

JOB SATISFACTION AMONG SCHOOL PSYCHOLOGISTS

by

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Chapter I

INTRODUCTION

Contexts in which human behaviors occur receive a great deal of attention from psychologists; this is readily apparent in the volumes of research devoted to the home, the school, and the workplace. Over the course of 45 working years, a person may spend 94,000 hours on the job. Consequently, it comes as no surprise that how people feel about their jobs during that time has been a prominent topic in the professional literature of business, organized labor, government agencies, and psychology.

The study of job satisfaction can be traced back several decades. In the 1920's, Mayo examined the effects of physical conditions on worker productivity at the Hawthorne Western Electric Company. During those studies, Mayo became convinced that social factors influence workers' satisfaction with work tasks and with worker productivity. Thereafter, industrial psychologists sought to improve worker happiness and, concurrently, worker productivity (Gruneburg, 1976). The 1950's witnessed a renewed interest in worker satisfaction. Studies of the effects of assembly line automation on blue collar workers became prominent. Managerial personnel were ignored for the most part until the 1960's. Prior to that time, managers were not believed to experience dissatisfaction with their jobs (Carroll, 1973).

Job satisfaction is a highly researched topic in organizational and industrial psychology. Kahn (cited in Wool, 1973) estimated that 2000 surveys of job satisfaction were conducted in the United States over the past few decades. Locke (1969) estimated 2000 articles and books were written by 1969. In addition, there have been at least seven national surveys of workers, and eight Gallop polls were published between 1958 and 1973 (Quinn, Staines & McCullough, 1974).

Interest in job satisfaction has not abated. A comprehensive computer search of the Psychological Abstracts between 1967 and mid-1981 yielded 2324 citations. It is also apparent that job satisfaction research is not confined to industrial and organizational psychology; a computer search of the ERIC system produced 2702 citations for the descriptor "job satisfaction-vocational adjustment."

Despite the intense interest in job satisfaction, there exists considerable disagreement in the literature as to the significance of the proportion of dissatisfied workers. Pessimistic authors emphasize that between 10% and 20% of all workers are dissatisfied with their jobs (Barbash, 1976; O'Toole, 1974; Sheppard & Herrick, 1972; Strauss, 1975). Optimistic authors, however, note that there have always been dissatisfied workers in the workforce and focus instead on the fact that 80% to 90% of the workforce is satisfied with its jobs (Gomberg, 1973; Winspinger, 1973; Wool, 1973).

Regardless of the actual percentage of dissatisfied workers, it is clear that they constitute a sizable group when viewed in the context of all workers. It is not surprising, given the substantial number of dissatisfied workers and the amount of time that people spend

on the job, that social scientists have conducted so many studies of job satisfaction and the effects of dissatisfaction. It is reasonable to assume that there are difficulties associated with work in the complex and technical American society. These difficulties, in turn, produce dissatisfied workers who deserve professional attention. The importance of work to the individual was highlighted by Coles (1978) when she stated that people find it almost impossible to talk about themselves without reference to the kind of work they do. In essence, we are what we do.

By logically extending Coles' (1978) statement to job satisfaction, it is possible that people who are dissatisfied with their jobs are also dissatisfied with themselves. This argument has definite implications for the mental health of workers. Research has linked job dissatisfaction with physical and mental health problems (Portugal, 1976). Specifically, job dissatisfaction has been identified as a key mediating variable in the mental health of blue collar workers (Gurin, 1960; Kornhauser, 1965). Evidence also links job satisfaction to longevity; dissatisfaction is associated with high risk of heart disease, psychosomatic illnesses, and low self esteem (O'Toole, 1973).

Historically, job satisfaction research focused on industrial settings and workers. The inclusion of nonindustrial workers in job satisfaction studies is relatively recent. In the last few years there has been increased interest in the job satisfaction of other occupational groups, including educational personnel. Frequently, references to the job satisfaction of these groups falls under the

heading of burnout. Despite numerous opinions regarding teacher burnout in both the professional and the popular media, relatively few empirical studies have been conducted. Virtually all of the studies on the job satisfaction of educational personnel are confined to local or state populations. In general, there is little replication of job satisfaction studies on a national basis (Portigal, 1976).

The relatively small number of empirical studies on job satisfaction of educational personnel is particularly evident for school psychologists; the comprehensive computer searches cited above yielded only one reference specific to this group. Yet, a review of the profession's literature indicates that there is a great deal of interest in school psychologists' job satisfaction. The immediate past-president of the National Association of School Psychologists (NASP), for example, stated that "one could wittingly content that there are more . . . [school psychologists] . . . now, enjoying . . . [their work] . . . less than ever" (Fagan, 1981a, p. 1). This statement evolved out of school psychologists' concern over their general inability to expand their roles beyond individual assessment.

Training programs in school psychology prior to the passage of P.L. 94-142 (The Education for All Handicapped Children Act of 1975) had begun to encourage their students to move beyond individual intelligence testing and into broader service roles, such as consultation, parent training, and systemic intervention. This encouragement took the form of diverse course offerings and academic requirements, as well as the adoption of more stringent professional standards. The passage of P.L. 94-142, however, forced many school psychologists to spend much

of their time conducting initial psycho-educational evaluations and required triennial reevaluations of special education students. This situation led the current NASP president to state that the broad coursework requirements in training programs have produced a generation of school psychologists highly qualified to provide a wider array of services than many school systems request (Guidubaldi, 1981). Fagan (1981b) notes that some school systems use only about six hours of the school psychologist's 60 hour professional preparation. This point has been reiterated by Trachtman (1981) in a special issue of the School Psychology Review devoted to the issues which school psychologists must face over the next few years. He points out that few school psychologists can ever hope to find employment which can support all of the role functions for which they are trained. Trachtman goes on to make the case for the study of job satisfaction of educational personnel when he states:

Given the current economic recession and massive increase in governmental regulation at all levels, the quality of life for most institutional staff members, including school psychologists (and university trainers), has deteriorated dramatically in the past few years. In some settings the work situation has become so intolerable that one must seek a professional life elsewhere. However, for the most of us who have chosen service professions and institutional settings, it is important to remember that it is necessary to be unhappy in our jobs. The nature of most institutional settings is such that one retains one's humanity through constant dissatisfaction and struggle. If you are happy, the odds are that you have sold a piece of your soul and are less human for it. (p. 148)

Vensel (1981) takes exception to Trachtman's view when she notes that being unhappy in one's job is maladaptive. The first step toward the diminishment of dissatisfaction, she says, is the setting of goals and appropriate actions. Kilpatrick, Shook and Swanson (cited in Vensel,

1981) apparently found this to be the case in Illinois; approximately one-half (48%) of the respondents to their survey stated that they planned to leave the field of school psychology in the next five years.

The profession of school psychology experienced a period of rapid growth in the last decade. Training programs produced large numbers of students and practitioners who now find their skills under-utilized. The question of the effects of this situation is open. It is clear, however, that school psychologists face apathy, detachment, lack of professional commitment, and burnout (Bardon, 1981).

