aged 45-54

expressed dissatisfaction. Wild and Dawson (1976) report similar findings and follow Hoppock's (1935) observation that individuals eventually find the sources of fulfillment and satisfaction in their work or, as Mortimer (1979) suggests, alter their occupational values, aspirations, and expectancies.

Other authors suggest that correlations between age and job satisfaction consist of more than a simple linear relationship. Beck (1983) and Hertzberg, Mauser, Peterson, and Capwell (1957) cite data reflecting the relationship between age and job satisfaction to be U-shaped, with the youngest and oldest workers reporting the highest levels of satisfaction. Task novelty and feelings of accomplishment in securing the job are reported as being the basis for high levels of satisfaction in young workers. This initial satisfaction gives way to the tedium of monotonous tasks and the decreased potency of work reinforcers. As workers grow older, Hertzberg, et al. (1957) postulate that they resign themselves to the realities of the situation or leave the organization.

Schultz (1982) debates the notion that a U-shaped relationship characterizes the correlations between satisfaction and age. He cites data indicating that, because young workers are not as concerned with issues such as job security, the most dissatisfied frequently drop out of the labor force or change jobs so rapidly that they often are not included in job satisfaction studies.

Hulin (1963) was also critical of the U-shaped relationship, explaining that statistical analyses were not performed and that

conclusions were based merely on inspections of data. Hulin and Smith (1965) hypothesized that the U-shaped model of age distribution may apply to some factors of job satisfaction, but not to others. Testing a regression model, Hulin and Smith (1965) concluded that age and experience are monotonically related to both satisfaction with work and satisfaction with pay.

Age has been shown to be highly related to other correlates of job satisfaction. While Schwab and Heneman (1977) reported that age and experience are positively related in most employment situations, Schwab and Wallace (1976) found that age and experience are not independent in their effects on satisfaction with pay. Wild and Dawson (1976) report that the effects of many of the component attitudes composing job satisfaction are confounded by the employee's tenure in the job.

Schwab and Heneman (1977) suggest that the interrelationships between age and other variables threaten the internal validity of job satisfaction studies because of the phenomenon of multicollinearity. Farrar and Glauber (1967) define multicollinearity as significant departures from orthogonality of independent variables, but suggest that the phenomenon may be avoided by care in experimental design. While multicollinearity makes it difficult to partition the variance into the independent contributions of related variables, it can be controlled by careful selection of independent variables for inclusion in a regression analysis.

Sex

The evidence regarding differences in job satisfaction between men and women is inconsistent and unclear. Some studies indicate that women are generally more satisfied on the job than men, while other research reports that women are far more dissatisfied. Still, other authors doubt the existence of a relationship between sex and job satisfaction. Hulin and Smith (1965) concluded that sex is not a crucial determinant of job satisfaction. Barbash (1976) states that women are not less satisfied with their jobs than men when age and education are controlled. Hertzberg (1966) however, speculated that, much like age, sex may cause differences in desired work reinforcers.

Beck (1983) suggests that when other factors are equal, women tend to be more satisfied in their jobs, with the separation from the stereotyped housewife role being a major influence. Schultz (1982) states that women are generally less satisfied with their jobs than men; a view shared by Sheppard and Herrick (1972). Schultz (1982) suggests that the reasoning for this is based on the fact that most women occupy less desirable jobs and are afforded fewer opportunities to fulfill esteem and self-actualization needs than men. Wild and Dawson (1976) suggest that women seek different reinforcement from the job than men. Thus, satisfaction within the two sexes cannot be equated. Andrisani and Shapiro (1978) hypothesized that women are more concerned with and effected by different aspects of a job than men. Research results showed that long range career goals are less

important to women, and that comfortable working conditions and the quality of interpersonal relationships are more important to women than to men. Andrisani and Shapiro (1978) report no differences between men and women on the importance of internal factors such as autonomy.

Race

Although not particularly at issue in this study, race has been reported as a very high correlate of job satisfaction. Moch (1980) and Weaver (1978) report that non-white workers are twice as likely as white workers to express dissatisfaction with their jobs. This tendency is stable across sexes and all levels of jobs. Non-whites reported higher levels of dissatisfaction in blue collar, white collar, and managerial positions than did white workers, with the greatest dissatisfaction reported by non-white workers in white collar jobs. Weaver (1978) reports that the high level of dissatisfaction in black workers remains stable through age forty-four and then declines below the level reported by whites.

Education

The relationship between education and job satisfaction is another area of confusion and debate in the literature. Some authors report that education and job satisfaction are not related (Maier, 1965; Sheppard and Herrick, 1972). Others suggest that education is related to satisfaction with pay (Klein and Maher, 1976; Phillips and Hays, 1978). Schultz (1982) and Beck (1983) refute the idea that

there is a consistent relationship. Education and job satisfaction are seen as related, only in light of other factors such as ability utilization, occupational level, and the congruence between educational and job specialization.

Job Experience

The relationship between job satisfaction and the length of time spent on the job is complex. Research suggests that new workers tend to be very satisfied during the early stages of employment, primarily because of the novelty and stimulation provided by a new job (Schultz, 1982). Beck (1983) suggests that the early satisfaction wanes, only to return gradually within the next decade. Most researchers agree that the relationship between job satisfaction and length of experience closely parallels that with age. Both should be considered in attempting to explain the job satisfaction of a particular group of workers.

Occupational Level

The occupational level or status of a job has been shown to have a consistently high correlation with job satisfaction. The higher the occupational level, the higher the level of satisfaction expressed by the worker (Schultz, 1982). Hertzberg (1966) suggests that higher levels of jobs present greater opportunities to satisfy motivator needs, and provide greater autonomy, challenge, and responsibility. Ewen (1966) suggests that the way in which a position is perceived by supervisors and other workers in the organization

affects job satisfaction. Hulin (1969) further indicates that perceptions of the level of a position by the individual worker and within the community are related to job satisfaction.

Professional Affiliation

There is no distinction in the literature as to the existence of a relationship between individuals' job satisfaction and tendencies to affiliate with professional organizations. Maier (1965) suggests that a relationship may exist, but does not speculate on what the relationship might be. Intuitively, individuals expressing higher levels of job satisfaction would be expected to possess more job involvement (Cheloha and Farr, 1980) and would be more likely to involve themselves in professional activities. Schultz (1982) indicates that, on the one hand, satisfied individuals could be expected to extend their professional affiliations beyond the work environment, while on the other hand, those workers whose affiliation needs are not fulfilled on the job would seek to meet these needs outside of the work environment.

For this study, it will be of interest to determine what, if any relationship exists between school psychologists' job satisfaction and membership in professional organizations. Such information may be of value in understanding another dimension of job satisfaction.

Job Satisfaction, Burnout, and Turnover

The study of job satisfaction includes both its components and

its effects. It is generally assumed that dissatisfaction has negative consequences for both the worker and the organization. Job satisfaction has been historically linked to productivity and performance on the job. More recently, it has been suggested that this relationship is cyclic, with improved performance and productivity leading to higher levels of job satisfaction, and higher satisfaction leading to higher production. Conversely, the dissatisfied worker would appear to be caught in the midst of a downward spiral, in which levels of satisfaction and performance continually descend (Lawler and Porter, 1967).

Job dissatisfaction has been found to be related to absence from work, burnout, and turnover among employees. Schultz (1982) states "a high level of job satisfaction is directly related to positive behavior on the job, specifically to high performance, low turnover, and low absenteeism" (p. 297). Schultz goes on to say "Employees who are dissatisfied with their jobs will leave them through frequent absences (sort of part-time quitting) or by finding other jobs" (p. 297). A number of other researchers have found direct relationships between absenteeism and job dissatisfaction. Cheloha and Farr (1980) found a relationship between job involvement, absenteeism, and job satisfaction, and propose that frequent absence from work is simply a manifestation of loss of job involvement resulting from lowered levels of satisfaction. Ilgen and Hollenback (1977) found that dissatisfied workers had significantly more absences from work than those who were satisfied. Supportive findings are also reported by

Ewen (1966), Kasl (1977), and Portigal (1976).

Pines and Kafry (1978) define burnout as emotional detachment from the job, resulting from stress, the tedium of work, and job dissatisfaction. Burnout has generally been viewed as a symptom displayed by workers who lack power over the outcome of the job, have feelings of helplessness or non-effectiveness, or lack any measure of their success on the job (Daley, 1979; Lattanzi, 1981; Pines and Maslach, 1978). Pines and Maslach (1978) found that mental health staff workers suffering from burnout also reported very low levels of job satisfaction. Freudenberger (1977) reports that employee burnout is the most frequently reported cause of turnover in professional child care workers.

It is generally agreed that job satisfaction is negatively correlated with turnover; lower satisfaction yields a higher rate of turnover (Fournet, Distefano, and Pryer, 1969). Studies by Daley (1979), Farris (1971), Lattanzi (1981), and Pines and Maslach (1978) all support the premise that job dissatisfaction leads employees to seek other employment. Turnover rates could thus be reasonably employed as predictors of levels of job dissatisfaction.

Beyond the implications of absenteeism and turnover, such as loss of productivity due to understaffing and time required in training new workers, job dissatisfaction may have other significant adverse effects on the organization. Brayfield and Crockett (1955) suggest that the low productivity associated with high levels of job dissatisfaction may actually reflect a form of worker aggression.

Porter and Lawler (1968) conducted studies showing a positive relationship between job dissatisfaction and counterproductive behavior. Such behaviors resulted in faulty products, sabotaged equipment, theft, and destructive rumors or gossip.

Job Satisfaction in Educational Settings

Hoppock (1935) is credited with conducting the first study of job satisfaction of public school teachers. He reported that about three-fourths of the questions used to measure job satisfaction related to emotional adjustment, with dissatisfied teachers frequently complaining of monotony and fatigue. Satisfied teachers generally tended to report better supervisor and co-worker relationships than those who were dissatisfied, and tended to work in cities having a population in excess of 10,000. Hoppock (1935) found no differences between satisfied and dissatisfied teachers in terms of salary levels. However, he reported that, on the average, satisfied teachers were seven and one-half years older than those who were dissatisfied, following the linear age-satisfaction relationship pattern that has generally been reported in the literature.

Cole (1977) found that teachers are generally satisfied with their jobs. Cole reports that elementary school teachers are more satisfied with their work than middle school teachers, and that elementary and middle school teachers are more satisfied than high school teachers with supervision on the job. The latter factor supports the recommendation of Dixon, Shaw, and Bensky (1980) that supervisors should be knowledgeable in the same areas as their

subordinates to maintain congruence and satisfaction, since supervisors and teachers in the high school setting tend to have more diverse backgrounds than those in the elementary school.

Kelsey (1978) reported a significant negative relationship between teaching experience and job satisfaction of personnel working with severely and profoundly retarded students. Wiggins (1975) surveyed a group of teachers of the educable mentally retarded and failed to find relationships between job satisfaction and age, experience, and tenure. Job satisfaction and education were found to be significantly correlated. Both Kelsey (1978) and Wiggins (1975) suggest that teachers of special student populations are subject to lower levels of satisfaction than their regular classroom counterparts. Mattingly (1977) found that dissatisfaction in child care workers was associated with stress caused by excessive job demands.

Job Satisfaction in Mental Health Occupations

Schultz (1982) includes social service occupations in his list of the least satisfying occupations, suggesting that the chances for dissatisfaction in this occupational area are almost one in four. Researchers report varying degrees of satisfaction in various areas of mental health services, but an overriding theme is that opportunities for adequate case follow through and outcome measurement are lacking. Pacinelli (1968) found relationships between rehabilitation counselors' perceptions of themselves as leaders, background, and overall job satisfaction. Phillips and Hays (1978) report that a positive relationship exists between job satisfaction and the

perceived congruence of attitudes of mental health workers and their supervisors. Pines and Kafry (1978) and Smits (1972) cite the tedium of work and lack of variety as major determinants of job dissatisfaction and turnover of social service workers and counselors.

Job Satisfaction Among School Psychologists

Over the past decade, the job satisfaction of school psychologists has been more the subject of speculation and discussion than of scientific investigation. Fagan (1981 a, b), Guidubaldi (1981), Hart (1983), Trachtman (1981), and Vensel (1981) have all suggested the need for role and position expansion as well as reassessment of training and practice goals. The professional literature in school psychology contains many articles discussing under-utilization of skills, lack of appropriate supervision, disparities between school psychologists' and educators' perceptions of appropriate role and function, lack of opportunities for advancement and peer contact, and the demeaning effects of the repetitive assessment role. Such discussions give the profession of school psychology the appearance of being founded upon, and inherently possessing all of the major factors which reportedly define job satisfaction.

While the subject of job satisfaction among school psychologists has frequently been discussed, little substantive research is available. There are, however, exceptions. The earliest studies reporting information on school psychologists' job satisfaction were generally concerned with other issues, incorporating satisfaction as an aside. For example, Hughes and Clark (1981) studied differences

between school psychologists practicing in urban and rural areas in Virginia, and included the psychologists' estimates of satisfaction on a four point Likert scale. While they report finding no differences between the two groups in their estimated levels of satisfaction, Hughes (1982) later discusses the higher turnover rate among rural school psychologists, and points to job dissatisfaction as a probable cause.

Reiner and Hartshorne (1982) discussed the problem of burnout of school psychologists. Working with a group of school psychologists who had either recently left their jobs or reported burnout, Reiner and Hartshorne concluded that burnout is often caused or accompanied by low satisfaction. They defined burnout as "failing, wearing out, or becoming exhausted through excessive demands on energy, stress, or resources" (p. 508). Reiner and Hartshorne (1982) defined the sourceof low satisfaction and burnout as stress on the job and delineated (a) excessive caseload, (b) lack of time to fulfill duties, (c) lack of support or appreciation of effort, (d) demands from administration, (e) poor role definition, and (f) unclear job expectations as the major sources of stress reported by school psychologists.

In a 1978 study, Solly asked school psychologists in West Virginia to rate their overall working conditions and to predict the length of time they expected to remain in their positions. None of the respondents rated their working conditions as excellent, but 57% rated conditions as good, 32% as fair, 10% as poor, and 2% as

unfit. Additionally, 72% of the respondents indicated that they planned to remain in their positions less than five years.

Other studies have addressed the issue of job satisfaction among school psychologists more directly. Miller, Witt, and Finley (1981) used a structured interview to obtain perceptions of satisfaction and dissatisfactions of forty school psychologists in two urban areas of Colorado. The most frequently reported source of satisfaction was flexibility and freedom in scheduling. More than 25% of the respondents also listed helping others, associating with competent colleagues, and the challenge, importance and variety of their work as being major sources of satisfaction. Twenty percent of the school psychologists reported satisfaction resulting from supportive and helpful supervisors, in-service and professional development opportunities, and being treated as a professional.

Miller, Witt, and Finley (1981) found that school psychologists listed 116 sources of dissatisfaction, 40% of which related to time pressures and stress, stemming from serving large numbers of children. The most frequently reported sources of dissatisfaction were boredom with testing and lack of time for in-depth counseling and psychotherapy. The list of major dissatisfiers also included requirements for labeling children, ambiguous placement guidelines, the feelings of loneliness and isolation associated with being itinerant and in a helping profession, unrealistic expectations of others regarding the role and function of school psychologists, and lack of supervision by individuals knowledgeable in the

discipline. Miller, Witt, and Finley (1981) concluded that while school psychology has the potential of being a very satisfying profession, many school psychologists do not have adequate training or skills to cope with the pressures, stress, and dissatisfactions they encounter in their work.

Ahrens (1977) conducted a study on the effects of internal role conflict on the overall job satisfaction of psychologists in school, private practice, institutional, and administrative positions. In studying the effects of incongruent role expectations or job satisfaction, Ahrens (1977) proposed that school psychologists experience incongruence between what they actually do and what they are trained to believe they should be doing, ultimately leading to job dissatisfaction and termination of employment.

Ahrens (1977) developed 38 questions, critiqued by Rutgers University faculty, sampling satisfaction with various job components. Job satisfaction was defined as a summation of the evaluation of job components. Ahrens' (1977) results indicated that there are differences in levels of role conflict experienced by psychologists in different occupational settings. School psychologists were found to have higher levels of role conflict than psychologists in any of the other settings. A negative correlation was reported between internal role conflict and job satisfaction.

Ahrens (1977) also investigated the relationships between selected demographic variables and job satisfaction. Job satisfaction correlated significantly with income ($r = 0.27$, $p < .001$), community

size ($r = 0.17$, $p < .01$), professional experience ($r = 0.18$, $p < .002$), age ($r = 0.27$, $p < .001$), education ($r = 0.20$, $p < .001$), and experience in present position ($r = .15$, $p < .01$). Job satisfaction increased with increasing levels of each of the preceding variables. Correlations between job satisfaction and caseload ($r = -0.09$), and district size ($r = 0.09$) were insignificant ($p > .05$).