Purpose of Study

This study was designed to investigate and describe the job satisfaction of a national sample of school psychologists. The evident concern over the job satisfaction of school psychologists, noted above, appears to have been based on experiential, rather than empirical, information. A comprehensive review of both job satisfaction and school psychology literature bases failed to produce a single study which utilized both a national sample of school psychologists and an indepth criterion measure. This study was descriptive in nature and posed the following research questions:

1. In a national sample of school psychologists, what are the levels of overall job satisfaction?
2. Job satisfaction research indicates that overall emotional responses individuals express toward their jobs are actually composit indices of many sub-factors. The instrument selected for the present study samples 20 of

these factors. On the whole, what degree of satisfaction do school psychologists express with each sub-factor of job satisfaction?

3. What is the relationship between overall job satisfaction and selected demographic variables?

The sample for this study consisted of 455 members of NASP drawn at random from the 1982 membership directory.¹ The study was endorsed by the NASP National Committee on Vocational School Psychology.

This study was conducted through the use of mailed surveys. Three days prior to survey mailing, a letter of endorsement from nationally recognized leaders in school psychology was sent to participants (Appendix A). The subsequent mailings of survey materials contained the Demographic Data Form (Appendix B) and an adapted form of the Minnesota Satisfaction Questionnaire (Appendix C). The Computer Resources Department and the Test Scoring Center at Virginia Tech were utilized for scoring and analysis of returned surveys.

Significance of the Study

Job satisfaction literature suggested that individual's feelings about their jobs have direct consequences for the quality and quantity of work produced and for their emotional and physical well being. Nevertheless, little research existed on the job satisfaction of professionals who work with school children. This is particularly true of school psychologists who are often crucial members of the multidisciplinary teams which make decisions determining the educational

careers of exceptional students. The major role of school psychologists in assessment, placement, and program decisions makes job satisfaction a salient variable if work quality is affected.

The results of this study will be useful to both training programs and prospective employers of school psychologists. In terms of the former, university trainers will be able to prepare students for the actualities of school psychology practice. Prospective employers will be able to use the results to provide job enrichment activities or implement systemic changes to provide a more conducive working environment based on shared sources of job satisfaction among school psychologists. The most important use of the results, however, may be among practitioners themselves. The results will provide a basis for better understanding of their own feelings and attitudes toward their roles and functions. The results will be an invaluable tool for discussion among school psychologists, as they confront the problems of poor morale and professional burnout noted by Trachtman (1981).

Limitations

The sample for the study consisted of practicing school psychologists who were members of NASP. Consequently, the results of this study are generalizable only to practicing members of that organization. The NASP membership constitutes about one-third of the total population of school psychologists in the United States. While NASP members come from all 50 states and represent both sexes, numerous age and ethnic groups, and urban and rural settings, significant differences in job satisfaction may exist between members and non-members. The inclusion

of non-members in the sample, however, was not feasible. Therefore, results cannot be generalized to all school psychologists.

Definition of Terms

The research questions contained in this study are based on the following operational definitions:

- (1) School psychologists--those individuals who:
 - (a) designate "practitioner" as their primary role and
 - (b) are members of NASP. Membership guidelines specify that applicants must be practitioners, psychological services supervisors or consultants, trainers, certified by a state as a school psychologist, or a school psychology student.
- (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 adapted MSQ.

Organization of the Study

The intent of this study is to provide information on how school psychologists feel about their jobs. Chapter I presents a description of the problem under investigation, the purpose of the study, and its significance for individual school psychologists, trainers, and employers. In addition, limitations of the study are discussed, and pertinent terms are defined. Chapter II is a summary of research germane to this study, including job satisfaction studies and current

views of job satisfaction among school psychologists. Chapter III presents a detailed methodological description of the study, including research questions, sampling procedures, instrumentation, and information collection and analysis strategies. The analysis of data and results are reported in Chapter IV. Conclusions and recommendations for future research are discussed in Chapter V.

Chapter II

REVIEW OF THE LITERATURE

Speculations about school psychologists' work satisfaction are frequent in the profession's literature, particularly in reference to to discrepancies between professional training standards and realistic service roles. The profession's literature and credentialing standards depict numerous competencies and roles for practitioners (e.g., consultant, counselor, researcher, community liason, and evaluator). Often, the reality of school psychological practice is quite different; state and federal guidelines for psychological assessments frequently force school systems to designate testing as the school psychologist's primary (and often sole) job function. According to professional opinion, this discrepancy between school psychologists' training and practice can lead to job dissatisfaction. Empirical evidence of widespread discontent among school psychologists, however, is unavailable. Studies of job satisfaction among school psychologists must precede generalizations of cause and effect relationships.

This chapter summarizes opinion and empirical studies pertinent to the understanding and investigation of job satisfaction among school psychologists. Of its eight sections, the first is an overview of job satisfaction and includes definitions. The second and third sections discuss job satisfaction-need relationships and measurement problems. Literature support for determinants and correlates of job satisfaction

comprise the fourth and fifth sections. The effects of job dissatisfaction are presented in the sixth section. Specific studies among teachers and school psychologists are discussed in the seventh section. The final section reviews instruments used in the present study.

Job Satisfaction

Studies of job satisfaction have appeared in the professional journals of psychology, education, business, organized labor, and government. Inter-disciplinary research on job satisfaction has clouded the issue since each group labels the construct differently. Studies of job satisfaction are variously referred to as studies of burnout, job satisfaction, morale, job attitudes, vocational adjustment, occupational adjustment, and work alienation. A consensus is apparent on at least one point--most authors, regardless of discipline, describe work as a critical role and central life activity in our society (Kasl, 1977). Work consumes a great deal of time and effort while providing the major source of income for most people. Further, work is probably the most significant source of social contact.

Job satisfaction research with blue collar workers extends back several decades. Early studies explicitly assumed a casual link between work factors and efficiency (Kornhauser, 1965). Historically, industries have been interested in factors which effect efficiency, productivity, and product quality. Thus, job satisfaction research was encouraged and supported within the industrial community. More recently, job satisfaction has become a national concern. By 1974, seven national surveys of workers had been completed and eight Gallup

polls appeared between 1958 and 1973 (Quinn, Staines, & McCullough, 1974).

Three trends in job satisfaction research were identified by Mortimer (1979). Research initially focused on relationships between environmental factors and worker performance. Typical studies conducted during the 1920's emphasized work environments and worker salaries. Mayo's studies at Western Electric's Hawthorne facility, for example, began with an examination of working conditions (Gruneburg, 1976). Mayo's work, however, uncovered the influence of social factors in the workplace. During the 1930's, Mayo's work stimulated research interest in the effects of co-workers and supervisors on worker satisfaction and dissatisfaction. More recently, research has focused on the interest and challenge jobs hold for workers. Target populations have expanded beyond blue collar workers to include technical and managerial personnel. What began as research to improve efficiency of blue collar workers evolved into an increased awareness of the importance of work in everyone's life.

Definitions of Job Satisfaction

The terms morale, job attitudes, work satisfaction, and job satisfaction are frequently used interchangeably while at other times, each is defined more precisely (Carroll, 1973). The specificity of job satisfaction definitions varies according to researchers' needs and purposes. Investigators agree that satisfaction is an emotion people experience in reference to a particular state of affairs (Portugal, 1976). The converse of job satisfaction--job dissatisfaction--is

defined as a negative emotional state associated with a combination of tasks performed for financial or other remuneration (Locke, 1969). Each individual can be expected to vary in their degree of satisfaction with work (Hoppock, 1935).