Anderson (1982) surveyed 450 members of the National Association of School Psychologists, comparing selected demographic variables, reported level of satisfaction, and measures of satisfaction on the Modified Minnesota Satisfaction Questionnaire (MSQ). Of the 245 practitioners in the study, 79.5% stated that they were either "Satisfied" or "Very Satisfied," and 20.5% stated that they were either "Dissatisfied" or "Very Dissatisfied" when asked to rate their overall job satisfaction. Measures of job satisfaction provided by the Modified MSQ indicated that 5% were "Very Satisfied," 81% "Satisfied," and 14% "Dissatisfied." None of the respondents scored in the "Very Dissatisfied" range.

Anderson (1982) found that school psychologists were satisfied with 18 of the 20 factors comprising overall job satisfaction. On two scales of the Modified MSQ, Advancement and School System Policies and Practices, the school psychologists surveyed scored in the "Dissatisfied" range. Anderson (1982) further found increasing age and decreasing psychologist to student ratios to be related to increasing levels of job satisfaction. The regression model included age ($r = 0.34$) and psychologist to student ratio ($r = 0.16$, nonlinear) as significant predictors of overall job satisfaction scores,

while accounting for only 8.67% of the total variance in job satisfaction scores.

Anderson's (1982) findings are surprising in light of the studies of other authors and the discussions in the literature reviewed above. The percentages of school psychologists reporting dissatisfaction (20.5%) and scoring in the dissatisfied range on the MMSQ (14%) do not markedly deviate from those reported by Schultz (1982) for all young workers (13%-20%), and are below the 25% expectation for service occupations. It can be argued, however, that Anderson's (1982) study included too diverse a sample to gauge the full impact of differing levels of demographic variables. For example, the only indicator of urban versus rural setting in Anderson's (1982) study was school system size. Since system size can vary greatly within cities or rural areas, there was no true delineation on this variable. Factors affecting satisfaction and dissatisfaction in rural and urban areas may counterbalance one another in a national study. Membership in a national professional organization may also be related to job satisfaction.

Each of the studies that have dealt with the issue of job satisfaction among school psychologists has approached the topic from a different perspective. Although the specific aims and findings of the studies differ, several noteworthy commonalities have emerged. First, each of the studies included some suggestion that school psychologists face possible dissatisfaction because of excessive caseloads, associated with high psychologist: student ratios and

assessment demands. Second, social variables, including supervision and peer interaction, were discussed or related to job satisfaction in each of the studies. Third, role conflicts and the associated under utilization of skills were commonly mentioned. Additionally, factors such as differences between urban and rural settings, lack of opportunities for advancement, and the uniqueness of psychologists' positions within the educational environment emerged as strong undercurrents relating to job satisfaction among the studies of school psychologists.

The State of West Virginia

Known as "The Mountain State," West Virginia was founded in 1863 when the 55 counties of Virginia, west of the Alleghanies, refused Virginia's secession during the Civil War. Most of the state is marked by rugged terrain and diverse cultures, within a primarily rural setting (West Virginia Blue Book, 1982). West Virginia ranks 34th in the nation in population and 41st in total land area, having a total population density of 81.1 inhabitants per square mile. Sixty-four percent of West Virginia's population live in rural areas, with the total racial distribution being 96.1% white; 3.3% black; and 0.6% Hispanic or other racial minorities (The World Almanac and Book of Facts, 1983). Agriculture is the leading industry within the state, followed closely by coal mining and distantly by the manufacturing of goods such as chemicals, metals, and glassware (West Virginia Blue Book, 1982).

Although the state is primarily rural and includes no major

cities exceeding 100,000 in population, four areas in West Virginia have been designated Standard Metropolitan Statistical Areas (SMSAs) by the U.S. Census Bureau (1980). Additionally, urban population figures are given for ten West Virginia cities, each approaching or exceeding an urban area population of 50,000 (World Atlas: Imperial Edition, 1981). Population figures for those areas in West Virginia considered urban are detailed in Appendix G.

School districts in West Virginia are designated strictly within jurisdictional boundaries of counties, a feature unique within the United States. All school systems are county-affiliated systems; there are no city or consolidated school districts (West Virginia Blue Book, 1982). The issue of whether school districts are urban or rural then rests on the urban or rural classification of the county.

The issue of urban versus rural designation is one that generally lacks clarity. Urban school districts have been defined as those within a city or area exceeding 50,000 in population (Hughes, 1982) and those with student enrollments exceeding 10,000 (Kelsey, 1979). Urban areas have been defined on the basis of both population (U.S. Census Bureau, 1980; The World Almanac and Book of Facts, 1983) and population density (World Atlas: Imperial Edition, 1981). Because of the wide range of land areas included within West Virginia counties (84-1040 sq. miles), and the associated wide range of population distribution and school enrollments, population density appears to be the most appropriate criterion for use in making the urban or rural designation. A review of those areas listed as "primarily urban" in

the World Almanac and Book of Facts (1983) provides an average population density of 181.6 inhabitants per square mile. The World Atlas: Imperial Edition (1981) suggests that urban areas should have a population density of 250-500 inhabitants per square mile.

There has generally been little discussion in the literature regarding the relationship between type of community and job satisfaction. However, Ahrens (1977) found satisfaction to be higher in psychologists practicing in urban areas. With the rural nature of most of West Virginia, it is also of interest to determine if a relationship exists between the type of community and the job satisfaction of school psychologists in the state. For the purposes of this study, counties within West Virginia and their associated school districts are designated as urban (Appendix H) if they have a population density exceeding 180 inhabitants per square mile and are dominated by one of the state's ten largest cities. Thus, rural school districts (Appendix I) are those located in counties which are not dominated by one of the state's largest cities and have a population density of less than 180 inhabitants per square mile.

An additional topic that should be included in a discussion of characteristics of the state of West Virginia is the tendency for young professionals to migrate from the state. Robinson (1976) expressed concern over the growing trend, citing numerous examples of individuals who had been initially employed in West Virginia becoming successful and professionally known only after leaving the state. Robinson (1976) speculated that the trend was caused by a lack of advancement opportunities and a generally rigid culture within the state.

School Psychology in West Virginia

The profession of school psychology is quite new in the state of West Virginia. School psychologists were first certified in the state in 1971. Prior to the 1974-75 school year, there were reportedly only five certified psychologists practicing full-time in the schools of West Virginia (West Virginia Department of Education, 1974). It was not until the 1977-78 school year that the number of school psychologists employed in the state equaled or exceeded the total number of school systems. Currently, only 48 of the 55 school systems within the state regularly employ at least one school psychologist (West Virginia Department of Education, 1974-1982).

The growth of school psychology in the state has been rapid, moving forward from the five employed in 1974 to the current 137 school psychologists practicing in West Virginia during 1982-83. Rapid growth, shortage of psychologists, and changing personnel have apparently led to concerns over identity, assessment caseloads, flexibility, and supervision. However, to date only three studies addressing the issues relating to job satisfaction are available.

Lynn (1980) surveyed 30 randomly selected school psychologists in West Virginia regarding evaluation caseload and psychologist: student ratios. He reported that within the sample of respondents, the average psychologist: student ratio was 1:5,117, and that the average number of evaluations completed per year was 111, with an average backlog of 80 pending evaluations. Lynn (1980) postulated that to effectively meet the evaluation demands of 1980 (without regard to

other duties), one psychologist would be needed for every 2,973 students in the state. He further cited annual increases in evaluation requests as a basis for predicting that the psychologist: student ratio required to meet evaluation demands would reach 1:2000 within three years. Lynn (1980) concluded that a serious problem exists affecting both the quality of services provided to the schools and the quality of life for school psychologists in West Virginia.

Sealy (1982) conducted a study of West Virginia school superintendents', administrators', and school psychology interns' views of priority functions of school psychologists. Superintendents, Directors of Special Education, Directors of Pupil/Student Services, Directors of Personnel, Psychological Services Supervisors, and Psychology Interns were asked to rate the priority of functions of school psychologists on a five point Likert scale, from not important to very important. Although Sealy (1982) found wide disparities between school psychology interns and administrators regarding their perceptions of the importance of various daily functions, she reports nearly perfect agreement between the order of importance reported by administrators and proportion of actual time spent by interns in service delivery functions. Administrators rated assessment of children and the associated processing of paperwork as most important, assigning the lowest priorities to program/curriculum evaluation and therapy. School psychology interns reported that assessment and paperwork occupied the greatest amount of their time, but rated crisis intervention, school consultation, and therapy as most

important, while assigning paperwork their lowest priority.

Sealy (1982) further reports that only 2.5% of the individuals charged with direct supervision of psychological services provision in West Virginia school districts are titled or trained as psychologists. The incongruencies in psychologists' and administrators' backgrounds, views, and priorities reported by Sealy (1982) would be expected to produce role designation conflicts, possibly leading to dissatisfaction of school psychologists.

Solly (1978) surveyed school psychologists in West Virginia regarding various aspects of their jobs. Of 56 respondents, 52 worked in systems with no other psychologists. The average psychologist: student ratio exceeded 1:3000 and the average evaluation backlog was 62 cases. Solly (1978) further reported that on the average, school psychologists in West Virginia served 14 schools, had 2.75 years of experience, and spent more than 65% of their time in individual assessment and paperwork. Thirty-six percent of the psychologists surveyed stated that they planned to remain in their current positions for two years or less and 72% planned to remain in their positions for five years or less.

If turnover rates are a valid indicator of job dissatisfaction, as suggested by several authors (Daley, 1979; Farris, 1971; Fournet, Distefano, and Pryer, 1969; Schultz, 1982), it can be assumed that employees' expressions of intentions to leave their jobs are also indicators of dissatisfaction. The intentions expressed by school psychologists in Solly's (1978) study have been confirmed by actual

turnover rates. Thirty-six percent of the respondents in the 1978 survey planned to leave their jobs in two years or less. By 1980, 34% of the school psychologists practicing in West Virginia in 1978 had left their jobs. Similarly, 72% of the survey respondents indicated the intention of leaving their jobs within five years. Four years later, in 1982, 59.6% of those school psychologists practicing in West Virginia at the time of the survey had left their jobs (West Virginia Department of Education, 1974-1982).

Table I presents a summary of turnover among school psychologists in West Virginia between the years 1974 and 1982. The average annual turnover rate for the nine year period is 31.8%, or more than four times the rate suggested by Schultz (1982) as being indicative of a serious problem, deserving of management concern. The turnover rates, coupled with the growth in the total number of positions create several issues of concern. First, stability of personnel and services is affected. Over the nine year period, the average number of new psychologists (36.1) has almost equaled the average number returning to their positions (42.8). Each year, nearly half of the workforce has been faced with learning new routines and familiarizing themselves with programs and personnel. Second, rapid turnover adds to the lack of case follow-up or follow through. Third, valuable staff time is lost in both recruitment and orientation activities.

The studies and data presented above suggest that the matter of job satisfaction of West Virginia school psychologists is deserving of

TABLE I

Turnover of West Virginia School Psychologists, 1974-1982[a]

Year	Total Number of Psychologists Employed	Number Not Returning	Number Returning	Number New	Turnover Rate
1974-75	12	4	N/A	N/A	33.3%
1975-76	24	9	8	16	37.5%
1976-77	51	19	15	36	37.3%
1977-78	76	24	32	44	31.6%
1978-79	89	31	52	47	34.8%
1979-80	107	32	57	50	29.9%
1980-81	101	29	69	32	28.7%
1981-82	116	35	72	44	30.2%
1982-83	137	N/A	81	56	N/A

[a] Source: West Virginia Department of Education. West Virginia Education Directory, Charleston: Author, 1974-1982.

Average Annual Turnover Rate (1974-82): 31.8%.

attention and study. Indications are that school psychologists in the state are more dissatisfied with their jobs than the results of Anderson's (1982) national survey would suggest.

The Minnesota Satisfaction Questionnaire

After reviewing a number of approaches to the measurement and determination of job satisfaction, the Minnesota Satisfaction Questionnaire was selected as the most appropriate instrument for this study. The Minnesota Satisfaction Questionnaire (MSQ) is a product of the University of Minnesota's Work Adjustment Project.

Begun in 1957, the Minnesota Studies in Vocational Rehabilitation, better known as the Work Adjustment Project, centered around two objectives: the development of a diagnostic instrument to assess the work adjustment potential of applicants for rehabilitation services and the evaluation of outcomes of work adjustment (Weiss, Dawis, England, and Lofquist, 1967). These goals evolved from a conceptual framework, known as the Theory of Work Adjustment. This theory proposes that work adjustment outcomes (namely, job satisfaction or dissatisfaction) are based on the correspondence between characteristics of the work environment and the work personality of individuals. In essence, work adjustment and job satisfaction depend on how well an individual's abilities correspond to the ability requirements of work and how well his or her needs correspond to the sources of reinforcement available in the work environment.

The MSQ was designed to measure both overall and specific components of job satisfaction. Weiss, Dawis, England, and Lofquist (1967) identified twenty specific sources of job satisfaction, based on a review of the literature, similar to that published by Lofquist and Dawis (1975). The MSQ provides an overall index of job satisfaction, as well as indices of satisfaction derived from the following sources: ability utilization, achievement, activity, advancement, authority, company policies and practices, compensation, coworkers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, and working conditions.

The MSQ consists of one-hundred items and is self-administered, requiring 15-20 minutes to complete. Each MSQ item requires the respondent to indicate their degree of satisfaction with a work reinforcer on a five point scale, as described by Likert (1970). The response "very dissatisfied" is assigned a value of "1," the response "dissatisfied" is assigned a value of "2," proceeding similarly to the response "very satisfied," which is assigned a value of "5." The authors estimate that a fifth grade reading level is required by items on the MSQ.

Each subscale, reflecting a source of reinforcement, is sampled with five questions. Subscale scores are obtained by summing the points for the five items comprising the scale. The overall index of job satisfaction is obtained by summing the points for a subset

of twenty items, one from each subscale. These items were selected because of the strength of their correlations with respective subscale scores.

Percentile ranks, corresponding to raw scores may be obtained by using sections III-B and IV-B in the MSQ Manual. Norms for the 20 MSQ subscales and the overall scale are provided for 25 occupational groups, as well as for employed and unemployed disabled persons. Elementary school teachers comprise the only group within the educational profession included in the manual.

Hoyt reliability coefficients for overall satisfaction and the 20 subscales of the MSQ are presented on page 14 of the manual. The coefficients range from .59 to .97 for the 25 occupational groups across all scales. Albright (1972) reports that of the 567 Hoyt reliability coefficients reported, 83% were .80 or higher and only 2.5% were lower than .70. Albright (1972) and Guion (1978) conclude that these data, in general, reflect that the MSQ scales have adequate internal consistency.

The MSQ Manual presents test-retest reliability coefficients on page 15. For a one week interval, stability coefficients ranged from .66 for co-workers to .91 for working conditions. The manual reports that the median coefficient for the subscales over a one week interval was .83. The one week stability coefficient for the general satisfaction scale was .89. For a one year interval, subscale stability coefficients ranged from .35 to .71, with a median of .61. Over the one year period, test-retest correlations on the

general satisfaction scale averaged .70. The manual further reports canonical correlation coefficients of .97 for the one week interval and .89 for the one year interval, accounting for 95% and 80%, respectively, of the variance in MSQ scores.

Since MSQ items and scales are based on the Theory of Work Adjustment, construct validity of the instrument relies on the extent to which MSQ results conform to theoretical expectations. Much of the construct validity research is based on a parallel instrument, the Minnesota Importance Questionnaire (MIQ), which measures the relative importance of work reinforcers. The test authors tested the hypothesis that satisfaction was a function of the correspondence between individuals' needs and the reinforcer system of the job. The major prediction was that individuals having high need-high reinforcement scores on the MIQ would exhibit the most satisfaction and those with low need-low reinforcement scores would exhibit the least satisfaction.

According to the MSQ Manual, construct validity was high for the ability utilization, advancement, and variety scales, and moderate for the authority, achievement, creativity, and responsibility scales. The authors state that caution should be used in the interpretation of the compensation, independence, and social service scales, since these scales did not meet theoretical expectations.

The authors performed a one-way analysis of variance, comparing 25 occupational groups on the 21 scales of the MSQ to test the hypothesis that different occupational groups possess different

levels of overall job satisfaction and patterns of reinforcer need. Significant differences were found between all groups on all scales ($p < .001$), leading the authors to conclude that concurrent validity had been established.

Content validity of the MSQ was inferred from factor analytic studies. Intercorrelation matrices for the 20 subscales are presented in the manual. The factor studies extracted two vectors: extrinsic satisfaction, composed of the two supervision scales, company policies and practices, working conditions, advancement, compensation, and security; and intrinsic satisfaction, composed of all other subscales.

The Modified Minnesota Satisfaction Questionnaire

The modified long form of the MSQ, used by Anderson (1982), will be employed in this study.[1] Anderson (1982) postulated that some items of the MSQ, designed for industrial workers might not be applicable to school psychologists. Thus, 21 of the 100 items of the MSQ were modified to enhance the face validity for school psychologists. While the majority of items remained intact, alterations were made to seven scales: Advancement (4 of 5 items), Authority (2 of 5 items), Company Policies (5 of 5 items), Supervision-Human Relations (4 of 5 items), Supervision-Technical (3 of 5 items) and Working Conditions (1 of 5 items). Anderson (1982) reports Cronbach Alpha reliability coefficients ranging from .73 to .93 for the twenty subscales of the modified MSQ, and an internal

consistency coefficient of .97 for overall job satisfaction scores. Appendix D includes Anderson's (1982) Cronbach reliability coefficients for all twenty subscales[2], while the original and modified forms of the MSQ are presented in Appendix C and Appendix B, respectively.

Summary

The issue of job satisfaction has been the focus of research for many years. However, little empirical investigation has been done within the profession of psychology, particularly in the public schools. Although Anderson's (1982) national study failed to substantiate the supposition that significant numbers of school psychologists are dissatisfied with their jobs, the unique conditions and factors existing in specific locations may have had a counterbalancing effect in the study. Turnover rates, supervision issues, and factors associated with rapid growth tend to suggest that school psychologists in West Virginia are more dissatisfied than those of the national sample.

CHAPTER III

METHODOLOGY

Methodological procedures relating to the study are outlined in this chapter. The target population is defined and specific instrumentation is described. Survey distribution and data collection methods are delineated. Research questions are recapitulated, and data analysis methods are discussed.

Participants

The participants in this study included the entire population of school psychologists practicing in the state of West Virginia. Participants were certified (either provisionally, fully, permanently, or by permit) as school psychologists by the West Virginia Department of Education, and employed by one of the 55 county school systems, eight Regional Education Service Agencies (RESAs), or a branch of the State Department of Education within the territorial boundaries of the state of West Virginia. A list of certified school psychologists employed in the state at the time of the survey distribution was provided to the author by the West Virginia Department of Education. The list included names, home and office addresses, telephone numbers, and employers of 137 potential participants to be surveyed. Only those designating practitioner as their primary role were included in the data analysis.

Instrumentation

Each of the 137 school psychologists practicing in West Virginia was asked to complete and return a demographic data form and the

modified form of the Minnesota Satisfaction Questionnaire. Responses to these two data gathering instruments formed the basis for the results of this study.

Data Form

The Data Form (Appendix A) was used to gather information regarding demographic characteristics of the participants and to aid in the determination of relationships between demographic variables and job satisfaction. Demographic variables included: primary role designation, sex, age, current degree status, number of co-workers, years of experience as a school psychologist, years of experience in current position, years of teaching experience, psychologist student ratio, annual evaluation caseload, annual salary, contract length, role designation of primary supervisor, area and level of training of primary supervisor, professional organization memberships, plans to remain in current position, plans to remain in the profession of school psychology, type of community, satisfaction with the community, and personal rating of job satisfaction. Response options to the last two items were Very Satisfied, Satisfied, Dissatisfied, and Very Dissatisfied. Additionally, participants were asked to indicate three major sources of satisfaction and three major sources of dissatisfaction in their jobs. Data on sex and type of community was coded on the Data Forms prior to mailing, based on information contained on the mailing list described above.

Modified Minnesota Satisfaction Questionnaire

Modified and original forms of the MSQ are presented in Appendices B and C, respectively. Wording changes in several original items (described in Chapter II) may affect the statistical properties of the scale. Additionally, the neutral response option is deleted in the Modified MSQ for ease and clarity in participant response and data analysis. Therefore, caution is urged when comparing results of the original MSQ and the modified form used in this study. Statistical properties of the original and modified forms of the MSQ are discussed in Chapters II and IV.

The Modified MSQ samples 20 sources of work reinforcement or job satisfaction that, when combined, comprise overall job satisfaction. These subscales include:

1. Ability Utilization - The chance to make use of abilities.
2. Achievement - The feeling of accomplishment one derives from a job.
3. Activity - The ability to stay busy.
4. Advancement - The chances for advancement on the job.
5. Authority - The opportunity to tell others what to do.
6. School System Policies and Practices (Company policies and practices on the original MSQ) - The way system 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 opportunity to try one's own methods.
10. Independence - The opportunity to work alone.
11. Moral Values - The ability to do things which do not go against one's conscience.
12. Recognition - Being recognized for doing a good job.
13. Responsibility - Freedom to use one's own judgment.
14. Security - The way the job provides for steady employment.
15. Social Service - The ability 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 opportunity to do different things.
20. Working Conditions - Physical conditions in which one works.

Each of the above scales is sampled by five items which ask respondents to rate their satisfaction with that particular aspect of their job. Response options include: Very Dissatisfied (VDS), Dissatisfied (DS), Satisfied (S), and Very Satisfied (VS).

Data Collection

Survey materials used in this study were distributed and collected by mail. Steps in the data collection process included: initial survey distribution, a follow-up mailing to non-respondents, and a personal telephone call to those individuals not responding to the two mailings.

Survey packets contained an introductory letter from the author (Appendix E), a letter from the West Virginia Department of Education Coordinator of School Psychology, expressing support for the study and urging cooperation of school psychologists (Appendix E), the Data Form, the Modified Minnesota Satisfaction Questionnaire, and a stamped, self-addressed envelope. The introductory letter briefly described the study, assured confidentiality, specified a return deadline, and invited requests for results of the study. Survey materials were printed on light colored paper (Data Form - Yellow; Modified MSQ - Green; Instructions - Pink).

Initial survey distribution took place on April 4, 1983. Approximately two weeks later (April 20, 1983) a second packet of survey materials was mailed to all individuals who had not responded. The packet included duplicate copies of the Data Form and Modified MSQ, a stamped, self-addressed envelope, and a cover letter urging prompt completion and return of the survey materials. Survey packets in the initial mailing were sent to school psychologists' office addresses, and packets in the follow-up mailing were sent to school psychologists' home addresses. Approximately two weeks after the follow-up mailing (May 6 & 7, 1983) telephone calls were placed to each of the remaining non-respondents. Those contacted were asked to return their survey materials or, if they preferred, respond to the survey items over the telephone. Two of the individuals contacted elected to respond in the latter fashion.

The above procedures represent an efficient and economical compromise to those found by Pucel, Nelson, and Wheeler (1969) as generating the highest overall survey response rates. These included using colored paper, sending a pre-letter and a pencil, and using colored paper, letter of endorsement, and a packet of coffee.

Research Questions

The methodological procedures used in this study were selected to answer the following research questions:

1. What are the levels of overall job satisfaction of school psychologists practicing in West Virginia, as measured by the Modified Minnesota Satisfaction Questionnaire (MSQ)?
2. What are the major sources of job satisfaction and dissatisfaction for school psychologists practicing in West Virginia, particularly those subfactors measured by the Modified MSQ?
3. What is the relationship between the overall job satisfaction of school psychologists practicing in West Virginia and demographic variables that have been linked to variations in job satisfaction?
4. How do school psychologists practicing in West Virginia compare with those of a national sample, in terms of levels of overall job satisfaction (as measured by the Modified MSQ)?
5. How do school psychologists practicing in West Virginia compare with those of a national sample, in terms of sources and correlates of job satisfaction?

Data Analysis

Completed questionnaire packets returned by May 13, 1983 were used in the data analysis. Analysis procedures were completed with the aid of computer facilities at Virginia Polytechnic Institute and State University. Specific statistical procedures were selected on the basis of their ability to provide analyses appropriate in answering the research questions posed by this study.

Treatment of Data

Responses to items of the Data Form were treated as ordinal data, with the exception of sex, years of experience, caseload, and number of professional organization memberships. These variables were treated as interval. Annual salary and contract length were combined to form a new variable, daily salary, to standardize salary scales. This alteration was accomplished by dividing the midpoint of the annual salary range by the length of contract (in days). For the regression analysis, the only experience variable used was experience as a school psychologist. Additionally, because of high intercorrelations, the variables: supervisor's role designation, supervisor's area of training, and supervisor's level of training were combined into a single variable, labelled supervision.

Each of the 20 subscales of the Modified MSQ included five items having four response options ranging from "Very Dissatisfied" to "Very Satisfied." Ordinal weights were assigned to each of the response options (1 = Very Dissatisfied to 4 = Very Satisfied), with increasing scores indicating increasing degrees of satisfaction. Each subscale had

an associated score which could range from 5 to 20, consisting of the sum of response weights of its five items.

Satisfaction categories for the subscale scores were assigned, based on the original response options. Following the procedures used in the original MSQ, response options were assumed to represent the midpoint of score or value intervals (i.e., a value of 3 actually represented the midpoint of the interval 2.5 - 3.5). Multiplying interval limits by the number of scale items (5) produced the following subscale intervals (satisfaction categories): 7.50 or below (Very Dissatisfied), 7.51 - 12.50 (Dissatisfied), 12.51 - 17.50 (Satisfied), 17.51 or above (Very Satisfied).

Overall job satisfaction scores were computed by summing response weights of the 100 items of the Modified MSQ for each respondent. Satisfaction categories for the total scale, based on original response options, were computed in the same way as those for the subscales, with interval limits being multiplied by 100. Satisfaction categories and intervals included: Very Dissatisfied: 150 or below; Dissatisfied: 151 - 250; Satisfied: 251 - 350; Very Satisfied: 351 or above. Total scores had a possible range of 100-400.

Statistical Analysis

Specific statistical techniques employed for each research question are described below:

Question 1

An overall index of job satisfaction was constructed by averaging overall job satisfaction scores on the Modified MSQ of each respondent.

A frequency distribution was plotted and percentages of respondents scoring in each category of satisfaction on the Modified MSQ were calculated to describe the job satisfaction of school psychologists practicing in West Virginia.

Question 2

A hierarchy of Modified MSQ subscales was developed by averaging the subscale scores of each respondent. Means and 95% confidence intervals (described by Hinkle, Wiersma, and Jurs, 1979) were calculated for each scale, and scales were ranked to describe the relative sources of satisfaction for school psychologists in West Virginia.

Additionally, participant responses to the items on perceived sources of satisfaction and dissatisfaction were categorized and response frequencies were tabulated. Percentages of responses in each category were used to describe the perceived sources of job satisfaction and dissatisfaction of school psychologists practicing in West Virginia.

Question 3

The relationship between overall job satisfaction and demographic variables was determined with a multiple regression procedure. Independent variables consisted of demographic variables from the Data Form, and the dependent variable was overall job satisfaction. All independent variables were initially used to construct an overall correlation matrix, from which variables were selected for inclusion in the regression equation. The regression model was developed using a forward inclusion procedure, run under the New Regression subprogram of the Statistical Package for the Social Sciences (SPSS).

The independent contribution of each variable was assessed through the use of partial correlation coefficients and partial F tests (Kerlinger, 1973; Kerlinger and Pedhazur, 1973). The partial correlation coefficients were used to measure the strength of linear relationships between predictor (independent) variables and overall job satisfaction scores, while controlling for the effects of other predictor variables. Partial F tests were used to determine if partial correlation coefficients differed from zero.

Question 4

Percentages of respondents scoring at each of the levels of job satisfaction were compared with those in Anderson's (1982) national sample of school psychologists to determine if differences existed. Overall job satisfaction scores on the Modified Minnesota Satisfaction Questionnaire of school psychologists practicing in West Virginia and those of the national sample were compared for equivalency as well. A t test (one sample case) was employed to determine if overall job satisfaction scores of West Virginia school psychologists (assumed to be the sample) differed from overall job satisfaction scores in the national study (assumed to be the population).[3]

Question 5

Hierarchies of Modified MSQ scales were compared, in terms of rank order and score levels to describe the commonalities and differences in sources of satisfaction between school psychologists in West Virginia and those of a national sample. Additionally, regression equations were

inspected, and predictors of overall job satisfaction of the two groups were compared.

Summary

This chapter has described participants and instrumentation to be used in the study. Additionally, procedures for data collection and analysis have been presented, and research questions have been reviewed.

CHAPTER IV

RESULTS OF THE STUDY

This chapter details the results of the data analysis procedures described in Chapter III. It includes sections examining: (a) response rates, (b) demographic data describing the sample, (c) statistical properties of the Modified Minnesota Satisfaction Questionnaire (MSQ), and (d) job satisfaction of school psychologists practicing in West Virginia. Finally, school psychologists in West Virginia are compared to those in Anderson's (1982) national survey of school psychologists, regarding demographic characteristics, levels of overall job satisfaction, sources of job satisfaction, and correlates of job satisfaction.

Survey Response

Complete data collection procedures are described in Chapter III. Recapping, data collection consisted of three steps: (a) an initial mailing of survey materials to all school psychologists in West Virginia, (b) a follow-up mailing to those individuals who did not respond to the initial mailing, and (c) a telephone follow-up of all remaining non-respondents. One survey packet was returned by the Postal Service as undeliverable. It was treated as a non-respondent case.

Table III presents survey response rates and percentages for each step in the data collection process. The final response total of 125

Table II

Survey Response Rates

Step	Number Mailed	Number Returned	Percent of Total
Initial Mailing	(137)	96	70.07
Followup Mailing	(41)	21	15.33
Telephone Followup	-	8	5.84
Total		125	91.24

Note: There were 137 possible participants

represents 91.24% of the school psychologists currently practicing in West Virginia.

Demographic Data

Participant responses to items on the Data Form were used in describing characteristics of the sample and in determining relationships between demographic variables and overall job satisfaction, as measured by the Modified MSQ. The first item of the Data Form was used to differentiate practitioners from non-practitioners. On all other items of the Data Form, information is reported only for those individuals who indicated that practitioner is their primary role. Additionally, data on sex and type of community was acquired from the original mailing list of school psychologists, provided by the West Virginia Department of Education (described in Chapter III), and was precoded onto Data Forms.

Primary Role Designation

Participants in the study included 84.8% (n = 106) practitioners employed by public school systems or Regional Education Service Agencies (RESAs) and 15.2% (n = 19) non-practitioners (Table III). The group of non-practitioners was composed of administrators, supervisors, trainers, and other individuals who did not meet the criteria of the definition of "West Virginia School Psychologist," presented in Chapter I.

Table III

Primary Role Designation

Category	Number	Percent of Total
Practitioner (Includes those employed by county school systems and RESAs)	106	84.80
Non-practitioner (Includes administrator, supervisor, trainer, and other)	19	15.20
Total	125	100.00

Sex

Data on the sex of participants was precoded from information on the original mailing list, which was provided by the West Virginia Department of Education. The sample was composed of 50.9% (n = 54) females and 49.1% (n = 52) males.

Age

The age distribution of respondents is presented in Table IV. School psychologists in West Virginia tend to be relatively young. While only 10.4% are 25 years of age or younger, 50.0% are under the age of 32, and more than 90% are under 44 years of age. Less than 3% are over 55 years of age, and none of the respondents reported being over 61.

West Virginia Native

Most of the school psychologists practicing in West Virginia have come from outside the state. Of the group of respondents, 29.2% (n = 31) indicated that they were native West Virginians, while 69.8% (n = 74) indicated that they were not originally from the state. One respondent failed to check this item.

Continuing Education

Of the group of practitioners, 56.6% (n = 60) indicated that they are currently continuing their education or pursuing an additional degree, while 42.5% (n = 45) reported that they are not involved in any continuing education activity. One individual did not respond to this item.

Table IV

Age Distribution

Age Range	Number	Percent of Total	Cumulative %
20 - 25	11	10.4	10.4
26 - 31	42	39.6	50.0
32 - 37	29	27.4	77.4
38 - 43	14	13.2	90.6
44 - 49	6	5.7	96.3
50 - 55	1	0.9	97.2
56 - 61	3	2.8	100.0
62 or over	0	0.0	100.0
Total	106	100.0	

Current Degree Status

Table V presents numbers and percentages of respondents holding degrees in each category. All but four of the practitioners are sub-doctoral level school psychologists. However, most of the school psychologists in West Virginia are trained at the post-masters level.

Co-workers

The number of co-workers ranged from 0 to 8, with an average of 2.6. Within the group of respondents, 14.2% reported working alone, while 21.7% (n = 23) reported that there is one other psychologist in the system, and 23.6% (n = 25) reported having two co-workers. Further, 13.2% of the respondents (n = 14) reported having three co-workers, 9.4% (n = 10) reported having four, and 17.9% (n = 19) reported that there were five or more other psychologists in the system.

Experience

Respondents reported their years of experience in the profession of school psychology, as a school psychologist in West Virginia, and any teaching experience they had acquired. Results are presented in Table VI. Several respondents indicated that their teaching experience was at the college level. However, in most cases, it was not possible to distinguish between teaching experience in public schools and teaching experience at the college level. Of the group of respondents, 63.2% indicated that they had no teaching experience.