Researchers conceptualize job satisfaction two ways. Proponents of an overall job satisfaction construct assume the existence of a general factor reflecting job satisfaction (Brockman, 1971; Hinrichs, 1968; Hoppock, 1935; Locke, 1969; Lofquist & Dawis, 1975; Mortimer, 1979). Support for this conceptual framework is found in factorial studies reporting a factor of overall satisfaction (Hinrichs, 1968). The second major approach characterized job satisfaction as a composite variable composed of several needs.

Most theoretical models of job satisfaction are essentially additive (Smith, Kendall, & Hulin, 1969). These models assume that factors important to job satisfaction sum in their effects to produce an overall affective response. Additive models are supported by research showing that people can reliably differentiate among specific components of work and achieve a subjective averaging of their satisfaction with each (Hinrichs, 1968; Hoppock, 1935; Hulin, 1963; Locke, 1969; Weiss, Dawis, England, & Lofquist, 1967).

Traditional models of job satisfaction are bipolar: job satisfaction is placed at one end of a continuum and job dissatisfaction is placed at the other. Degrees of job satisfaction or dissatisfaction are determined by interactions among jobs and environmental factors which lead to positive and negative emotions. The neutral point of bipolar models is analogous to a balancing point between the extremes.

The remediation of the causes of dissatisfaction, or the enhancement of factors related to satisfaction, leads to greater satisfaction (Brockman, 1971). Some factors presumably affect the balance more than others; however, the large body of research devoted to the determination of factor potency has failed to generate any consensus.

Hertzberg's (1966) two factor model of job satisfaction is a significant departure from the conventional approach. This model, discussed in detail below, places job satisfaction and job dissatisfaction on two parallel, unipolar continua. This model proposed that factors contributing to job satisfaction are qualitatively different from factors contributing to job dissatisfaction. Hygiene or maintenance factors prevent job dissatisfaction, but are different from motivators of positive job attitudes.

Job Satisfaction and Needs

Levels of job satisfaction are consistently associated with the degree to which workers' needs are fulfilled. People may be dissatisfied with one aspect of their jobs and not another; many will remain in a job while others choose to move on. Hoppock (1935) states that "a priori, it seems that any attempt to make job satisfaction a function of a single variable . . . would suffer from oversimplification" (p. 1). People work for singular reasons. Motivation for working is associated with a model of need fulfillment which relates job satisfaction to need satisfaction (Castellano, 1975; Kornhauser, 1965; Pietrofesa & Splete, 1975; Zytowski, 1970).

The basic assumption underlying need-fulfillment models is that when needs are satisfied, people are happier and more content than if needs are thwarted (Kornhauser, 1965; Pietrofesa & Splete, 1975). Happiness is an emotional state which people actively seek to attain. Hoppock (1935) proposed that most people eventually succeed in affecting job adjustments which are in accordance with their abilities and ambitions. In essence, people actively seek goals in their work. In turn, these goals are stated as needs.

Pietrofesa and Splete (1975) hypothesized that people choose specific jobs and careers because they think that their needs will be satisfied. These authors also proposed that career guidance is based on the maximization of job satisfaction. Need-fulfillment models emphasize the compatibility or "fit" between individual needs and satisfiers available in work environments (Mortimer, 1979). Thus, job satisfaction reflects the correspondence between what workers seek and what jobs can give. It is logical to hypothesize that people seek to satisfy basic personality needs in their jobs (Pietrofesa & Splete, 1975). Accordingly, the prediction of overall job satisfaction is based on a measure of the extent to which an individual's two or three strongest needs are fulfilled (Kuhlan, 1963; Schaffer, 1953; Zytowski, 1970). Researchers typically rely on three need classification systems; Maslow's need hierarchy, Hertzberg's two factor approach, or a vocational need conceptualization.

Maslow's Need Hierarchy

Maslow's need hierarchy is frequently adapted in job satisfaction research. Maslow (1954) postulated a five-stage hierarchical theory of human motivation. The hierarchy, from lowest to highest need classes, consists of physiological, safety, belongingness, esteem, and self-actualization needs (Maslow, 1954). Higher order needs emerge only after lower order needs are fulfilled; when physiological needs, for example, are satisfied, they cease to be active determinants of behavior, but can reemerge if thwarted. This need-hierarchy appeals to many job satisfaction researchers as shown in the following examples. Work can fulfill physiological needs for food and shelter through compensation. Conditions in the work environment impact on safety needs of workers, and feelings of group belongingness have been studied extensively in recent years in comparisons between American and Japanese workers. The need for esteem is associated with competition, achievement, and recognition (Maslow, 1954). The highest order need, self-actualization, is found in opportunities for interesting and creative work.

In terms of need-fulfillment and job satisfaction, Maslow's hierarchy implies that rewards offered by work must be relevant to needs of individual workers. Under this framework, workers who seek a sense of belongingness are dissatisfied if their jobs provide only for the fulfillment of physiological and safety needs, while workers concerned with meeting physiological needs have little need for creativity. The reemergence of lower order needs is an important consideration for job

satisfaction researchers. Hoppock (1935) hypothesized that researchers will find less dissatisfaction among workers during difficult economic times because workers may sacrifice higher order needs so that lower order needs may be fulfilled.

Job satisfaction research based on Maslow's need-hierarchy has produced conflicting results. Wofford (1971) concluded from a review of the research that a positive correlation exists between occupational level and higher order need strength (e.g., lower level needs are more important to blue collar workers). Wofford's (1971) study examined the relationship between need-fulfillment and job satisfaction. Results supported the hypothesis that job satisfaction is associated with need-fulfillment. Support was not demonstrated, however, for specific applications of Maslow's theory. Wofford's (1971) results indicated that higher order needs have a greater effect on job satisfaction when lower order needs were thwarted, than when these needs were fulfilled. The need-hierarchy assumes that when lower order needs are frustrated, higher order needs are less potent.

Blai (1964) used Maslow's need-hierarchy to construct an instrument to predict job satisfaction based on need satisfaction. Results of this study indicated that the major determinants of job satisfaction among federal employees were job security (a lower order need) and self-actualization. The need-hierarchy predicts that, if higher order needs are strong, lower order needs are not actively directing behavior (Maslow, 1976). Thus, it appears that Maslow's need-hierarchy is not useful in specific applications. Ramser (1973) reported that an instrument based on Maslow's need-hierarchy was unable to differentiate

between managerial and nonmanagerial personnel employed in a state institution for the mentally retarded. A factor analytic study conducted by Roberts, Walter, and Miles (1971) on a sample of industrial managers provided mixed support for the utility of Maslow's need categorization system as a means to structure the dimension of job satisfaction.

These studies suggest that Maslow's need-hierarchy is more useful as a conceptualization of need theory, than as a specific interpretive framework for job satisfaction. It is possible that the specific categories in the hierarchy are too broad to adequately discriminate between degrees of job satisfaction. It is more likely, however, that the determinants of job satisfaction are not easily consigned to any one need category.