Table V

Current Degree Status

Degree	Number	Percent of Total
Bachelors	2	1.9
Masters	11	10.4
Ed.S., C.A.G.S., or Masters + 30 Semester (45 Quarter) Hours	89	84.0
Doctorate	4	3.8
Total	106	100.0

Table VI

Experience

Category	Years of Experience		
	Mean	Std. Dev.	Range
Experience in the Profession of School Psychology	4.623	4.199	1 - 28
Experience as a School Psychologist in West Virginia	3.486	2.937	1 - 18
Teaching Experience	2.571	7.528	0 - 20

Psychologist to Student Ratio

Data on psychologist to student ratios is presented in Table VII. More than half (51.9%) of the school psychologists in West Virginia reported having a ratio of 1:2500 or less, while 13.2% reported having a ratio of more than 4500 students per psychologist. Only 13.2% reported having a ratio of 1:1500 or less, the optimal ratio suggested by National Association of School Psychologists (Tractman, 1981).

Annual Evaluation Caseload

Responses to this item varied considerably, with respondents reporting an average annual evaluation caseload of 141. One-half (50.0%) of the respondents reported having annual evaluation caseloads of 100 or less, while 29.2% reported average caseloads in excess of 200 evaluations each year.

Professional Affiliation

Table VIII presents a summary of professional organization affiliations reported by survey respondents. Of the group of respondents, 16.0% (n = 17) reported being affiliated with no professional organizations, 34.0% (n = 36) indicated that they were members of one organization, 40.6% (n = 43) reported having two professional memberships, and 8.5% (n = 9) indicated that they held memberships in three organizations. One respondent reported being affiliated with five professional organizations.

Table VII

Psychologist to Student Ratio

Ratio	Number	Percent of Total
1:1000 or less	6	5.7
1:1001 to 1:1500	8	7.5
1:1501 to 1:2000	11	10.4
1:2001 to 1:2500	30	28.3
1:2501 to 1:3000	12	11.3
1:3001 to 1:3500	16	15.1
1:3501 to 1:4000	2	1.9
1:4001 to 1:4500	7	6.6
1:4501 or more	14	13.2
Total	106	100.0

Table VIII

Professional Affiliation

Organization	Number of Participants Reporting Membership	Percent of Total
National Association of School Psychologists (NASP)	49	46.23
West Virginia School Psychologists Association (WVSPA)	66	62.26
American Psychological Association (APA)	8	7.55
West Virginia Psychological Association (WVPA)	4	3.77
American Personnel and Guidance Association (APGA)	1	0.94
Other	26	24.53

Salary

To standardize salary levels among respondents, daily salary was computed by dividing the midpoint of the annual salary range by the length of contract (in days). Daily salary ranged from $60 to $192, with a mean of $91.63. When converted to annual salary equivalents, the average salary would range from $18,326 for a ten month, school year contract (200 days) to $23,824 for a 12 month (260 day) contract. Additionally, 98.1% of the respondents reported having an annual salary of $30,000 or less, and 53.8% reported having an annual salary of $20,000 or less.

Supervision

This variable was addressed through three survey items, including: supervisor's role designation, area of training, and level of training. Specific tabulations for each item are presented in Tables IX, X, and XI, respectively. The majority of respondents (72.6%) indicated that their primary supervisor's role designation was in an area other than psychology. Further, 76.4% reported that their primary supervisor was trained in an area other than psychology. While education administration and special education were the most commonly reported areas of training, responses to this item were diverse, including among others, the areas of speech pathology, biology, mathematics, and music. Four respondents reported that their supervisor's role designation was in psychology, but area of training was not.

Respondents further reported that 69.5% (n = 73) of their supervisors held the masters degree, while 19.0% (n = 20) were trained above

Table IX

Supervisor's Role Designation

Role Designation	Number	Percent of Total
Director/Coordinator/Supervisor of Psychological Services or Chief Psychologist	29	27.36
Director/Coordinator/Supervisor of Special Education or Pupil Services	52	49.06
Other	25	23.58
Director of Curriculum and Instruction	6	5.66
Director of Personnel	4	3.77
Director of Guidance	2	1.89
RESA Director	2	1.89
Principal	4	3.77
Unspecified	7	6.60
Total	106	100.00

Table X

Supervisor's Area of Training

Area	Number	Percent of Total
Psychology	25	23.59
Special Education	21	19.81
Education Administration	33	31.13
Other	26	24.53
Unknown	1	0.94
Total	106	100.00

Table XI

Supervisor's Level of Training

Degree	Number	Percent of Total
Bachelors	12	11.43
Masters	73	69.52
Ed.S., C.A.G.S., or Masters + 30 Semester (45 Quarter) Hours	13	12.38
Doctorate	7	6.67
Total	105	100.00

Note: One respondent failed to check this item.

the masters level. Of the group of participants, 71.7% (n = 76) reported their own educational level to be higher than that of their primary supervisor.

Plans to Remain in Present Position

Participants were asked to estimate the number of years they planned to remain in their present position. The average estimate was about 3½ years. Specific figures are presented in Table XII. More than 13% (n = 14) indicated plans to leave their positions before the next school year, while 46.2% planned to remain in their present position 2 years or less, and 81.1% planned to remain in their present position five years or less. These findings are consistent with those reported in an earlier study of school psychologists in West Virginia (Solly, 1978).

Plans to Remain in the Profession

Participants were also asked to estimate the number of years they planned to remain in the profession of school psychology. Estimates tended to be higher on this item than for plans to remain in present position, with 81.1% (n = 86) of the respondents indicating plans to remain in the profession for 5 or more years, and 52.8% (n = 56) planning to remain in the profession for 9 or more years. (See Table XIII.)

Intended Direction of Movement

School psychologists participating in the study were further asked to indicate their planned direction of movement if they were to leave

Table XII

Plans to Remain in Present Position

Number of Years	Number	Percent of Total	Cumulative %
0	14	13.2	13.2
1	17	16.0	29.2
2	18	17.0	46.2
3	11	10.4	56.6
4	9	8.5	65.1
5	17	16.0	81.1
6	2	1.9	83.0
7	0	0.0	83.0
8	1	0.9	84.0
9 or more	17	16.0	100.0
Total	106	100.0	

Table XIII

Plans to Remain in the Profession

Number of Years	Number	Percent of Total	Cumulative %
0	3	2.8	2.8
1	3	2.8	5.7
2	5	4.7	10.4
3	6	5.7	16.1
4	3	2.8	18.9
5	22	20.8	39.6
6	2	1.9	41.5
7	3	2.8	44.3
8	3	2.8	47.2
9 or more	56	52.8	100.0
Total	106	100.0	

their present position. Of the 89 participants responding, 10.1% intended to seek another position as a school psychologist in West Virginia, 30.3% reported intentions to seek a school psychologist position in another state, 28.1% planned to enter another specialty in psychology, 5.6% planned to become trainers, 7.9% expressed intentions to enter education administration, and 1.1% planned to enter psychological services administration. Other intended directions of movement, reported by 16.9% of the respondents, included retirement, private practice, and seeking a position in business and industry.

Job Satisfaction

Participants were asked to rate their overall satisfaction in their present position. Of the 106 respondents, 13.2% indicated that they were "Very Dissatisfied," 27.4% indicated that they were "Dissatisfied," 49.1% indicated that they were "Satisfied," and 10.4% rated themselves as "Very Satisfied."

Satisfaction with the Community

Following the same format as the job satisfaction item, participants were asked to rate their satisfaction with the community in which they live. On this item, 2.8% checked "Very Dissatisfied," 17.9% checked "Dissatisfied," 48.1% checked "Satisfied," and 31.1% checked "Very Satisfied."

Type of Community

Communities and their associated school districts were defined as urban or rural, based on the criteria presented in Chapter II. Based

on these definitions, 69.8% (n = 74) of the respondents were employed in communities classified as rural, and 30.2% (n = 32) were employed by school systems in communities classified as urban. Data on type of community was also precoded on Data Forms, based on information from the mailing list, provided by the West Virginia Department of Education.

Statistical Properties of the Modified Minnesota Satisfaction Questionnaire

The Modified Long Form of the Minnesota Satisfaction Questionnaire (described in Chapter III) was employed in this study to measure job satisfaction of school psychologists practicing in West Virginia. Statistical properties of the instrument were calculated because of the modifications, and are presented below.

Reliability

Cronbach's Alpha is currently the most commonly used reliability measure in psychometric research. Cronbach's Alpha was used to determine the internal consistency of overall job satisfaction scores, and resulted in a coefficient of .957.

Validity

Concurrent validity of the Modified MSQ was assessed by comparing overall job satisfaction scores with respondents' ratings of their overall job satisfaction (Data Form item #22). A cross-tabulation of

job satisfaction ratings and overall job satisfaction scores yielded a Chi-square value of 108.07 ($p < .05$), indicating that total job satisfaction scores are not independent of respondents' ratings of their job satisfaction. The analysis further resulted in an Eta coefficient of .744, which reflects the magnitude of the relationship between respondents' Modified MSQ scores and their reported feelings of satisfaction with their jobs. Results of the Cross-tabulation Analysis are presented in Table XIV.

Job Satisfaction of School Psychologists in West Virginia

Overall job satisfaction scores were calculated by summing response weights for the 100 items of the Modified MSQ, providing a possible score range of 100 - 400. Scores were categorized into levels of overall job satisfaction, based on the original response options. Of the 106 survey respondents, 8.5% (n = 9) scored in the "Very Dissatisfied" range, 27.4% (n = 29) scored in the "Dissatisfied" range, 60.4% (n = 64) scored in the "Satisfied" range, and 3.8% (n = 4) scored in the "Very Satisfied" range. Overall job satisfaction scores ranged from 121 to 370, with the average score ($\bar{X}$ = 261.12; s = 56.57) falling within the lower limits of the "Satisfied" range. Over one-third (35.8%) of the West Virginia School Psychologists responding had overall scores indicating that they are dissatisfied or very dissatisfied with their jobs.

Table XIV

Crosstabulation of Job Satisfaction Ratings and Overall Job Satisfaction Scores

Overall Job Satisfaction Scores		Job Satisfaction Ratings			
		Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied
Very Dissatisfied (100 - 150)	Observed (Expected)	9 (1.18)	0 (2.46)	0 (4.42)	0 (0.93)
Dissatisfied (151 - 250)		3 (3.83)	20 (7.93)	6 (14.23)	0 (3.01)
Satisfied (251-350)		2 (8.45)	9 (17.51)	44 (31.40)	9 (6.64)
Very Satisfied (351-400)		0 (0.53)	0 (1.09)	2 (1.96)	2 (0.42)

Chi-square = 108.07, $p < .05$.

Eta = .744.

Sources of Job Satisfaction

As discussed in Chapter II, job satisfaction does not exist merely as a unitary, global factor, but is composed of satisfaction or reinforcement derived from a number of sources available in the work environment. To determine the major sources of job satisfaction for school psychologists in West Virginia, a hierarchy of Modified MSQ scales was constructed, including means, standard deviations, and 95% confidence intervals for each scale. The hierarchy is presented in Table XV. Based on original response weights of the scales, school psychologists in West Virginia are satisfied with 14 of the 20 factors contributing to overall job satisfaction, and dissatisfied with six. Five scales: School System Policies and Practices, Advancement, Compensation, Working Conditions, and Supervision-Technical have means and confidence intervals falling totally within the "Dissatisfied" range. A sixth scale, Supervision-Human Relations has a mean in the "Dissatisfied" range and a confidence interval extending from the "Dissatisfied" range into the "Satisfied" range. West Virginia school psychologists indicated that their greatest amounts of satisfaction are derived from Co-workers and Social Service.

Relationships Between Overall Job Satisfaction Scores and Selected Demographic Variables

A multiple regression analysis was used to determine the relationships between overall job satisfaction scores and selected demographic variables. The regression model was constructed through the use of the Statistical Package for the Social Sciences (SPSS) New

TABLE XV

Hierarchy of Modified Minnesota Satisfaction Questionnaire Scales

Scale	Mean	Standard Deviation	95% Confidence Interval
Co-workers	15.547	3.080	14.959 - 16.135
Social Service	15.047	3.181	14.440 - 15.654
Activity	14.934	2.705	14.417 - 15.451
Moral Values	14.679	3.152	14.078 - 15.280
Independence	14.557	4.095	13.928 - 15.186
Security	14.038	3.277	13.413 - 14.663
Responsibility	13.925	3.518	13.253 - 14.597
Achievement	13.821	3.239	13.202 - 14.440
Social Status	13.613	2.717	13.094 - 14.132
Ability Utilization	13.500	3.750	12.785 - 14.215
Recognition	13.009	5.209	12.015 - 14.003
Authority	12.953	3.479	12.289 - 13.617
Variety	12.755	3.995	11.993 - 13.517
Creativity	12.736	4.095	11.954 - 13.518
Supervision-Human Relations	12.179	4.682	11.285 - 13.073
Supervision-Technical	11.726	4.886	10.793 - 12.659
Working Conditions	11.708	3.942	10.955 - 12.461
Compensation	11.406	3.566	10.726 - 12.086
Advancement	10.547	4.236	9.739 - 11.355
Sch. System Policies & Practices	10.368	3.560	9.688 - 11.048

Regression Procedure. An overall correlation matrix, including all variables was constructed prior to the analysis to aid in the detection of multicollinearity. Experience as a school psychologist was intercorrelated with both age (0.49) and salary (0.41). Number of co-workers was intercorrelated with salary (0.48) and type of community (0.47). Since neither co-workers nor experience were correlated with overall job satisfaction, they were deleted from the analysis.

Additionally, the preliminary correlation matrix revealed intercorrelations among supervisor's role designation, supervisor's area of training, and supervisor's level of training ranging from 0.84 to 0.87. (Supervisors holding a role designation in psychology tended to be trained in psychology, and those who were trained in psychology tended to be trained at higher levels than those who were not.) All three of the supervision variables were correlated with overall job satisfaction scores, and were thus combined for the regression analysis.

Several combinations of variables were explored in an attempt to find the "best fitting" regression equation. Two regression models of value emerged from the analysis. The first model included six variables: supervision, salary, age, type of community, psychologist to student ratio, and sex. For the total model, $R^2 = 0.218$, with supervision the only variable contributing significantly to the prediction of overall job satisfaction scores ($F = 6.63$, $p < .05$). The first regression model is presented in Table XVI.

The second regression model (presented in Table XVII) included only supervision and salary as independent variables. The model had a total R^2 value of 0.182. Both supervision ($F = 6.51$, $p < .05$) and salary ($F =$

Table XVI

Multiple Regression Summary

Source	df	SS	MS	F
Regression	6	71,772.49	11,962.08	4.56*
Residual	98	256,998.56	2,622.43	
Total	104	328,771.05		

Estimate	b	Std. Error b	F
Intercept	145.29	27.31	
Supervision	7.86	3.05	6.63*
Salary	0.52	0.33	2.60
Age	6.22	4.47	1.93
Type of Community	17.19	12.19	1.99
Ratio	-2.45	2.30	0.04
Sex	6.66	10.14	0.43

*$p < .05$.

Note: b values are partial regression weights.

Table XVII

Multiple Regression Summary

Source	df	SS	MS	F
Regression	2	59,904.34	29,952.17	11.36*
Residual	102	268,866.70	2,635.95	
Total	104	328,771.04		

Estimate	b	Std. Error b	F
Intercept	148.47	25.09	
Supervision	7.74	3.03	6.51*
Salary	0.83	0.27	9.73*

*$p < .05$

Note: b values are partial regression weights.

9.73, $p < .05$) emerged as significant predictors of overall job satisfaction scores. Job satisfaction increased as (a) salary levels increased, and (b) as the level of training of the supervisor increased and the area of training more closely approached that of a school psychologist.

The partial correlation between overall job satisfaction and supervision, controlling for salary was 0.25. The partial correlation between overall job satisfaction and salary, controlling for supervision was 0.16.

Perceived Sources of Satisfaction and Dissatisfaction

As a final step in the data collection, West Virginia school psychologists were asked to list three factors they perceived as being major sources of satisfaction and three factors they perceived as being major sources of dissatisfaction in their jobs. Response frequencies were tabulated and categorized. Results are reported in Table XVIII. The sources of satisfaction most frequently listed included: (a) providing service to children and parents (59.7%), (b) friendly or supportive co-workers (58.1%), and (c) freedom and flexibility in scheduling (41.9%).

The most frequently listed sources of dissatisfaction included: (a) adequacy or quality of supervision (37.1%), including the supervisor's knowledge or understanding of the role and function of the psychologist, (b) physical working conditions (35.5%), including office and testing space and secretarial help, (c) excessive demands for testing (32.2%), (d) salary or compensation (32.3%), (e) lack of status in the school system (25.8%), (f) policies of the school system

Table XVIII

Perceived Sources of Satisfaction and Dissatisfaction

Source Source	Percent of Total Listing Source
Sources of Satisfaction	
Providing Service to Children and Parents	59.7
Friendly or Supportive Co-workers	58.1
Freedom/Flexibility in Scheduling	41.9
Autonomy	14.5
Annual/Daily Work Schedule (Abbreviated)	11.3
The Community	8.1
Working with a Variety of People	6.5
Job Security	6.5
Activity/Being Able to Stay Busy	6.6
Sources of Dissatisfaction	
Adequacy or Quality of Supervision	37.1
Physical Working Conditions	35.5
Excessive Testing Demands	32.3
Salary/Compensation	32.3
Lack of Status in the System	25.8
Policies of the School System	25.8
Lack of Advanced Training Opportunities	20.9
Psychologist Caseload or Ratio	17.7
Lack of Advancement Opportunities	16.1
Lack of Time for Clinical/Counseling Interventions	14.5
Monotony of Testing/Boredom	14.5
Lack of Input in Program Development/Decision-Making	12.9
Excessive Travel	8.1

Note: There were 62 school psychologists responding to this item.

and the way in which they are implemented (25.8%), and (g) lack of advanced training opportunities (20.9%), including opportunities to attend workshops for psychologists or to pursue doctoral level training. All other sources of dissatisfaction were listed by less than 20% of the respondents. A total of 62 participants responded to this item.