Hertzberg's Two Dimensional Need System

Hertzberg (1966) proposed a two dimensional need classification scheme in which job satisfaction and job dissatisfaction coexist on two mutually exclusive unipolar continua. The model was developed after interviews with 200 engineers and accountants. Using a critical incident technique, Hertzberg (1966) asked participants to recall events which led to exceptionally positive and negative feelings toward their jobs. Hertzberg's (1966) analysis of the recounted events led him to propose two independent continua for the classification of needs. In this system, the opposite of job satisfaction is no job satisfaction. Likewise, the unipolar opposite of job dissatisfaction is no job dissatisfaction. The system is hierarchial because a condition of no

dissatisfaction must exist before a feeling of job satisfaction can develop (Brockman, 1971).

Hertzberg (1966) found that factors associated with job dissatisfaction described the work environment (e.g., supervision, salary, and working conditions). Since fulfillment of these needs prevented job dissatisfaction, they were called "hygiene" or "maintenance" factors. Essentially, these were hypothesized to be components of an overall need to avoid unpleasant feelings.

Needs associated with the job satisfaction continuum were labeled "motivators" by Hertzberg (1966) and revolved around an overall need for growth and self-actualization. The critical incidents which participants associated with job satisfaction consistently described the job itself (e.g., achievement and recognition in the job area). Hertzberg (1966) hypothesized that these factors motivated people to perform and called them "motivators." Hertzberg (1966) proposed two continua because he concluded that maintenance, or hygiene needs, had little impact on job satisfaction since their fulfillment did not provide for the development of a sense of growth and achievement.

Hertzberg's (1966) two-factor approach to job satisfaction resulted in increased professional research and controversy over the determinants of job satisfaction (Wofford, 1971). Frequently, arguments centered on the utility of the critical incident technique (Brockman, 1971). Critics questioned the objectivity and reliability of recalled information. For example, the consistent association reported by Hertzberg (1966) between negative feelings (job dissatisfaction) and environmental variables may have been due to a tendency

for workers to externalize personal failures in achieving need fulfillment. The two-factor approach has also been criticized for researcher bias in the coding of participant responses (King, 1976).

Hertzberg's (1966) two-factor model produced contradictory research evidence. Morgan (1978) surveyed 160 school counselors and reported that job satisfaction was associated with job activities, and job dissatisfaction was related to environmental characteristics. A study by Graen and Hulin (1968), however, contradicted predictions of the model. They reported that variables associated with work itself and promotions influenced the development of both job satisfaction and dissatisfaction.

The two-factor approach to job satisfaction is a refinement of Maslow's need-hierarchy. Hertzberg (1966) groups Maslow's physiological and safety needs into extrinsic factors which, when fulfilled, block job dissatisfaction. Maslow's higher order needs for belongingness, esteem, and self-actualization are grouped together as intrinsic needs, which, when fulfilled, enhance job satisfaction. There is a conceptual problem with this model not noted in the literature. If there is indeed a positive correlation between occupational level and the strength of higher order needs (Wofford, 1971), it would be expected that engineers and accountants would have strong higher order needs. Conversely, it would be expected that blue collar workers exhibit relatively weak needs for esteem and self-actualization. Because job satisfaction is a product of higher order need fulfillment, it can be argued that blue collar workers do not strive for job satisfaction, but are content with a state of no job dissatisfaction.

The external validity of the two-factor model may be threatened by Hertzberg's (1966) decision to confine his study to upper level professional groups. A separate model may exist for members of lower occupational groups.

Vocational Needs

The Theory of Work Adjustment is the conceptual framework developed by researchers at the University of Minnesota for the study of job satisfaction. This model proposed that work adjustment outcomes can be predicted from interactions between worker personalities and work environments (Weiss et al., 1967). The model defined worker personalities as a combination of individuals' vocational abilities and vocational needs. Vocational needs were defined as individual preferences for specific reinforcements, such as variety, working conditions, and salary levels in the environment (Lofquist & Dawis, 1975). Work environments were characterized by ability requirements and levels of work reinforcers. Job satisfaction then became the primary index of work adjustment (Weiss et al., 1967). The model proposed that degrees of job satisfaction reflected degrees of correspondence between work personalities and work environments (Dawis & Lofquist, 1977).

The vocational need-work reinforcer conceptualization of job satisfaction is a more succinct articulation of the "fit" hypothesis than either Maslow's need-hierarchy or Hertzberg's two-factor approach. The proponents of this approach acknowledged individual differences in preferred work reinforcers. Maslow's need-hierarchy implied that all people share a common need pattern. The Theory of Work Adjustment,

however, proposed that people with the same level of overall job satisfaction may fulfill different needs in the same work environment. In a significant departure from the need-hierarchy approach, Weiss et al. (1967) proposed that individuals' patterns of preferred reinforcers were idiosyncratically developed rather than inherent in human nature. Lofquist and Dawis (1975) avoided the intrinsic and extrinsic characterization of needs proposed by Herzberg (1966). Job satisfaction was defined as a function of vocational need-work reinforcer correspondences, rather than a sole product of self-esteem and self-actualization need fulfillment. Weiss et al. (1967) proposed that job satisfaction reflects personalized vocational need patterns which embody intrinsic and extrinsic needs. There has been considerable debate in the literature over whether important determinants of job satisfaction are inherent in jobs or in individuals. The Theory of Work Adjustment proposed that workers ascribe relative values to reinforcements in the work environment according to individual needs.

The vocational need approach has received mixed support in the literature. Weiss et al. (1967) stated that satisfaction in a variety of work environments can be predicted from the correspondence between measured vocational needs and estimated or inferred reinforcer systems (p. V). Graen, Dawis, and Weiss (1968) reported that individuals with different preferred reinforcers placed in the same job will exhibit different levels of job satisfaction, suggesting that workers seek fulfillment of different needs, since the same satisfiers are available to all. Novak (1975) reported a positive relationship between preferred job reinforcers and job satisfaction for vocational educators.

Other authors, however, failed to support vocational need-work reinforcer correspondence as a predictor of job satisfaction (Olson, 1975; Vassey, 1973; Warren, 1971).

Measurement of Job Satisfaction

The preceding sections illustrated disagreements in the literature on definitions and theories of job satisfaction. Consequently, there is no agreement on how job satisfaction should be measured (O'Toole, 1974; Smith, Kendall, & Hulin, 1969). Part of the debate questions whether job satisfaction measures sample position satisfaction or career satisfaction. Harmon (1966), however, was unable to measure position and career satisfaction independently.

Job satisfaction is an attitude and, as such, it cannot be measured directly (Lemon, 1973). Instead, researchers must specify criteria reflecting the construct in order to make inferences and draw conclusions. Generally, researchers agree that people seek to satisfy their needs through working and that work environments are capable of need fulfillment. Workers with differing needs can be expected to exhibit varying degrees of job satisfaction; it is assumed that a specific work setting provides the same opportunities for need fulfillment to all who work in it (Graen, Dawis, & Weiss, 1968). Workers in the same work setting who exhibit similar degrees of job satisfaction should, therefore, possess similar need patterns.

There is some indication that specialized occupations attract people who have similar need patterns. Super (cited in Pietrofesa & Splete, 1975) stated:

It seems possible that if occupations are sufficiently narrowly and precisely defined, for example, functional specialities within an occupation, significant differences in occupational groups may be found. Perhaps some will be found which are so highly structured that only individuals with certain traits are successful or satisfied in them, whereas others will be found in which there is so little structure that individuals with greatly varying personality patterns can find satisfaction in them, each structuring the occupation in his own way (p. 46).

Warren (1971) studied telephone operators, telephone service representatives, and vocational rehabilitation counselors and reported that members of these occupations exhibited different work reinforcement patterns. Kazanas and Gregor (1975) found no difference between the work reinforcer patterns of vocational and nonvocational educators, suggesting that teachers resemble each other in their work reinforcer preferences.

Since attitudes are usually inferred from interview responses, researchers must phrase questions carefully and exercise caution in interpretations of results. An illustration of this point is provided by Kasl (1977): In response to the question, "All in all, how satisfied would you say you are with your job?", about 12% of the population reported dissatisfaction. When asked if they would prefer another job, however, 48% said "yes."

It is unclear at present precisely what approach to the definition of satisfaction is the most useful (Portigal, 1967). Since no agreed upon definition exists, this study will follow the lead of Hulin (1963) and define job satisfaction in terms of measures while remaining cognizant of limits to generalizations.

Determinants of Job Satisfaction

There is little agreement in the literature on the relative importance of work reinforcers available to workers through their jobs. Patterns of preferred work reinforcers vary between individuals and groups. Confounding the problem is variability in definitions and measurements of job satisfaction. For example, Hulin and Smith (cited in Ivanovich & Donnelly, 1968) found that salary was ranked third in importance, behind advancement opportunities and job security, but it was given as the primary reason for job satisfaction or dissatisfaction. A second issue which prevents precise interpretation of research is the degree of relation between members of some sets of reinforcers. Some authors control for these relationships, while others do not. Studies by Hulin (1963) and Schwab and Heneman (1977), for example, created regression models for the prediction of job satisfaction, while other studies reported simple relationships between selected variables and job satisfaction. Further, it is not clear whether job satisfaction is a discrete construct. Hoppock (1935) stated that job satisfaction may not be independent of other life satisfactions. Strauss (1974) hypothesized that since most workers indicated satisfaction with their work, the discontent expressed by blue collar workers may be a product of economic conditions and social pressures to expect too much from one's job.

Salary

The most frequent determinant of job satisfaction reported in the literature is salary. From surveys of the literature, Portigal (1976)

and Barbash (1976) concluded that a clear relationship has been established between pay and job satisfaction. Kasl (1977) concluded that an inadequate income is related to low levels of job satisfaction. Studies by Ewen (1966) and Phillips and Hays (1978) linked job satisfaction and pay for groups of personnel workers and mental health supervisors, respectively. Ronan (1970) reported that the major reason given by administrative, professional, and clerical personnel for leaving an organization was salary.

Other authors have not found a clear relationship between salary and job satisfaction. Hoppock (1935) reported that earnings did not discriminate between satisfied and dissatisfied teachers. Smith, Kendall, and Hulin (1969) concluded that earnings were associated more closely with satisfaction with pay than with other components of overall job satisfaction.

Repetitious Tasks

Uninteresting and repetitive work has been linked to job dissatisfaction (Hoppock, 1935; Kasl, 1977; Portugal, 1976). It is likely that workers who perform the same job over and over will lose interest in their work. Ronan (1970) cited four studies in which interesting duties were listed as an important job characteristic. A survey of federal employees reported by Blai (1970) showed that interesting duties were listed as a major job component by 53% of the participants.

Task Variety

Variety in job tasks is one way to maintain worker interest and avoid boredom. Few studies differentiate between satisfaction with the work itself and satisfaction with variety.

Studies conducted by Phillips and Hays (1978) and Sarata and Jeppesen (1977), however, concluded that the number of tasks performed and the number of different client groups contacted were positively related to the level of job satisfaction among human service workers. Kasl (1977) and Hulin and Smith (cited in Ivanovich & Donnelly, 1976) reported that a discrepancy between skill training and job demands resulted in low job satisfaction.

Job Environments

In major reviews of the literature, both Kasl (1977) and Portugal (1976) concluded that the work environment is an important determinant of job satisfaction. Conditions associated with low levels of job satisfaction include hazards and excessive working hours. Regarding the latter, it has been hypothesized that unpredictable and excessive hours can lead to conflicts with family roles. While workers expect jobs to require personal time and energy, excessive demands affect job satisfaction (Zytowski, 1970). Workers have come to expect 40 hour work weeks regardless of the structure. For example, Mathis (1973) was unable to detect any change in job satisfaction after nursing personnel were given a four day work week.

Co-workers

The quality of social interactions among co-workers has been identified as a determinant of job satisfaction (Barbash, 1976; Phillips & Hays, 1978). Kasl (1977) concluded that an absence of opportunities to interact with other workers leads to job dissatisfaction. Ronan (1970) cited a 1961 study conducted by England and Stein, in which all participant groups marked co-workers as the most important job characteristic. Farris (1971) stated that colleague congeniality was negatively associated with employee turnover.

Supervision

Interpersonal factors also emerged from the literature as an important determinant of job satisfaction in employee-supervisor relationships (Barbash, 1976; Ewen, 1966; Hoppock, 1935). Considerate supervision, in which employees were recognized as individuals, was associated with higher levels of job satisfaction (Kasl, 1977; Phillips & Hays, 1978). The style and structure of supervision also influenced job satisfaction. For example, ambiguity in employee-supervisor roles resulted in lowered levels of job satisfaction, according to Kasl (1977). Distefano and Pryor (1973) and Pacinelli (1968) reported that rehabilitation counselors who perceived their supervisors as considerate and effective were more satisfied with their jobs.

Advancement Opportunities

The effects of advancement opportunities on job satisfaction is well established (Portugal, 1976). Promotions and perceived opportunities for advancement are associated with job satisfaction (Barbash, 1976; Graen & Hulin, 1968). This relationship was established for teachers and personnel workers by Hoppock (1935) and Ewen (1966), respectively. In a related study, the opportunity for advancement was reported to be negatively associated with employee turnover (Farris, 1971).

Autonomy

The freedom to set the pace of work and to control work methods were defined as salient work reinforcers in the literature (Kasl, 1977; Portugal, 1976). Research has shown that, in general, the more autonomy and independence workers have, the more satisfied they are with their jobs. This has been demonstrated for service providers in human service settings (Phillips & Hays, 1978; Sarata & Jeppesen, 1977) and for administrators in social welfare settings (Weinberger, 1966). The lack of autonomy was reported by Wool (1973) to be the major source of dissatisfaction in the American labor force.

Achievement

It is reasonable to assume that workers want to be successful in the performance of job tasks (Portugal, 1976). In short, workers strive for successful performance (Ronan, 1970). The personal sense

of accomplishment is associated with self-actualization in the workplace. Blai's (1946) survey of federal employees revealed that 45% considered self-actualization an important component of job satisfaction. Another study demonstrated that the opportunity for self-actualization was negatively correlated with employee turnover (Farris, 1971).

Correlates of Job Satisfaction

A large portion of job satisfaction literature is devoted to the study of relationships between job satisfaction and selected demographic and sociologic variables. These studies have generated considerable disagreement on the singular and interactive effects of these variables on the development of overall job satisfaction and patterns of preferred work reinforcers. Some authors study sets of related variables; others base their conclusions on single variables.