Comparison of West Virginia School Psychologists and Those of a National Sample

The final phase of data analysis consisted of a comparison between school psychologists practicing in West Virginia and those of Anderson's (1982) national sample of school psychologists. The two groups of psychologists were compared regarding levels, sources, and correlates of job satisfaction, as well as demographic characteristics.

Overall Job Satisfaction

On the average, school psychologists in West Virginia appear to be less satisfied with their jobs than school psychologists across the nation. While none of the school psychologists in Anderson's (1982) national study had modified MSQ scores in the "Very Dissatisfied" range, 8.5% of those in West Virginia scored in the "Very Dissatisfied" range. Nationally, 14.2% of the school psychologists surveyed were found to be "Dissatisfied" or "Very Dissatisfied" with their jobs.

In West Virginia, 35.8% of the school psychologists scored in the "Dissatisfied" or "Very Dissatisfied" range on the Modified MSQ. In contrast, 80.7% of the national sample of school psychologists were

"Satisfied" with their jobs and 5.1% were "Very Satisfied", as compared to 60.4% "Satisfied" and 3.8% "Very Satisfied" in West Virginia.

A t test (one sample case) indicated that school psychologists practicing in West Virginia had significantly lower overall job satisfaction scores ($t = -4.00$, $p < .05$) than school psychologists in Anderson's (1982) sample of the NASP membership. Results of the comparison of satisfaction levels appears in Table XIX.

Sources of Job Satisfaction

School psychologists in Anderson's (1982) national survey demonstrated satisfaction with 18 of the 20 subscales of the Modified MSQ. School psychologists in West Virginia exhibited satisfaction with 14 of the 20 scales. However, the order of the hierarchy of sources of satisfaction was similar in both groups. Nationally, school psychologists derive the greatest satisfaction from: (a) Social Service, (b) Moral Values, (c) Activity, (d) Co-workers, and (e) Independence. In West Virginia, the primary sources of satisfaction include: (a) Co-workers, (b) Social Service, (c) Activity, (d) Moral Values, and (e) Independence.

School psychologists across the nation are least satisfied with: (a) Advancement Opportunities, (b) School System Policies and Practices, (c) Technical Aspects of Supervision, (d) Working Conditions, and (e) Compensation. Those in West Virginia are most dissatisfied with: (a) School System Policies and Practices, (b) Advancement Opportunities, (c) Compensation, (d) Working Conditions, and (e) Technical Aspects of Supervision.

Table XIX

Comparison of Overall Job Satisfaction Levels

Category	West Virginia Percentage	National Sample Percentage
Very Dissatisfied	8.5	0.0
Dissatisfied	27.3	14.2
Satisfied	60.4	80.7
Very Satisfied	3.8	5.1

Correlates of Job Satisfaction

In a national sample of school psychologists, age (r = .234) and psychologist to student ratio (r = -.135; non-linear) were the only significant predictors of overall job satisfaction (Anderson, 1982). Other correlates included salary (r = .155), number of co-workers (r = -.106), degree status (r = -.079), and sex (r = .038). Within the group of West Virginia school psychologists, age (r = .126) and ratio (r = -.094) also correlated with job satisfaction, but salary (r = .361) and supervision (r = .322) were significant predictors of overall job satisfaction scores. It should be noted, however, that Anderson's (1982) national study did not include supervision as a demographic variable. In West Virginia, type of community (r = .120) was also correlated with overall job satisfaction scores (with urban related to higher levels of satisfaction).

Demographic Characteristics

School psychologists in West Virginia differ from those of a national sample in terms of overall job satisfaction and factors relating to job satisfaction. There are also demographic differences between the two groups. When compared with a national sample, West Virginia school psychologists tend to be younger, have fewer co-workers, higher psychologist to student ratios, and less experience. School psychologists in West Virginia also tend to receive lower annual salaries and plan to remain in their present positions for shorter periods of time than do their colleagues across the nation.

Summary

Results of the study have been described in this chapter. Briefly, an overall response rate of 91.24% was obtained. Although more than 1/3 are dissatisfied, a majority of school psychologists in West Virginia are satisfied with their jobs; but less satisfied than school psychologists of a national sample. Additionally, participants in the study exhibited dissatisfaction with 6 of the 20 sources of satisfaction (subscales) of the Modified MSQ. Significant predictors of job satisfaction were supervision and salary. Other factors, including age, type of community, and psychologist to student ratio were also found to be related to overall job satisfaction.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

In this chapter, results of the study are interpreted and discussed. The chapter includes a review of the research questions and implications of the findings. Additionally, recommendations for future research, and for the profession of school psychology in West Virginia are provided.

Review of the Research Questions and Methods

This study was designed to describe and analyze the job satisfaction of school psychologists practicing in West Virginia. Five specific research questions provided the basis of the analysis:

1. What are the overall levels of job satisfaction of school psychologists practicing in West Virginia?
2. What are the major sources of job satisfaction and dissatisfaction for school psychologists practicing in West Virginia?
3. What is the relationship between overall job satisfaction of school psychologists in West Virginia and demographic variables that have been linked to variations in job satisfaction?
4. How do school psychologists practicing in West Virginia compare with those of a national sample, in terms of levels of overall job satisfaction?

5. How do school psychologists practicing in West Virginia compare with those of a national sample, in terms of sources and correlates of job satisfaction?

A survey of job satisfaction was conducted which included all the 137 school psychologists employed in West Virginia. A mailing list of school psychologists was provided by the West Virginia Department of Education. Survey materials, including a Data Form and the Modified Minnesota Satisfaction Questionnaire (MSQ), were distributed and collected by mail. The Data Form was used to gather demographic information and the Modified MSQ was used to measure job satisfaction.

A total of 125 individuals (91.24%) responded to the survey. Of this number, 106 were practitioners employed by public school systems or Regional Education Service Agencies, and fit the definition of West Virginia School Psychologist, presented in Chapter I. Data from the survey was statistically analyzed through the facilities of the computer center at Virginia Polytechnic Institute and State University.

Participant responses to items of the Modified MSQ provided the basis for scores on 20 subscales (sampling sources of job satisfaction) and an overall job satisfaction index. Levels of overall job satisfaction were determined by tabulating frequencies of scores within standardized intervals. A hierarchy of Modified MSQ scales was constructed following the calculation of means and confidence intervals for each scale. This hierarchy was used to describe the major sources of job satisfaction and dissatisfaction for school psychologists in West Virginia. Factors expressed as perceived sources of job satisfaction

and dissatisfaction by respondents were categorized and tabulated, to provide further information on these sources.

A multiple regression procedure was used to determine the relationships between overall job satisfaction scores and demographic variables from the Data Form. The levels, sources, and correlates of overall job satisfaction of school psychologists in West Virginia were compared to those of a national sample. A t test was used to compare overall job satisfaction levels between school psychologists practicing in West Virginia and school psychologists in Anderson's (1982) national sample of NASP members.

Summary of Results and Conclusions

The research questions which provided the basis for this study are also used as a framework for summarizing the results and conclusions.

1. What are the levels of overall job satisfaction of school psychologists practicing in West Virginia?

The results of this study indicated that 8.5% of school psychologists practicing in West Virginia were very dissatisfied with their jobs, 27.4% were dissatisfied, 60.4% were satisfied, and 3.8% were very satisfied. While a majority of school psychologists in West Virginia (64.2%) are satisfied with their jobs, a significant number (35.8%) are dissatisfied.

2. What are the major sources of job satisfaction and dissatisfaction for school psychologists practicing in West Virginia?

The hierarchy of Modified MSQ scales indicates that West Virginia School Psychologists are satisfied with 14 of the 20 sources that

comprise overall job satisfaction, and dissatisfied with six. According to Modified MSQ scales, these individuals derive the greatest amounts of satisfaction from their co-workers, the opportunity to provide social service, being able to stay busy in their jobs, doing things that do not go against their moral values, and the independence they experience in their jobs. The Modified MSQ hierarchy further indicates that school psychologists in West Virginia receive the greatest dissatisfaction from school system policies and practices, opportunities for advancement, the compensation they receive for the amount of work they do, working conditions on the job, and the technical quality of their supervision.

West Virginia school psychologists' perceived sources of satisfaction and dissatisfaction in their jobs closely resemble those sources reflected by the Modified MSQ. Frequently listed sources of satisfaction included: providing service to children and parents, friendly or supportive co-workers, and freedom or flexibility (independence) on the job. Major sources of dissatisfaction expressed by this group were: adequacy or quality of supervision, physical working conditions, excessive testing demands, salary or compensation, and lack of status in the school system. Policies of the school system, lack of advancement opportunities, and lack of opportunity for advanced training were other factors perceived by West Virginia school psychologists as being major sources of dissatisfaction.

3. What is the relationship between overall job satisfaction of school psychologists practicing in West Virginia and demographic variables that have been linked to variations in job satisfaction?

A multiple regression model using supervision, salary, age, type of community, psychologist to student ratio, and sex as independent variables accounted for 21.83% of the variation in job satisfaction scores of school psychologists practicing in West Virginia. Supervision and salary were found to be significant predictors of overall job satisfaction scores.

A further analysis of the nature of the relationships between the these significant predictors and overall job satisfaction indicated that a positive relationship exists between salary and overall job satisfaction. As salary increases for West Virginia psychologists, overall job satisfaction also increases. The relationship between supervision and satisfaction was more complex. The analysis revealed that as the supervisor's area of training and expertise more closely approaches that of a psychologist, and simultaneously, the educational level of the supervisor increases, overall job satisfaction increases. It should be noted that, within this study, high intercorrelations were found among the characteristics of supervision. As would be expected, supervisors holding the title of psychologist tended to be trained in psychology. However, supervisors who were trained in psychology also tended to have higher educational levels than those who were not. This phenomenon may be unique to the state of West Virginia.

4. How do school psychologists in West Virginia compare with those of a national sample, in terms of levels of overall job satisfaction?

A comparison of school psychologists in West Virginia with those in Anderson's (1982) national sample revealed through a t test that overall levels of job satisfaction were significantly lower for school psychologists in West Virginia than for those in the national sample. While the national sample of school psychologists was found to be neither more satisfied nor more dissatisfied than the overall U.S. workforce, school psychologists in West Virginia were found to be more dissatisfied than their counterparts from across the nation and workers in general.

5. How do school psychologists practicing in West Virginia compare with those of a national sample, in terms of sources and correlates of job satisfaction?

Sources of job satisfaction for school psychologists in West Virginia tend to parallel those for school psychologists across the nation. Although their relative positions in the Modified MSQ hierarchy varied, the same five factors: co-workers, social service, activity, independence, and moral values emerged as the greatest sources of satisfaction in both Anderson's (1982) national sample of school psychologists and the group of school psychologists practicing in West Virginia. Similarly, the sources of least satisfaction (or greatest dissatisfaction) for both groups included: school system polices and

practices, opportunity for advancement, technical supervision, compensation, and working conditions.

While correlations between demographic variables and overall job satisfaction tended to be similar for school psychologists in West Virginia and those of a national sample, significant predictors of overall job satisfaction in West Virginia included supervision and salary, as opposed to age and psychologist to student ratio in the nationwide study. (Supervision was not included in the national sample.)

Discussion

Job satisfaction issues took the form of five specific research questions in this study. The results of the study are discussed below, in light of each of the research questions.

Levels of Overall Job Satisfaction

The issue of job satisfaction has received considerable attention. Although there has been wide debate on the proportion and importance of dissatisfied workers in the labor force, there is general agreement that job dissatisfaction poses problems for workers and employees, alike (Barbash, 1976; Gruneberg, 1976; 1979; Hulin, 1969; Portigal, 1976; Schultz, 1982; Strauss, 1975). Within the work environment, productivity has traditionally been an issue of concern. In industrial psychology literature, discussions of job dissatisfaction have consistently addressed both the quantity and quality of work provided (Maier, 1965; Roethlisberger and Dickson, 1939; Schultz, 1982).

Any appreciable amount of job dissatisfaction within a group of school psychologists may affect the quality of their work through burnout (Reiner and Hartshorne, 1982; Schultz, 1982), and lack of job involvement (Cheloha and Farr, 1980) including apathy, detachment, and lack of professional commitment (Bardon, 1981). The issue of the quality (rather than quantity) of psychological services provided to children is one of considerable gravity.

The results of this study indicated that considerably more school psychologists in West Virginia are dissatisfied with their jobs than their counterparts across the nation and the workforce in general. The proportion of dissatisfied school psychologists in West Virginia (35.8%) exceeds the levels Schultz (1982) projects for the workforce in general (10-15%) and for individuals in social service occupations (25%).

A relationship between job dissatisfaction and turnover has clearly been demonstrated in the literature (Daley, 1979; Farris, 1971; Fournet, Distefano, and Pryer, 1969; Freudenberger, 1977; Lattanzi, 1981; Pines and Masluch, 1978; Schultz, 1982). Within the domain of school psychological services, professional turnover diminishes the continuity of service delivery and suppresses the effectiveness of follow-up activities. While the relationship between job dissatisfaction and turnover is not the issue of this study, one would be remiss to ignore the fact that the proportions of school psychologists in West Virginia who are dissatisfied (35.8%) and who leave their jobs each year (31.8%) are very similar. Additionally, 81.1% of school

psychologists responding in the West Virginia study expressed intentions to leave their positions within five years. This is almost twice the percentage (41.7%) of school psychologists in a national study indicating similar intentions to leave their positions within five years (Anderson, 1982).

Sources of Job Satisfaction and Dissatisfaction

School psychologists in West Virginia appear to gain satisfaction from the same sources as do school psychologists across the nation and other social service professionals. As noted by Anderson (1982) and Vensel (1980), school psychologists derive satisfaction from social science and autonomy, resulting from the unique characteristics of their jobs within the structure of the public education system. The evidence suggests, however, that this same uniqueness of the position may also contribute to school psychologists' dissatisfaction. An examination of the source of satisfaction and dissatisfaction provides information that can be used in the development of programming to enhance the job satisfaction of specific groups of school psychologists, and thus the delivery and quality of services.

The hierarchy of Modified MSQ scales indicates that school psychologists in West Virginia are satisfied with many aspects of their jobs. Major sources of satisfaction included co-workers, social service, activity, moral values, and independence. Major sources of dissatisfaction were school system policies and practices, advancement opportunities, compensation, working conditions, and technical supervision. Dissatisfaction with school system policies and practices probably

reflects the inherent conflicts in the basic operational modes of the psychologist and the public school system. As Hart (1983) suggests, school psychologists philosophically are change agents, subscribing to an ideology of efficient, systematic change, while public education in America (and West Virginia) has traditionally been a sociopolitical system, the position of the school psychologist is unique, fitting neither the instructional domain nor the typical administrative hierarchy. Issues such as the identity of the school psychologist's primary client (i.e., the administration versus the student versus the parent) continue to cloud perceptions of the relative level of the position (Guidubaldi, 1981; Hart, 1983), and prevent systematic structuring of advancement opportunities. The position of school psychologist, as Anderson (1982) suggests, is often both an entry level and a terminal position.

The dissatisfaction West Virginia school psychologists exhibit with other factors, including compensation, working conditions, and supervision is probably a result of the interrelationships of the relative youth of the profession within the state, and the unclear distinction of the level of the position. Many school psychologists are paid on teachers' salary scales, yet their positions require the highest level of education for entry of any in the system. Dissatisfaction may also result from school psychologists' comparisons of their own salary levels with those of professionals in other specialties in the field of psychology. Working conditions involving factors such as lack of office space and secretarial help may also stem from the

novelty and leveling of the position. Most school system facilities in West Virginia were designed and constructed before school psychology was a recognized profession, and thus adequate space was not provided. Typically school psychologists in West Virginia also serve a number of schools, and thus they do not have one particular location in which they work. Additionally, positions in public school systems not at an administrative level are rarely afforded substantial amounts of secretarial time.

Supervision issues were also revealed to be a major source of dissatisfaction for school psychologists in West Virginia. With the inception of P.L. 94-142, large numbers of school psychologists were for the first time hired in West Virginia. The placement and supervision of the individuals posed problems for chief administrators who were unfamiliar with the profession. School psychologists' positions were placed under varying units within school systems, and currently few psychological services units exist as separate departments within school systems of the state. Varying types of supervision result, so that most school psychologists in West Virginia are supervised by individuals who have little training or expertise in psychology, and a majority are supervised by individuals at lower educational levels than themselves. These factors have been reported by Dixon, Shaw, and Bensky (1980) as sources of dissatisfaction for special service personnel.

West Virginia school psychologists responding to the survey also demonstrated that they have accurate perceptions of their sources of

satisfaction and dissatisfaction. Responses to open ended items asking participants to list factors they viewed as major sources of satisfaction and dissatisfaction in their jobs closely resembled the hierarchy of Modified MSQ scales. Co-workers, providing social services, and autonomy were the most frequently listed sources of satisfaction, while supervision, working conditions, and salary headed the list of dissatisfactions. Other sources of dissatisfaction listed included lack of status in the system, which further illustrates the advancement and identity difficulties described earlier, and lack of advanced training opportunities. This last source of dissatisfaction probably results from the fact that only one school psychology training program exists in the state, and offers training at the subdoctoral level to prepare entry level school psychologists. Individuals seeking advanced graduate level training in school psychology are forced to attend institutions in other states

Job Satisfaction and Demographic Variables

Supervision and salary were found to be significant predictors of overall job satisfaction of school psychologists in West Virginia. Reiterating, job satisfaction increased as salary increased. Job satisfaction of West Virginia school psychologists also tended to increase when the individuals providing supervision were trained in psychology, and had higher levels of training. Salary and supervision have consistently emerged as sources, predictors, and correlates of job satisfaction for school psychologists practicing in West Virginia.

They are important factors to be considered in any attempt to increase overall levels of satisfaction.

Other demographic variables were also found to be related to overall job satisfaction. Age correlated positively with job satisfaction, but not to the extent reported by Ahrens (1977) or Anderson (1982). A negative relationship was found between psychologist to student ratio and overall job satisfaction. However, the curvilinear nature and magnitude reported by Anderson (1982) were not apparent. Type of community was also related to overall job satisfaction scores of school psychologists in West Virginia. While the correlation was not large, the same tendency as reported by Ahrens (1977) for satisfaction to be higher for school psychologists practicing in urban areas than in rural areas held true in West Virginia. However, job satisfaction appears to be independent of satisfaction with the community. School psychologists in West Virginia expressed generally higher levels of satisfaction with the community than they did with their jobs.

Comparison of West Virginia School Psychologists and Those of a National Sample

Overall, a higher percentage of school psychologists in West Virginia are dissatisfied with their jobs than the percentage reported at the national level by Anderson (1982). However, the relative sources of job satisfaction and dissatisfaction were essentially the same in the two groups. These factors indicate that the differences in satisfaction are not the result of differences between the two groups

of individuals, but are based on differences in the respective work environments. The demographic variables that served as significant predictors of overall job satisfaction also differed in the two groups, further emphasizing the differences in the work environments.

A further examination of the differences suggests that, on many fronts, those factors relating to job dissatisfaction of school psychologists at the national level are amplified in West Virginia. School psychologists in West Virginia tend to have fewer co-workers, lower salaries, and higher psychologist to student ratios than their colleagues across the nation. Possibly as a result, those in West Virginia also plan to remain in their positions for shorter periods of time than is characteristic at the national level.

Implications of the Study

Several implications can be drawn from the results of this study that may be of value to school psychologists practicing in West Virginia, the State Department of Education, and professional organizations in school psychology, as well as trainers and employers of school psychologists.

1. It appears that significant numbers of school psychologists practicing in West Virginia are dissatisfied with their jobs. Based on research findings in the literature, it is reasonable to suspect that this dissatisfaction may lead to lowered job involvement, affecting the quality and type of services provided to school systems, and to higher turnover rates among school psychologists in the state.

Results of the study further indicate that more than eighty percent of the school psychologists practicing in West Virginia plan to leave their jobs within the next five years. It may become increasingly difficult to meet the demands for psychological services in the schools of West Virginia if efforts are not made to retain school psychologists in the state.

2. Based on the results of this study, it is apparent that school psychologists in West Virginia are considerably more satisfied with the communities in which they live than with their jobs. This implies that factors in the work environment may be more related to psychologists' decisions to leave their positions in the state than factors specific to communities or to the state as a whole.

3. Two factors of the work environment: supervision and salary, consistently emerged as areas of concern for school psychologists in West Virginia. School psychologists appear to feel that their supervision needs are not being adequately met unless the supervision is provided by individuals having training in school psychology that is at least comparable to that of the practitioners.

The data also tend to indicate that school psychologists' salaries in West Virginia do not provide adequate compensation for the requirements and responsibilities of the positions. Salary levels that are not commensurate with those for school psychologists in other regions of the country or for individuals in other specialties in psychology may lead West Virginia school psychologists to seek alternative employment. Supervision and salary would appear to be two areas in which major evaluation and revision are warranted.

4. It appears that school psychologists in West Virginia are not fully prepared to deal with the realities they face, in terms of the policies, practices, and structure of school systems, as well as the relative position and advancement opportunities of psychologists within the structure of school systems in West Virginia. This would imply that efforts are needed to more clearly distinguish the positions and potential career ladders of school psychologists within the administrative structure of school systems in West Virginia, and to make school psychologists aware of these distinctions.

5. The findings indicate that West Virginia school psychologists seek opportunities for educational advancement as well as for advancement in the work environment. Practitioners' expressed dissatisfaction with their own educational opportunities reflects the need for a doctoral level training program in school psychology and a structured program of continuing professional development for school psychologists in the state. Without these educational opportunities, West Virginia school psychologists may not be able to remain abreast of professional developments in their field, and may leave the state to further their educations.

6. Working conditions in school systems appear to pose another problem for school psychologists practicing in West Virginia. Psychologists responding to the study indicated that facilities and clerical assistance, inadequate in providing the necessary support for their duties, were sources of dissatisfaction. Such factors may lead to reduced efficiency, and possibly a lower quality of service.

Recommendations

The results and implications of this study provide the basis of recommendations for school psychologists, trainers of school psychologists, the State Department of Education, and the West Virginia School Psychologists Association, as well as recommendations for additional research.

Recommendations for the Profession

1. Efforts should be made to further explore and remediate factors which are sources of dissatisfaction and/or bases of frequent job exodus for school psychologists in West Virginia. The State Department of Education and the West Virginia School Psychologists Association appear to be the most appropriate organizations to initiate such efforts. Additionally, the State Department of Education and local school systems should work cooperatively in seeking and implementing strategies for retaining school psychologists in the state.
2. Since the results of this study do not show that school psychologists in West Virginia are dissatisfied with their communities, discussions and activities directed toward satisfaction issues should focus on the job environment rather than factors of the community.
3. The issues of salary and supervision of school psychologists in West Virginia should be addressed. Most appropriately, the State Department of Education, the West Virginia School Psychologists Association, and local school systems should work cooperatively to study the establishment of salary scales that

are equitable and representative of the educational level, duties, and responsibilities of school psychologists in relation to other educational personnel.

Efforts should also be made to affect some standardization of the supervision of school psychologists. Perhaps the State Department of Education should explore the establishment of a required credential for psychological services provision, providing criteria of training and experience in school psychology for those individuals holding the credential.

4. A cooperative effort should also be made by school psychologists, local school systems, and the State Department of Education to establish and clarify the position of the school psychologist within the organizational structure of the school system. Such a distinction might diminish the confusion surrounding the position and provide the framework for career ladders and realistic views of advancement opportunities for school psychologists in West Virginia.
5. It is suggested that the State Department of Education, the West Virginia School Psychologists Association, and graduate training institutions in the state expand programs of continuing education for school psychologists. Efforts should also be made to establish a doctoral level school psychology training program in the state, since data from this study indicates that sufficient interest exists to support such a program.

6. Local school systems, with support from the State Department of Education, should make efforts to provide adequate office and assessment facilities, as well as the necessary clerical support for school psychologists. It may be beneficial for the West Virginia School Psychologists Association to provide consultation on the facilities and support that are necessary for appropriate psychological services provision.

Recommendations for Additional Research

1. Similar studies of job satisfaction should be conducted with populations of school psychologists in other states. Such studies may augment and solidify the understanding of the dimensions of job satisfaction among school psychologists.
2. Longitudinal studies of job satisfaction of school psychologists in West Virginia should be conducted, and should include a follow-up of individuals who actually leave their jobs. Research conducted over time may address the continuing effects of satisfaction issues and changes that may have been implemented, and may serve to further verify the relationship between job dissatisfaction and turnover.
3. Supervision and salary issues not considered in this study should be further explored as sources of job dissatisfaction. Additional factors of research interest might include additional factors within the work environment, the congruence between school psychologists' training and job roles, or personality factors that may affect school psychologists' expectations and perceptions of their jobs.

4. Future studies should explore opportunities for advancement of school psychologists in West Virginia, both inside and outside of the school system.
5. Research should also be directed toward determining the most appropriate position for school psychologists within the administrative structure of school systems.
6. Additionally, it is recommended that research be implemented to assist in the planning of advanced training opportunities for school psychologists in West Virginia. Topics that should be addressed include: school psychologists' interests and needs for workshops and professional development activities in specific competency or subject areas, methods of making continuing education opportunities available to school psychologists, and the most appropriate focus, structure, and location for a doctoral level school psychology training program in the state.

Summary

This chapter has served as a vehicle for the examination and interpretation of the results of the study. Several implications have been drawn, providing the basis for recommendations regarding job satisfaction levels, turnover rates, salary, supervision, educational and advancement opportunities, and working conditions of school psychologists practicing in West Virginia. Recommendations for future research conclude the chapter.

Footnotes

1. Permission to modify, reproduce, and use the MSQ in this study was given by the University of Minnesota's Division of Vocational Psychology Research.

2. Cronbach Alpha Reliability coefficients for the 20 subscales of the Modified MSQ are reprinted with the permission of W.T. Anderson.

3. Permission to use data from Anderson's (1982) study of the NASP membership was granted by W.T. Anderson.

REFERENCES

Adams, J.S. Inequity in social exchange. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 2). New York: Academic Press, 1965, 276-300.

Ahrens, R.H. Role conflict and job satisfaction in school, institutional, and private psychological practice (Doctoral dissertation, Rutgers University, 1976). Dissertation Abstracts International, 1977, 37, 7619A. (University Microfilms No. 77-132, 55).

Albright, L.E. Review of the Minnesota Satisfaction Questionnaire by D.J. Weiss, et al. In O.K. Buros (Ed.). The Seventh Mental Measurements Yearbook (Vol. II). Highland Park, N.J.: Gryphon Press, 1972, 1064-1065.

Alderfer, C. Existence, Relatedness, and Growth: Human Needs in Organizational Settings. New York: Free Press, 1972.

Anderson, W.T. Job satisfaction among school psychologists. (Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, 1982.)

Andrisani, P.J. & Shapiro, M.B. Women's attitudes toward their jobs. Personnel Psychology, 1978, 31, 15-34.

Atkinson, J.W. & Feather, N.T. A Theory of Achievement Motivation. New York: Wiley, 1966.

Barbash, J. Job Satisfaction Attitudes Surveys. Paris: Organization for Economic Cooperation and Development, 1976.

Bardon, J.I. Small group synthesis - group C. School Psychology Review, 1981, 10, 297-307.

Beck, R.C. Motivation: Theories and Principles (2nd Ed.). Englewood Cliffs, N.J.: Prentice-Hall, 1983.

Blai, B. An occupational study of job satisfaction and need satisfaction. Journal of Experimental Education, 1964, 32, 381-388.

Bockman, V.M. The Hertzberg controversy. Personnel Psychology, 1971, 24, 155-189.

Brayfield, A.H. & Crockett, W.H. Employee attitudes and employee performance. Psychological Bulletin, 1955, 52, 396-422.

Carroll, B. Job Satisfaction. Ithaca, NY: Cornell University Press, 1973.

Castellano, J.J. Influence of work, background, and work values on job attitude and job behavior (Doctoral dissertation, State University of New York, 1975). Dissertation Abstracts International, 1975, 36, 1933A. (University Microfilms No. 75-18, 780.)

Cheloha, R.S. & Farr, J.L. Absenteeism, job involvement, and job satisfaction in an organizational setting. Journal of Applied Psychology, 1980, 65, 467-473.

Cole, D.W. An analysis of job satisfaction among elementary, middle level, and senior high school teachers (Doctoral dissertation, University of Colorado, 1977). Dissertation Abstracts International, 1978, 38, 2443A. (University Microfilms No. 77-24, 211.)

Coles, R. Work and self respect. In E.H. Erikson (Ed.), Adulthood. New York: W.W. Norton, 1978.

Cooper, M.R., Morgan, B.S., Foley, P.M., & Kaplan, L.B. Changing employee values: Deepening discontent? Harvard Business Review, 1979, 57, 117-125.

Daley, M. Burnout: Smouldering problem in protective services. Social Work, 1979, 24(5), 375-379.

Distefano, M.K. & Pryer, M.W. Comparisons of leader and subordinate descriptions of leadership behavior. Perceptual and Motor Skills, 1973, 37, 714.

Dixon, B., Shaw, S.F., & Bensky, J.M. Administrator's role in fostering the mental health of special service personnel. Exceptional Children, 1980, 47(1), 30-36.

Ewen, R.B. Weighting components of job satisfaction (Doctoral dissertation, University of Illinois, 1965). Dissertation Abstracts International, 1966, 26, 7437. (University Microfilms No. 66-4172.)

Fagan, T. Role expansion in the eighties: Counseling and vocational school psychology. Communique, 1981, 9(6), 1-2. (a)

Fagan, T. The doctoral-nondoctoral issue. Communique, 1981, 9 (8), 1-2. (b)

Farrar, D.E. & Glauber, R.R. Multicollinearity in regression analysis: The problem revisited. Review of Economics and Statistics, 1967, 49, 92-107.

Farris, G.F. A predictive study of turnover. Personnel Psychology, 1971, 24, 311-328.

Fein, M. Motivation for work. In R. Dublin (Ed.), Handbook of Work, Organization, and Society. Chicago: Rand McNally, 1976, 465-530.

Fournet, G.P., Distefano, M.K., Jr., & Pryer, M.W. Job satisfaction: Issues and problems. Personnel Psychology, 1969, 19(2), 165-183.

Freudenberger, H.S. Burnout: Occupational hazard of the child care worker. Child Care Quarterly, 1977, 6(2), 90-99.

Friend, K.E. & Burns, L.R. Sources of variation in job satisfaction. Personnel Psychology, 1977, 30, 589-605.

Garson, B. All The Livelong Day: The Meaning and Demeaning of Routine Work. New York: Doubleday, 1975.

Gomberg, W. Job satisfaction: Sorting out the nonsense. American Federationist, 1973, 80(2), 14-19.

Graen, G.B., Dawis, R.U., & Weiss, D.J. Need type and job satisfaction among industrial scientists. Journal of Applied Psychology, 1968, 52, 286-289.

Graen, G.B. & Hulin, C.L. Addendum to "an empirical investigation of two implications of the two-factory theory of job satisfaction." Journal of Applied Psychology, 1968, 52, 341-342.

Gruneberg, M.M. Understanding Job Satisfaction. New York: Wiley, 1979.

Gruneberg, M.M. Job Satisfaction. New York: Macmillan, 1976.

Guidubaldi, J. On the way to Olympia. Communique, 1981, 10(3), 1-2.

Guion, R.M. Review of the Minnesota Satisfaction Questionnaire by D.J. Weiss, et al. In O.K. Buros (Ed.), The Eighth Mental Measurements Yearbook (Vol. II). Highland Park, N.J.: Gryphon Press, 1978, 1052-1053.

Gurin, G.G., Veroff, J., & Feld, S. Americans View Their Mental Health. New York: Basic Books, 1960.

Hackman, J.R. Work redesign and motivation. Professional Psychology, 1980, 11, 445-455.

Hackman, J.R. Is job enrichment just a fad? Harvard Business Review, 1975, 53, 129-138.

Hackman, J.R. & Oldham, G.R. Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 1976, 16, 250-279.

Harmon, L.W. Occupational satisfaction - A better criterion? Journal of Counseling Psychology, 1966, 13, 295-299.

Hart, S.L. Independent practice under employee status: School psychology's great challenge. Communique, 1983, 11(4), 1-2.

Hertzberg, F. Motivator-hygiene profiles: Pinpointing what ails the organization. Organizational Dynamics, 1974, 3, 18-29.

Hertzberg, F. Work and the Nature of Man. Cleveland: World Publishing, 1966.

Hertzberg, F., Mauser, B., Peterson, R.O., & Capwell, D.F. Job Attitudes: Review of Research and Opinion, Pittsburgh: Psychological Services of Pittsburgh, 1957.

Hinkle, D.E., Wiersma, W., & Jurs, S.G. Applied Statistics for the Behavioral Sciences. Boston: Houghton-Mifflin, 1979.

Hinrichs, J.R. A replicated study of job satisfaction dimensions. Personnel Psychology, 1968, 21, 479-503.

Hoppock, R. Job Satisfaction. New York: Harper & Row, 1935.