Age and Job Satisfaction

Barbash (1976) surveyed the literature and concluded that there is support for the hypothesis that age is related to job satisfaction. In general, the number of workers who express dissatisfaction with their jobs declines with increasing age. For example, a 1969 study conducted by the University of Michigan's Survey Research Center (cited in Sheppard & Herrick, 1973) showed that 13% of the workers aged 30 to 44 years express negative feelings toward their jobs. This figure declines to 11% for the 45 to 54 years and over cohort. According to that study, older workers were more satisfied, regardless of income.

The rationale frequently proposed to explain this trend is patterned after Hoppock's (1935) observation that most people eventually succeed in affecting job adjustments which are harmonious with their abilities, interests, and aspirations. In short, over time workers are more likely to find a job which meets their needs. Alternatively, workers may increase their job satisfaction over time by altering their occupational values, expectations, and aspirations (Mortimer, 1979).

Hertzberg, Mauser, Peterson, and Capwell (1957) reported that the relationship between age and job satisfaction was U-shaped, with younger and older workers having the highest levels of job satisfaction. According to these authors, young workers initially perceive jobs as varied and novel. Gradually, however, job satisfaction levels drop because new workers are typically given monotonous tasks. Beginning workers also do not initially understand opportunities for advancement nor do they worry about their job security. In effect, age influences work reinforcer patterns. Increasing job satisfaction is attributed to the tendency for dissatisfied workers to leave and the development of experience and seniority.

Hulin (1963) criticized the U-shaped relationship because no statistical analysis was performed; instead, conclusions were based on inspection. He also noted that Hertzberg (1966) relied on an overall measure of job satisfaction. Job satisfaction, however, is a complex concept composed of many factors. Hulin and Smith (1965) hypothesized that the U-shaped age distribution may be characteristic for some facets of job satisfaction, but not for others. These authors tested a regression model containing eight independent variables, including two

curvilinear functions (age² and tenure²) against a regression model containing six linear terms (including age and tenure). No difference was found between the two models, and Hulin and Smith (1965) concluded that age and tenure were monotonically related to satisfaction with work itself and satisfaction with pay.

Age is highly related to other correlates of job satisfaction. Schwab and Heneman (1977) stated that in most employment situations, age and experience are positively related. Schwab and Wallace (1976) reported that age and experience do not have independent effects on satisfaction with salary. Wild and Dawson (1976) found that many job attitudes which compose overall job satisfaction are confounded by the length of service.

These interrelationships among variables pose interpretation problems for investigators. When researchers attempt to predict job satisfaction from a set of interrelated variables, multicollinearity threatens the internal validity of the study (Schwab & Heneman, 1977).

Multicollinearity is defined as departures from orthogonality of independent variables (Farrar & Glauber, 1967). In effect, multicollinearity makes it difficult to distinguish the independent contributions of related variables toward the explanation of variance. For example, experience may explain the same variance as age does. Thus, little extra knowledge is gained by the use of both age and experience in regression models. Schwab and Heneman (1977) tested two separate regression models of job satisfaction. The first predicted the dependent variable, job satisfaction, with age, and a separate equation used experience as the predictor. The second model combined age and

experience into a single equation. The two models explained the same amounts of variance.

Since different samples will exhibit varying degrees of interdependence between related variables, estimated population parameters may be a unique function of the sample, and hence, pose threats to external validity. Farrar and Glauber (1967) proposed that multicollinearity is both a facet and a symptom of poor experimental design. It is a problem, however, only if it affects a variable-set crucial to the investigator's purpose. Investigators may avoid multicollinearity to some extent during the independent variable specification process in regression analysis. Historically, the rule of thumb is to choose only those independent variables which intercorrelate less than 0.80 (Farrar & Glauber, 1967). Secondly, multicollinearity is suspected if the zero order correlation between any two independent variables is greater than the multiple regression coefficient (Farrar & Glauber, 1967).

Gender and Job Satisfaction

A number of research studies attempted to determine the relationship between job satisfaction and gender (Mortimer, 1979). Hertzberg (1966) hypothesized that sex, like age, may cause differences in patterns of preferred work reinforcers. Hulin and Smith (cited in Ivanovich & Donnelly, 1968) concluded from their research that sex, per se, is not a crucial determinant of job satisfaction. Instead, these authors hypothesized that sex was part of a constellation of variables including compensation, occupational level, and opportunity

for advancement, which covary to determine the level of job satisfaction.

A 1969 national survey conducted by the Survey Research Center (cited in Sheppard & Herrick, 1972) showed that women were less satisfied with their jobs than men. While not specifically related to age, it was found that after age 30, twice as many women as men report dissatisfaction. Barbash (1976), however, concluded that women are not less satisfied than men when age and education were controlled.

Education and Job Satisfaction

Sheppard and Herrick (1972), citing a 1969 survey of workers, reported that education was not related to job satisfaction. They did note, however, that young workers with more than a high school education were more likely to report dissatisfaction. It is reasonable to assume that if younger workers are actually given monotonous tasks (Hertzberg et al., 1957), highly trained workers would be dissatisfied since their skills are under utilized.

It appears that education is related to satisfaction with pay (Klein & Maher, 1976). Phillips and Hays (1978) studied mental health workers and supervisors and reported that higher levels of education were associated with pay dissatisfaction.

Job Dissatisfaction

Most job satisfaction research is conducted under the assumption that job dissatisfaction results in negative outcomes for both workers and employers. While some investigators study the components of job

satisfaction in hopes of finding ways to enhance it, others study the effects of dissatisfaction.

The inability of jobs to keep pace with aspirations of young blue and white collar workers has resulted in severe physical, mental, and family problems for these workers (O'Toole, 1973). Job dissatisfaction has been linked to increased risk of heart disease (O'Toole, 1973) and fatigue (Mortimer, 1979). It has also been related to depression, low esteem, psychosomatic illnesses, anxiety, impaired interpersonal relationships, and personal maladjustment (Kornhauser, 1965). The interdependent relationship between mental health and job dissatisfaction obscures cause and effect determinations. Reactions to dissatisfaction may range from trying to change the situation or goals and perceptions, to the development of dysfunctional behaviors (Portigal, 1976). According to Heisler (1977), the most common emotional reaction to job dissatisfaction is a feeling of powerlessness which leads to suppressed frustration and non-involvement.

Output, turnover, absenteeism, and grievances are some of the behavioral consequences of job dissatisfaction which have been studied (Hulin, 1963). Brayfield and Crockett (1955) proposed that, under conditions of marked dissatisfaction, low productivity may reflect a form of aggression. Smith, Kendall, and Hulin (1969) stated, however, that no substantial correlation between satisfaction and productivity has been established. There is reasonable agreement that a relationship exists between dissatisfaction and absenteeism (Ewen, 1966; Kasl, 1977; Portigal, 1976). It is also generally acknowledged that

dissatisfied workers will move on to other jobs (Ewen, 1966; Farris, 1971; Hoppock, 1935; Kasl, 1977; Portigal, 1976; Smits, 1972).

Job Satisfaction in Educational Settings

Several studies have examined the job satisfaction of professional groups working in public schools. This section presents studies related to teachers and school psychologists who work directly with children.