Hughes, J.N. Manpower needs in rural school psychology. VASP Newsletter, 1982, 14(1), 4-5.

Hughes, J.N. & Clark, R.D. Differences between urban and rural school psychology: Training implications. Psychology in the Schools, 1981, 18, 191-196.

Hulin, C.L. Sources of variation in job and life satisfaction: The role of community and job-related variables. Journal of Applied Psychology, 1969, 53(4), 279-291.

Hulin, C.L. A linear model of job satisfaction (Doctoral dissertation, Cornell University, 1963). Dissertation Abstracts International, 1963, 24, 381-382. (University Microfilms No. 63-4798).

Hulin, C.L. & Smith, P.C. A linear model of job satisfaction. Journal of Applied Psychology, 1965, 49, 209-216.

Ilgen, D.R. & Hollenback, J.H. The role of job satisfaction in absence behavior. Organizational Behavior and Human Performance, 1977, 19, 148-161.

Ivanovich, J.M. & Donnely, J.H. Job satisfaction research: A manageable guide for practitioners. Personnel Journal, 1968, 47, 172-177.

Jackson, L.H. & Mindell, M.G. Motivating the new breed. Personnel, 1980, 57, 53-61.

Kasl, S.V. Work and mental health: Contemporary research evidence. In W.J. Heisler & J.W. Houck (Eds.), A Matter of Dignity. Notre Dame, IN: University of Notre Dame Press, 1977.

Kelsey, J.D. Personal characteristics and job satisfaction dimensions of personnel working with severely or profoundly retarded students (Doctoral dissertation, Northern Illinois University, 1978). Dissertation Abstracts International, 1979, 39, 4824-4825A. (University Microfilms No. 78-23, 106.)

Kerlinger, F.N. Foundations of Behavioral Research. New York: Holt, Rinehart, and Winston, 1973.

Kerlinger, F.N. & Pedhazur, E.J. Multiple Regression in Behavioral Research. New York: Holt, Rinehart, and Winston, 1973.

King, N. Clarification and evaluation of the two-factor theory of job satisfaction. In M. Gruenberg (Ed.), Job Satisfaction. New York: Macmillan, 1976.

Klein, S.M. & Maher, J.R. Educational level and satisfaction with pay. In M.M. Gruneberg (Ed.), Job Satisfaction. New York: Macmillan, 1976.

Kornhauser, A.W. Mental Health of the Industrial Worker. New York: Wiley, 1965.

Kuhlen, R.G. Needs, perceived need satisfaction opportunities, and satisfaction with occupation. Journal of Applied Psychology, 1963, 47, 56-64.

Landsberger, H.A. Hawthorne Revisited. Ithaca, N.Y.: W.F. Humphrey Press, 1979.

Lattanzi, M.E. Coping with work related losses. Personnel and Guidance Journal, 1981, 59(6), 350-351.

Lawler, E.E. & Porter, L.W. The effect of performance on job satisfaction. Industrial Relations, 1967, 7, 20-28.

Lemon, N. Attitudes and Their Measurement. London: B.T. Batsford, 1973.

Likert, R. A technique for the measurement of attitudes. In G.F. Summers (Ed.), Attitude Measurement. Chicago: Rand McNally, 1970.

Locke, E.A. The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology. Chicago: Rand McNally, 1976, 1297-1349.

Locke, E.A. What is job satisfaction? Organizational Behavior and Human Performance, 1969, 4, 309-336.

Locke, E.A. Toward a theory of task motivation and incentives. Organizational Behavior and Human Performance, 1968, 3, 157-189.

Lofquist, L.H. & Dawis, R.V. Vocational needs, work reinforcers, and job satisfaction. Vocational Guidance Quarterly, 1975, 24, 132-139.

Lynn, H.F., III. W. Va. school psychologists' evaluation data questionnaire: Brief summary of results. Kidstuff, 1980, 4, 8.

Maier, N.R.F. Psychology in Industry (3rd ed.). Boston: Houghton-Mifflin, 1965.

Maslow, A.H. A theory of human motivation. In N. Weir (Ed.), Job Satisfaction. Glasgow: Fontana/Collins, 1976.

Maslow, A.H. Motivation and Personality. New York: Harper and Brothers, 1954.

Mattingly, M.A. Sources of stress and burnout in professional child care work. Child Care Quarterly, 1977, 6(2), 127-137.

McClelland, D.C. & Burnham, D. The Achievement Motive. New York: Appleton-Century-Crofts, 1953.

Miller, C.D., Witt, J.C., and Finley, J.L. School psychologists' perceptions of their work: Satisfactions and dissatisfactions in the United States. School Psychology International, 1981, 2 (2), 1-3.

Moch, M.K. Racial differences in job satisfaction. Journal of Applied Psychology, 1980, 65, 299-306.

Morgan, J.W. Factors determining the job satisfaction/dissatisfaction of secondary school counselors (Doctoral dissertation, University of Missouri, 1977). Dissertation Abstracts International, 1978, 38, 5928-5929A. (University Microfilms No. 78-03, 744.)

Mortimer, J.T. Changing Attitudes Towards Work. Scarsdale, NY: Work in America Institute, 1979.

Nord, W.R. Job satisfaction reconsidered. American Psychologist, 1977, 32, 1026-1035.

Novak, K.D. Preferred job reinforcers and job satisfaction of faculty in Minnesota's vocational technical institutes (Doctoral dissertation, University of Minnesota, 1974). Dissertation Abstracts International, 1975, 35, 7799-7780A. (University Microfilms No. 75-12, 031.)

Olson, H. The relationship between needs-reinforcer correspondence and job satisfaction of Minnesota secondary school office education teacher coordinators (Doctoral dissertation, University of Minnesota, 1974). Dissertation Abstracts International, 1975, 35, 7599A. (University Microfilms No. 75-12, 032.)

O'Toole, J. Work and the Quality of Life. Cambridge, Mass.: MIT Press, 1974.

O'Toole, J. (Ed.) Work in America: Report of a Special Task Force to the Secretary of Health, Education, and Welfare. Cambridge, MA: MIT Press, 1973.

Pacinelli, R.N. Rehabilitation counselor job satisfaction as it relates to perceived leadership behavior and selected background factors (Doctoral dissertation, Pennsylvania State University, 1968). Dissertation Abstracts International, 1968, 29, 1863B. (University Microfilms No. 68-15, 138.)

Phillips, E. & Hays, J.R. Job satisfaction and perceived congruence of attitude between workers and supervisors in a mental health setting. Perceptual and Motor Skills, 1978, 47, 55-59.

Pietrofesa, J.J. & Splete, H. Career Development. New York: Grune and Stratton, 1975.

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

Pines, A. & Maslach, C. Characteristics of staff burnout in mental health settings. Hospital and Community Psychology, 1978, 29 (4), 28-37.

Porter, L.W. & Lawler, E.E. What job attitudes tell about motivation. Harvard Business Review, 1968, 46(1), 118-126.

Portigal, A.H. Towards the Measurement of Work Satisfaction. Paris: Organization for Economic Cooperation and Development, 1976.

Public Law 94-142, 94th Congress, S.6, November 29, 1975.

Pucel, D.J., Nelson, H.F., & Wheeler, D.N. Questionnaire Follow-Up Returns as a Function of Incentives and Responder Characteristics. Minneapolis: University of Minnesota (Project Mini-Score), 1969.

Quinn, R.P., Staines, G.L., & McCullough, M.R. Job satisfaction: Is there a trend? Manpower Research Monograph No. 30. Washington, D.C.: U.S. Department of Labor, 1974.

Ramser, C. Job satisfaction in an institution for the mentally retarded. Mental Hygiene, 1973, 56, 88-92.

Reiner, H.D. & Hartshorne, T.S. Job burnout and the school psychologist. Psychology in the Schools, 1982, 19(4), 508-512.

Roberts, K.N., Walter, G.A., & Miles, R.F. A factor analytic study of job satisfaction items designed to measure Maslow need categories. Personnel Psychology, 1971, 24, 205-220.

Robinson, M. Why do so many good professionals leave West Virginia? Dominion-Post, 1976, 109(36), B-2.

Roethlisberger, F.J. & Dickson, W.J. Management and the Worker. Cambridge, Mass.: Harvard University Press, 1939.

Ronan, W.W. Relative importance of job characteristics. Journal of Applied Psychology, 1970, 54, 192-200.

Sarata, B.P. & Jeppesen, J.C. Job design and staff satisfaction in human service settings. American Journal of Community Psychology, 1977, 5, 229-236.

Scanlan, B. Determinants of job satisfaction and productivity. Personnel Journal, 1976, 55, 12-14.

Schaffer, R.H. Job satisfaction as related to need satisfaction in work. Psychological Monographs, 1953, 67 (14, No. 364).

Schultz, D.P. Psychology and Industry Today. New York: Macmillan, 1982, 269-309.

Schwab, D.P. & Heneman, H.G., III. Age and satisfaction with dimensions of work. Journal of Vocational Behavior, 1977, 10, 212-220.

Schwab, D.P. & Wallace, M.J., Jr. Correlates of employee satisfaction with pay. In M.M. Gruneberg (Ed.), Job Satisfaction. New York: Macmillan, 1976.

Sealey, J.M. Survey of West Virginia county school board superintendents and school psychology interns. (Unpublished masters thesis, West Virginia College of Graduate Studies, 1982.)

Sheppard, H.L. & Herrick, N.Q. Where Have the Robots Gone? New York: Free Press, 1972.

Smith, P.C., Kendall, L.M., & Hulin, C.L. The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally, 1969.

Smits, S.J. Counselor job satisfaction and employment turnover in state rehabilitation agencies. Journal of Counseling Psychology, 1972, 19, 512-517.

Solly, D.C. West Virginia school psychologists' survey. WVSPA News, 1978, 1 (1), 1-3.

Statistical Package for the Social Sciences: Update for Releases 7-9. (C.H. Hull & N.H. Nie, Eds.). New York: McGraw-Hill, 1981.

Strauss, G. Worker dissatisfaction: A look at the causes. Vocational Guidance Quarterly, 1975, 24, 150-151.

Strauss, G. Is there a blue collar revolt against work? In J. O'Toole (Ed.), Work and the Quality of Life. Cambridge, Mass.: MIT Press, 1974.

Trachtman, G.M. On such a full sea. School Psychology Review, 1981, 10, 138-181.

U.S. Census Bureau. Report of the 1980 U.S. Census. Washington, D.C.: Author, 1980.

Vensel, D.S. Assuming responsibility for the future of school psychology. School Psychology Review, 1981, 10, 182-193.

Vessey, T.M. A longitudinal study of the prediction of the correspondence between needs and the perception of job reinforced in an occupation (Doctoral dissertation, University of Minnesota, 1973). Dissertation Abstracts International, 1973, 34, 2352-2353B. (University Microfilms No. 73-25, 667.)

Vroom, V.H. Work and Motivation. New York: Wiley, 1964.

Warren, L.W. The prediction of job satisfaction as a function of the correspondence between vocational needs and occupational reinforcers (Doctoral dissertation, University of Minnesota, 1970). Dissertation Abstracts International, 1971, 32, 608B. (University Microfilms No. 71-18, 834.)

Weaver, C.N. Job satisfaction in the United States in the 1970s. Journal of Applied Psychology, 1980, 65, 364-367.

Weaver, C.N. Black-white correlates of job satisfaction. Journal of Applied Psychology, 1978, 63, 255-258.

Weinberger, P.E. The job satisfaction of social welfare administrators (Doctoral dissertation, University of Southern California, 1966). Dissertation Abstracts International, 1966, 27, 1452A. (University Microfilms No. 66-11, 596.)

Weiss, D.J., Dawis, R.V., England, G.W., & Lofquist, L.H. Manual for the Minnesota Satisfaction Questionnaire. Minneapolis: University of Minnesota, 1967.

West Virginia Blue Book 1982. Charlottesville VA: Mitchie Co., 1982.

West Virginia Department of Education. West Virginia Education Directory. Charleston: Author, 1974-1982.

Wiggins, J.D. The relationship between job satisfaction and vocational preferences of teachers of the educable mentally retarded (Doctoral dissertation, Indiana University, 1974). Dissertation Abstracts International, 1975, 35, 6545A. (University Microfilms No. 75-5681.)

Wild, R. & Dawson, J.A. The relationship of specific job attitudes with overall job satisfaction and the influence of biographical variables. In M.M. Gruneberg (Ed.), Job Satisfaction. New York: Macmillan, 1976.

Winspinger, W. Job satisfaction: A union response. American Federationist, 1973, 80(6), 8-10.

Wofford, J.C. The motivational basis of job satisfaction and job performance. Personnel Psychology, 1971, 24, 501-518.

Wool, H. What's wrong with work in America? Monthly Labor Review, 1973, 96(3), 38-44.

The World Almanac and Book of Facts 1983. New York: Newpaper Enterprise Association, 1983.

World Atlas: Imperial Edition. Chicago: Rand McNally, 1981.

Wright, J.D. & Hamilton, R.F. Work satisfaction and age. Social Forces, 1978, 56, 1140-1158.

Yankelovich, D. Work, values, and the new breed. In C. Kerr & J. Rosow (Eds.), Work in America: The Decade Ahead. New York: Van Nostrand Reinhold, 1979, 5-12.

Zytowski, D.G. Psychological Influences on Vocational Development. New York: Houghton-Mifflin, 1970.

APPENDICES

APPENDIX A

No. _____

DATA FORM

The following information is needed from all West Virginia School Psychologists cooperating with this study.

1. What is your primary role designation?

   ____ Practitioner employed by a county school system
   ____ Practitioner employed by a RESA
   ____ Trainer of School Psychologists
   ____ Supervisor/Administrator
   ____ Other (Please Specify) _____

PRACTITIONERS AND RESA PSYCHOLOGISTS PLEASE CONTINUE

2. Please check your age group.

   ____ 20-25 ____ 26-31 ____ 32-37 ____ 38-43 ____ 44-49 ____ 50-55
   ____ 56 or over

3. Are you a native West Virginian? ____ yes ____ no

4. What is your current degree status? ____ BA/BS ____ MA/MS
   ____ EdS/CAS ____ MA/MS + 30 sem(45 qtr) hours ____ Doctorate

5. Are you currently continuing your education or pursuing an additional degree?
   ____ yes ____ no

6. How many other school psychologists are employed by your school system or RESA? _____ Full-time _____ Part-time

7. How many years of experience do you have as a school psychologist? _____

8. How many years of experience do you have as a school psychologist in W.V.? ____

9. How many years of teaching experience do you have? _____

10. What is the approximate psychologist to student ratio in your system?

    ____ 1:1000 or less ____ 1:2001-1:2500 ____ 1:3501-1:4000
    ____ 1:1001-1:1500 ____ 1:2501-1:3000 ____ 1:4001-1:4500
    ____ 1:1501-1:2000 ____ 1:3001-1:3500 ____ 1:4501 or more

11. What is your average annual evaluation caseload? _____

12. Please check any of the following organizations of which you are a member.
    ____ NASP ____ WVSPA ____ APA ____ WVPA ____ APGA ____ Other _____

13. What is the length of your current contract in days?
    ____ 200 ____ 205 ____ 210 ____ 220 ____ 240 ____ 260 ____ Other ____

PLEASE CONTINUE ON BACK

14. Please check your annual salary.

____ $12,000 or less	____ $20,001 - $22,000	____ $30,001 - $32,000
____ $12,001 - $14,000	____ $22,001 - $24,000	____ $32,001 - $34,000
____ $14,001 - $16,000	____ $24,001 - $26,000	____ $34,001 - $36,000
____ $16,001 - $18,000	____ $26,001 - $28,000	____ $36,001 - $38,000
____ $18,001 - $20,000	____ $28,001 - $30,000	____ $38,001 or over

15. What is the role designation of your primary supervisor?

____ Director/Coordinator/Supervisor of Psychological Services or Chief Psychologist
____ Director/Coordinator/Supervisor of Special Education/Pupil Services
____ Other (Please Specify) _____

16. What is the area of training of your primary supervisor?

____ Psychology ____ Special Education ____ Education Administration
____ Unknown ____ Other (Please Specify) _____

17. What is the level of training of your primary supervisor?

____ Bachelors ____ Masters ____ Ed.S./CAS, etc. ____ Doctorate

18. What is your estimate of the number of years you will remain in your present position?

___ 0 ___ 1 ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ 8 ___ 9 or more

19. What is your estimate of the number of years you will remain in the profession of school psychology?

___ 0 ___ 1 ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ 8 ___ 9 or more

20. If you intend to leave your present position, what is your planned direction of movement?

___ Another position as a school psychologist: ___ in WV ___ Out of State
___ Another specialty in psychology (counseling, clinical, developmental, etc.)
___ The training of school psychologists
___ An administrative position: ____ in education ____ in psychology
___ Other (Please Specify) _____

21. Overall, how satisfied are you with the community in which you live?

___ Very Dissatisfied ___ Dissatisfied ___ Satisfied ___ Very Satisfied

22. Overall, how satisfied are you with your present position?

___ Very Dissatisfied ___ Dissatisfied ___ Satisfied ___ Very Satisfied

--

Please list three factors that you perceive as being major sources of satisfaction in your present position.

1. _____

2. _____

3. _____

Please list three factors that you perceive as being major sources of dissatisfaction in your present position.

1. _____

2. _____

3. _____

PLEASE CONTINUE

APPENDIX B

MODIFIED MINNESOTA SATISFACTION QUESTIONNAIRE

QUESTIONNAIRE INSTRUCTIONS

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 other school psychologists in West Virginia, we hope to get a better understanding of the things individuals 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
Keeping the statement in mind:
--if you feel that your job gives you more than you expected, check the blank under "VS" (Very Satisfied);
--if you feel that you job gives you what you expected, check the blank under "S" (Satisfied);
--if you feel that your job gives you less than you expected, check the blank under "DS" (Dissatisfied);
--if you feel that your job gives you much less than you expected, check the blank under "VDS" (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.

PLEASE CONTINUE ON BACK

No. _____

Ask yourself: How satisfied am I with this aspect of my job?
VS means I am very satisfied with this aspect of my job.
S means I am satisfied with this aspect of my job.
DS means I am dissatisfied with this aspect of my job.
VDS means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	VDS	DS	S	VS
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 others 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 school system				
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 physical working conditions (heating, lighting, etc.) in the position				
14. The opportunities for advancement in this position				
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				
26. The chance to tell other staff members 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. School system policies and the way in which they are administered				
30. The way my supervisor handles 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 chance for getting ahead in this position				
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 others				
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 school system policies				
50. The way my supervisor backs employees up with the administration				

PLEASE CONTINUE

Ask yourself: How satisfied am I with this aspect of my job?
VS means I am very satisfied with this aspect of my job.
S means I am satisfied with this aspect of my job.
DS means I am dissatisfied with this aspect of my job.
VDS means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	VDS	DS	S	VS
51. The way my job provides for steady employment				
52. How my pay compares with that for similar positions in other school systems				
53. The pleasantness of the working conditions				
54. The way promotions are given out in this position				
55. The way my supervisor delegates work to staff members				
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 worth while				
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 school system policies are put into practice				
70. The way my supervisor takes care of complaints brought up by 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 in this position				
75. The way my supervisor provides help on hard problems				
76. The way my co-workers are easy to make friends with				
77. The freedom to use my own judgement				
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 school system treats its employees				
90. The personal relationship between my supervisor and his/her employees				
91. The way layoffs and transfers are avoided in my job				
92. How my pay compares with that of other school psychologists				
93. The working conditions				
94. My chances for advancement				
95. The way my supervisor trains 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				

THANK YOU!

UNIVERSITY OF MINNESOTA
TWIN CITIES

Department of Psychology
Elliott Hall
75 East River Road
Minneapolis, Minnesota 55455

David C. Solly

March 19, 1983

Dear Mr. Solly:

Thank you for expressing your interest and intent to administer the Minnesota Satisfaction Questionnaire as part of your dissertation research.

You are hereby granted permission to modify the MSQ Long Form as you outlined in your letter of March 8, 1983, and to duplicate copies of the modified version. Royalty fees are assessed at $ .13 per copy administered. Please inform me of the number of copies used at the end of your research.

We appreciate greatly your offer to share your experimental results with us. We attempt to maintain a bibliography of research related to VPR instruments, and would very much like to include your dissertation as a part of that listing.

If there are any additional services or information that we can provide to help in your dissertation process, please do not hesitate to contact me. I will be happy to provide any assistance I can. Best wishes for great results in your dissertation!

Sincerely,

Nancy Holt
Coordinator, Vocational Psychology Research

David J. Weiss
Director, Vocational Psychology Research

APPENDIX C

MINNESOTA SATISFACTION QUESTIONNAIRE

David J. Weiss, Rene V. Dawis
George W. England, and Lloyd H. Lofquist
University of Minnesota

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 thousands of other individuals throughout the nation, we hope to get a better understanding of the things individuals 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 blank under "VS" (Very Satisfied);
  - --if you feel that your job gives you what you expected, check the blank under "S" (Satisfied);
  - --if you cannot make up your mind whether or not the job gives you what you expected, check the blank under "N" (Neither Satisfied nor Dissatisfied);
  - --if you feel that your job gives you less than you expected, check the blank under "DS" (Dissatisfied);
  - --if you feel that your job gives you much less than you expected, check the blank under "VDS" (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?
VS means I am very satisfied with this aspect of my job.
S 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.
DS means I am dissatisfied with this aspect of my job.
VDS means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	VDS	DS	N	S	VS
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	—	—	—	—	—

Ask yourself: How satisfied am I with this aspect of my job?
VS means I am very satisfied with this aspect of my job.
S 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.
DS means I am dissatisfied with this aspect of my job.
VDS means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	VDS	DS	N	S	VS
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 men	—	—	—	—	—
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 his men up (with top management)	—	—	—	—	—

Ask yourself: How satisfied am I with this aspect of my job?
VS means I am very satisfied with this aspect of my job.
S 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.
DS means I am dissatisfied with this aspect of my job.
VDS means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	VDS	DS	N	S	VS
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 worth while	—	—	—	—	—
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 complaints brought to him by his men	—	—	—	—	—
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	—	—	—	—	—

Ask yourself: How satisfied am I with this aspect of my job?
VS means I am very satisfied with this aspect of my job.
S 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.
DS means I am dissatisfied with this aspect of my job.
VDS means I am very dissatisfied with this aspect of my job.

On my present job, this is how I feel about . . .	VDS	DS	N	S	VS
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 men					
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 men					
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					

Copyright © 1967 by the Work Adjustment Project Industrial Relations Center, University of Minnesota.

APPENDIX D

CRONBACH ALPHA RELIABILITY COEFFICIENTS FOR THE MODIFIED MSQ[a]

Scale	Reliability Coefficient
Ability Utilization	0.923
Achievement	0.795
Activity	0.738
Advancement	0.907
Authority	0.799
Policies and Practices	0.898
Compensation	0.910
Co-workers	0.909
Creativity	0.919
Independence	0.863
Moral Values	0.794
Recognition	0.925
Responsibility	0.766
Security	0.894
Social Service	0.900
Social Status	0.870
Supervision-Human Relations	0.913
Supervision-Technical	0.906
Variety	0.848
Working Conditions	0.937

a Source: W. T. Anderson. Job satisfaction among school psychologists 1982. Reprinted with permission of the author.

APPENDIX E

Survey Letters

State of West Virginia
Department of Education
Charleston
25305

ROY TRUBY
STATE SUPERINTENDENT
OF SCHOOLS

April 4, 1983

Dear Colleague:

I would like to encourage you to respond to the enclosed study concerning West Virginia School Psychologists. Results of this investigation will be made available to WVSPA and to individual school psychologists. This information can also be used by the Student Support Services Unit of the West Virginia Department of Education in our state efforts toward developing, expanding, and improving school psychological services.

The more responses received, the more accurate will be the picture of West Virginia School Psychology.

Sincerely,

Chloe Hollinger
Coordinator, School Psychology

CH:trf

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

March 28, 1983

Respond to:

Dear West Virginia School Psychologist:

As a school psychologist working on my dissertation in the Virginia Tech/James Madison University cooperative doctoral program, I am asking for your help in the collection of my data. Having practiced as a school psychologist in West Virginia for a number of years, I am most concerned with the issues that you face on a daily basis.

Enclosed with this letter are an information form and a questionnaire regarding your job satisfaction. The materials that I am asking you to complete will require 15 to 20 minutes of your time. I realize that this is a traditionally busy time of the year for school psychologists, but I encourage you to take a break from your usual activities and provide this valuable information on the profession of school psychology in the state.

This study, which is endorsed by the NASP National Committee on Vocational School Psychology, is directed primarily toward public school practitioners. Therefore, those school psychologists who check Trainer, Supervisor/Administrator, or who do not primarily provide psychological services in the public schools may stop with question 1 and return their materials in the enclosed envelope. (Response from all individuals who receive the survey is needed to aid in follow-up activities.) All practitioners are urged to complete the survey and return it in the enclosed stamped envelope by April 12th.

All information will be kept confidential. You will not, at any time, be identified with your responses. The number which appears on the forms will be used only to keep forms together and to aid in follow-up. Only group scores will be reported.

Information from this study will be made available (in the form of group results and analysis) to WVSPA for inclusion in their newsletter, and to individual school psychologists requesting copies of the results. Individual school psychologists may contact me at the above address for a copy of the results.

I thank you in advance for your assistance. The success of this study depends on your help.

Sincerely yours,

David C. Solly
School Psychologist/Doctoral Candidate

Enclosures

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

Respond to:

April 20, 1983

Dear West Virginia School Psychologist:

I am writing to follow up my study of job satisfaction of school psychologists in West Virginia. According to my records, I have not yet received your completed survey materials. Perhaps the activities of the past few weeks, with the state conference, re-evaluations, review teams, and the spring break, have caused you to misplace or overlook the materials. I have enclosed a duplicate set of survey materials and a stamped return envelope for your convenience. Please take a few minutes of time from your busy schedule to complete and return these materials so that we can have an accurate picture of school psychologists in the state.

This study has been endorsed by the NASP Committee on Vocational School Psychology and the Division of Student Support Systems of the West Virginia Department of Education. It has also generated significant interest among school psychologists in the state. Thus far, over 70% of your colleagues have returned their survey forms. Your response is needed to further assure the validity of the study.

I look forward to receiving your completed survey materials. Please respond by May 4th.

Sincerely yours,

David C. Solly
School Psychologist
Doctoral Candidate

enclosures

Appendix F

Overall Correlation Matrix

	Overall Job Satisfaction	Supervision	Salary	Type of Community	Age	Co-workers	Sex
Overall Job Satisfaction	1.000	0.323	0.361	0.233	0.246	0.291	0.040
Supervision		1.000	0.288	0.123	0.041	0.337	0.126
Salary			1.000	0.366	0.353	0.483	-0.059
Type of Community				1.000	0.121	0.473	0.269
Age					1.000	0.122	-0.105
Co-workers						1.000	-0.080
Sex							1.000

Appendix F--Continued.

	Ratio	Experience	Professional Affiliation	Continuing Education	Degree Status	W.V. Native	Evaluation Caseload
Overall Job Satisfaction	-0.034	0.110	0.034	-0.044	0.038	0.161	-0.012
Supervision	-0.025	-0.076	0.083	0.188	-0.062	0.281	-0.027
Salary	0.104	0.412	-0.144	-0.180	0.166	0.265	0.079
Type of Community	0.259	0.015	0.103	0.028	-0.095	0.176	0.115
Age	0.070	0.493	-0.046	-0.116	-0.018	0.073	0.158
Co-workers	0.069	0.166	0.090	0.115	-0.169	0.372	0.058
Sex	0.297	-0.047	-0.089	-0.213	-0.002	-0.140	0.137

Appendix F--Continued.

	Ratio	Experience	Professional Affiliation	Continuing Education	Degree Status	W. V. Native	Evaluation Caseload
Ratio	1.000	-0.086	-0.063	-0.024	-0.053	0.093	0.320
Experience		1.000	0.005	-0.110	0.080	0.232	0.033
Professional Affiliation			1.000	0.266	-0.147	0.035	-0.014
Continuing Education				1.000	-0.129	0.069	0.002
Degree Status					1.000	-0.095	0.094
W. V. Native						1.000	-0.051
Evaluation Caseload							1.000

APPENDIX G

Metropolitan Areas in West Virginia[a]

City	Metropolitan Area	1980 Urban Population[b]	1980 City Population[b]	County	1980 County Population[b]
Wheeling	Wheeling-Weirton-Steubenville, O.[c]	271,320	47,978	Ohio	66,297
Weirton			24,736	Hancock	40,418
Huntington	Huntington-Ashland, Ky.-Ironton, O.[c]	242,700	75,567	Cabell	118,718
Charleston	Charleston-S. Charleston[c]	219,400	73,891	Kanawha	231,414
Parkersburg	Parkersburg-Marietta, O.[c]	87,640	43,332	Wood	97,013
Morgantown	Morgantown	75,280	49,964	Monongalia	97,383
Clarksburg	Clarksburg-Bridgeport	49,210	22,371	Harrison	77,710

[a]Metropolitan areas and population figures from: World Atlas: Imperial Edition. Chicago: Rand McNally, 1981.

[b]Includes college student enrollments.

[c]Standard Metropolitan Statistical Area (SMSA).

APPENDIX G--Continued.

City	Metropolitan Area	1980 Urban Population[a]	1980 City Population[a]	County	1980 County Population[a]
Fairmont	Fairmont	47,800	29,028	Marion	70,954
Bluefield	Bluefield-Princeton	44,620	18,360	Mercer	78,604
Beckley	Oak Hill-Beckley	44,090	21,976	Raleigh	88,305

[a]Includes college student enrollments.

APPENDIX H

Urban School Districts in West Virginia

School District County	Public School Enrollment 1/1/83[a]	County Population 1980[b]	County Land Area (Sq. Miles)[b]	Population Density (Inhabitants/Sq. Mile)	Rank
Brooke	5,500	31,117	90	345.7	4
Cabell	17,636	118,718	282	421.0	3
Hancock	7,144	40,418	84	481.2	2
Harrison	14,065	77,710	417	186.4	10
Kanawha	39,276	231,414	901	267.9	6
Marion	11,234	70,954	312	227.4	8
Mercer	13,812	78,604	420	187.2	9
Monongalia	12,072	97,383	363	268.3	5
Ohio	7,776	66,297	106	625.4	1
Wood	18,020	97,013	367	264.3	7

[a]Source: West Virginia Department of Education, January, 1983.

[b]Source: The World Almanac and Book of Facts. New York: Newspaper Enterprise Association, 1983.

APPENDIX I

Rural School Districts in West Virginia

School District County	Public School Enrollment 1/1/83[a]	County Population 1980[b]	County Land Area (Sq. Miles)[b]	Population Density (Inhabitants/Sq. Mile)
Barbour	3,457	16,639	343	48.5
Berkeley	9,358	46,775	321	145.7
Boone	6,573	30,447	503	60.5
Braxton	2,995	13,894	513	27.1
Calhoun	1,839	8,250	280	29.5
Clay	2,664	11,265	346	32.6
Doddridge	1,569	7,433	321	23.2
Fayette	11,564	57,863	667	86.8
Gilmer	1,583	8,334	340	24.5
Grant	2,071	10,210	480	21.3
Greenbriar	7,177	37,665	1,025	36.7
Hampshire	3,031	14,867	644	23.1
Hardy	2,004	10,030	585	17.1
Jackson	5,640	25,794	464	55.6
Jefferson	6,034	30,302	209	145.0
Lewis	3,536	18,813	389	48.4
Lincoln	5,477	23,675	439	53.9
Logan	10,825	50,679	456	111.1

[a]Source: West Virginia Department of Education, January, 1983.

[b]Source: The World Almanac and Book of Facts. New York: Newspaper Enterprise Association, 1983.

APPENDIX I--Continued.

School District County	Public School Enrollment 1/1/83[a]	County Population 1980[b]	County Land Area (Sq. Miles)[b]	Population Density (Inhabitants/Sq. Mile)
McDowell	11,534	49,899	535	93.3
Marshall	7,967	41,608	305	136.4
Mason	5,229	27,045	433	62.5
Mineral	5,512	28,328	329	86.1
Mingo	9,158	37,336	424	88.1
Monroe	2,331	12,873	473	27.2
Morgan	2,158	10,711	230	46.6
Nicholas	6,109	28,126	650	43.3
Pendelton	1,488	7,910	698	11.3
Pleasants	1,701	8,236	131	62.9
Pocahontas	1,890	9,919	942	10.5
Preston	6,401	30,460	651	46.8
Putnam	8,001	38,181	346	110.3
Raleigh	17,374	88,305	608	145.2

[a]Source: West Virginia Department of Education, January, 1983.

[b]Source: The World Almanac and Book of Facts. New York: Newspaper Enterprise Association, 1983.

APPENDIX I--Continued.

School District County	Public School Enrollment 1/1/83[a]	County Population 1980[b]	County Land Area (Sq. Miles)[b]	Population Density (Inhabitants/Sq. Mile)
Randolph	5,640	28,734	1,040	27.6
Ritchie	2,118	11,442	454	25.2
Roane	3,139	15,952	484	33.0
Summers	2,634	15,875	353	45.0
Taylor	3,248	16,584	174	95.3
Tucker	1,751	8,675	421	20.6
Tyler	2,478	11,320	258	43.9
Upshur	4,540	23,427	355	66.0
Wayne	9,951	46,021	508	90.6
Webster	2,699	12,245	556	22.0
Wetzel	4,746	21,874	359	60.9
Wirt	1,178	4,922	235	20.9
Wyoming	8,549	35,993	502	71.7

[a]Source: West Virginia Department of Education, January, 1983.

[b]Source: The World Almanac and Book of Facts. New York: Newspaper Enterprise Association, 1983.

The vita has been removed from the scanned document