Teachers

Hoppock (1935) conducted the first job satisfaction study of public school teachers. He surveyed 500 teachers and compared the answers of the 100 most satisfied to the answers of the 100 least satisfied. Hoppock (1935) reported that about three-fourths of the questions used to measure job satisfaction were related to emotional adjustment. Those who were dissatisfied frequently complained of monotony and fatigue, lending support to hypothesized relationships between dissatisfaction and physical consequences. Teachers who were satisfied reported better supervisor and co-worker relationships. Hoppock (1935) found that salary did not discriminate between satisfied and dissatisfied teachers. It was also reported that more of the satisfied teachers worked in the cities with a population of 10,000 or more. The study did not reveal whether this latter finding was related to differences between urban and rural settings (e.g., access to peers). On the average, satisfied teachers were seven and one-half years older than their dissatisfied counterparts. This finding suggests that a

positive linear relationship exists between age and job satisfaction of teachers.

Cole (1977) surveyed 800 teachers in Colorado. His results suggested that teachers, in general, are satisfied with their jobs. Using the Job Description Index, Cole found that elementary school teachers were more satisfied with their work than middle school teachers. Regarding the educational environment, Cole reported that elementary and middle school teachers were more satisfied with supervision than their high school counterparts. The results of this study also showed that urban teachers were more satisfied than rural teachers with earnings, while rural teachers were more satisfied with their work. Thus, it seems that rural teachers have reversed the trend noted by Hoppock (1935) of being less satisfied. The ability of earnings to differentiate between urban and rural teachers may be due to the discrepancy between urban and rural pay scales, which may not have existed when Hoppock (1935) conducted his study.

Wiggins (1975) surveyed special education teachers and found that age, years as a teacher, and tenure were unrelated to job satisfaction. A significant relationship was reported between job satisfaction and education. Kelsey (1979), however, reported that there was a significant negative relationship between teaching experience and job satisfaction for personnel working with the profoundly retarded.

School Psychologists

Kilpatrick, Shook, and Swanson (cited in Vensel, 1981) found that 48% of their survey respondents planned to leave the field of school

psychology within five years. If turnover is an index of job dissatisfaction, it is apparent that large numbers of school psychologists are dissatisfied with their jobs. Regardless of the effects of dissatisfaction on the individual, turnover alone creates a burden for the public schools in the orientation and training of new personnel. There is also a cost to school psychologists' clients, since children and teachers must adapt to the skills and styles of changing service providers.

There may be several reasons for job dissatisfaction among school psychologists. One of the most salient factors is the under-utilization of skills (Guidubaldi, 1981). School psychologists are highly trained professionals capable of many service roles. School systems, however, operate under various mandates. Students needing special education services must be evaluated prior to placement and reevaluated to continue eligibility. Consequently, many school psychologists utilize only a small portion of their skills. In effect, school psychologists are becoming locked into the assessment role.

It is clear that school psychologists want to diversify their roles (Guidubaldi, 1981; Ramage, 1979). Given current role constraints, however, many might choose to explore service settings where testing is not considered the sole job function. It has already been stated that variety is an important correlate of job satisfaction. Testing for school psychologists may be a monotonous, routine, and uninteresting duty.

The most common reaction to job dissatisfaction is non-involvement and suppressed frustration (Heisler, 1977). Many school psychologists

are isolated from their peers (Rosenfield, 1981). If school psychologists are dissatisfied, it is reasonable to assume that isolation confounds their non-involvement and frustration. The inability to explore frustration with people in similar circumstances may contribute to the development of apathy, detachment, noncommitment, and burn-out within the profession.

While school psychologists' job satisfaction has been the subject of much conjecture, little substantive research is available. In some studies of school psychologists, job satisfaction is addressed only in passing. For example, Hughes and Clark (1981) studied differences between school psychologists employed in urban and rural settings in Virginia. Job satisfaction was estimated by four Likert-type items, and no differences were found between the two groups. It can be argued, however, that four items are not sensitive to differences in such a complex variable.

Ahrens (1977) developed and conducted a study on the effects of internal role conflict on overall job satisfaction of school, private practice, institutional, and administrative psychologists. The study investigated the effects of incongruent role expectations on job satisfaction (e.g., differences between training and actual practice).

Ahrens (1977) proposed that school psychologists are programmed to fulfill numerous roles as change agents through their training and literature. Nevertheless, as Trachtman (1981) noted, few school psychologists can even hope to find employment settings which would support all of the role functions which have been portrayed in the literature. Consequently, Ahrens (1977) proposed that school

psychologists would experience incongruence between what they actually do and what they are trained to believe they should be doing. This incongruence, in turn, leads to job dissatisfaction and a tendency to terminate employment. This argument could explain, in part, Trachtman's (1981) supposition that many school psychologists must seek alternative job settings and would support Kilpatrick, Shook, and Swanson's survey results (cited in Vensel, 1981) which indicated that one-half of the respondents intended to leave the field within five years.

Ahrens (1977) defined job satisfaction as a summation of evaluations of satisfaction with various job components sampled by 38 questions. The questions were written by Ahrens and critiqued by faculty members. Participants in the study included 154 school psychologists, 67 private practitioners, 29 institutional psychologists, and 15 administrators. Results of Ahrens' (1977) study indicated differences in levels of role conflict for psychologists employed in various settings. Post-hoc analyses demonstrated that school psychologists experienced higher levels of internal role conflict than either private practitioners or administrators. A negative correlation was found between internal role conflict and job satisfaction.

Ahrens' (1977) study also examined relationships between job satisfaction and selected demographic variables. Job satisfaction correlated significantly with income ($r = 0.27$, $p < 0.001$), community size ($r = 0.17$, $p < 0.01$), experience in present position ($r = 0.15$, $p < 0.01$), professional experience ($r = 0.18$, $p < 0.002$), age ($r = 0.27$, $p < 0.001$), and education ($r = 0.20$, $p < 0.001$). Nonsignificant

coefficients were reported for case load ($r = -0.09$) and district size ($r = 0.09$).

Ahrens' (1977) results, for the most part, concur with findings of studies of industrial and educational employees. Support is lent to the hypotheses that age, tenure, and experience are positively related to job satisfaction. The urban-rural controversy remains unresolved since Ahrens (1977) did not examine subcomponents of job satisfaction.

It is interesting that case load and district size were unrelated to job satisfaction. Case load was determined by asking respondents to estimate the approximate number of direct child, client, or patient contacts made in the past year. This estimate may not be a sensitive index of school psychologists' work load. School psychologists are frequently involved in individual and group counseling, consultation, parent training, and educational inservice activities, which may not be included in case load estimates. A more reasonable index of work load may be psychologist-to-pupil ratios. If ratios are relatively high, it is reasonable to expect that psychologists spend most of their time conducting psychoeducational assessments. If the ratios are relatively low, it is reasonable to assume that psychologists have sufficient time and flexibility to perform a variety of tasks.

Instrumentation

The review of the literature suggests a need for research on school psychologists' job satisfaction. It has been shown that while definitions and methodologies differ, job satisfaction is a salient and

measurable construct. After reviewing a number of overall and facet-specific job satisfaction measures, the Minnesota Satisfaction Questionnaire (MSQ) was selected as the most appropriate instrument for this study. This section describes the Demographic Data Form and the Minnesota Satisfaction Questionnaire.

Demographic Data Form

A data form (Appendix B) was attached to each questionnaire to collect information regarding age, sex, primary role designation, years experience as a school psychologist, income, educational level, number of school psychologists working for the school system, psychologist-to-pupil ratio, contract length, and overall job satisfaction. Respondents were asked if they plan to remain in their present job and if they plan to remain in the profession of school psychology. This information was used to describe the sample.

Minnesota Satisfaction Questionnaire

The Minnesota Satisfaction Questionnaire (MSQ) was developed by Weiss, Dawis, England, and Lofquist (1967) as part of the University of Minnesota's Work Adjustment Project. The project developed the Theory of Work Adjustment, a conceptual framework for the study of work adjustment outcomes. This theory proposed that job satisfaction was a result of the correspondence between workers' vocational needs or preferred reinforcers and work reinforcers available in the work environment. The MSQ was designed to provide both overall and facet-specific indices of job satisfaction. The authors of the MSQ identified 20

specific sources of job satisfaction from a review of the literature similar to the one discussed above (Lofquist and Dawis, 1975). In addition to an overall index of job satisfaction, the MSQ purports to measure satisfaction with the following sources of reinforcement: 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, and working conditions.

The MSQ was designed for use with potential applicants for vocational rehabilitation programs. The authors estimated that a fifth grade reading level was required to complete the survey. An examination of the 1967 revision of the MSQ revealed that some items might be difficult for school psychologists in public school settings to interpret. The long form of the MSQ consists of 100 items and is self-administered in 15 to 20 minutes. Of those items, 21 were modified to enhance the face validity for school psychologists.² Original and modified forms of the MSQ are presented in Appendices D and C, respectively.

Each MSQ item requires the respondent to indicate their satisfaction with a work reinforcer on a five point Likert (1970) scale. The response "very dissatisfied" is assigned a value of "1," the response "dissatisfied" is assigned a value of "2," and so on, to the response "very satisfied," which is given a point value of "5." The neutral response option was deleted in the modified version of the MSQ in order to simplify interpretation. It would be difficult to determine

whether individuals who chose this option could not decide if they were satisfied with an aspect of their job, or if their answer reflected nonapplicability. The neutral response also adds little descriptive information.

Each source of work reinforcement, or subscale, is sampled with five questions. Subscale scores are derived by summing the points for the five items comprising the respective subscale. An overall index of job satisfaction is derived by summing the points for a subset of 20 items, one from each subscale. These latter items were selected for their correlation with their respective subscale scores.

Raw scores for each MSQ subscale may be converted to percentiles by using section III-B and IV-B in the manual. Norms for the 21 MSQ scales (20 subscales and the overall scale) are available for 25 occupational groups including professional, clerical, service, bench, and miscellaneous occupations, as well as for employed and unemployed disabled individuals. Notably, elementary school teachers are the only education profession represented in the manual.

The alterations of item wording in the modified MSQ, while minor, may change the statistical properties of the instrument. Modifications were made affecting the following seven scales: Advancement (four of five items), Authority (two of five), Company Policies (five of five), Supervision-Human Relations (four of five), Supervision-Technical (three of five), and Working Conditions (one of five). The majority of items and scales, however, remained intact. Properties of the original version are described below while properties of the modified MSQ are presented in Chapter IV.

The MSQ manual presents a summary table of Hoyt internal consistency coefficients on page 14. For the 25 occupational groups across all scales, the coefficients range from 0.59 to 0.97. Nevertheless, 83% were over 0.80 and only 2.5% fell below 0.70 (Albright, 1972). Thus, as Guion (1978) notes, internal consistency appears adequate.

Test-retest reliabilities are presented on page 15 of the MSQ manual for one week and one year intervals. One week test-retest reliability coefficients were obtained on a group of 75 employed night school students. Coefficients range from 0.66 to 0.91 across the 21 scales, with a median of 0.83. Test-retest reliability coefficients for the one year interval were obtained on a sample of 115 employed people and ranged from 0.35 to 0.71 across the 21 scales.

MSQ items and scales were developed from the Theory of Work Adjustment. Therefore, construct validity of the instrument is based on the extent to which MSQ results conform to expectations based on the theory. The Work Adjustment Project staff developed an instrument parallel to the MSQ which sampled the relative importance of work reinforcers, called the Minnesota Importance Questionnaire (MIQ). The test authors set out to test the hypothesis that individuals with high-need (MIQ)-high reinforcement (MSQ) correspondence would exhibit more satisfaction than individuals with low-need (MIQ)-low reinforcement (MSQ) correspondence.

According to the MSQ manual, analysis revealed construct validity for ability utilization, achievement, advancement, authority, creativity, responsibility, and variety scales. The authors suggest caution in the interpretation of the compensation, independence, and social

service scales, since these did not perform according to theoretical expectations.

Concurrent validity of the MSQ is based on its ability to discriminate between occupational groups. The authors reviewed the literature on job satisfaction and concluded that sufficient evidence was available to suggest that different occupations exhibit different levels of overall job satisfaction and different patterns of preferred reinforcers. An analysis of variance (one-way classification) was performed comparing 25 occupational groups for each of the 21 scale scores reported by the MSQ. Results indicated significant differences between all groups on all scales ($p < 0.001$). Results presented on page 19 of the manual indicate that the MSQ can differentiate between occupational groups on the basis of work reinforcers and overall satisfaction indices.

Content validity of the MSQ may be inferred from factor analytic studies. Intercorrelation matrices for the 20 subscales, based on 14 groups of 100 subjects, are presented in section III-C of the manual. In general, these factor studies extracted two vectors, labelled intrinsic and extrinsic. The two supervision scales, the company policies and practices, working conditions, advancement, compensation, and security indices loaded on the extrinsic factor; the rest loaded on the intrinsic factor. Thus, it was inferred that the MSQ provides adequate sampling of components which are thought to influence job satisfaction outcomes.

Summary

Job satisfaction among American workers has been a subject of research and speculation for several decades. Nevertheless, relatively few studies have examined the job satisfaction of educational personnel, and still fewer have involved school psychologists. There is evidence that significant numbers of school psychologists are dissatisfied with their jobs. According to Ahrens (1977), school psychologists' job satisfaction is associated with compensation, community type, experience, age, educational level, and role conflict. These results tend to conform with factors identified with most other occupational groups. There remain, however, several unanswered questions. For example, it is not clear whether these results apply to school psychologists in general, since only one state was involved in the study. Second, results were based on a content-validated instrument which examined overall job satisfaction. Research suggests, however, that job satisfaction is a complex composite variable of which overall job satisfaction is but one aspect.

Two presidents of NASP have expressed concern over school psychologists' inability to expand their roles to be more congruent with their training. Speculations on the effects of this situation are increasing in the professional literature without empirical support. It has been suggested that the actualities of school psychology practice have the potential for driving significant numbers of practitioners from the field. Further studies of school psychologists' perception of their roles and work environments are needed to provide insight into the problem.

Chapter III

METHODOLOGY

This chapter delineates methodological procedures for the present study. The target population is described and participant selection procedures are discussed. In addition, survey distribution and collection methods are presented. Finally, statistical treatments of survey responses are described.

Research Questions

The procedures described below were derived from the following research questions:

1. In a national sample of school psychologists, what are the levels of overall job satisfaction?
2. On the whole, what degree of satisfaction do school psychologists express with each sub-factor of job satisfaction (as measured by the MSQ)?
3. What is the relationship between overall job satisfaction and selected demographic variables?

Specific hypotheses were not developed because of the descriptive nature of the study. Findings related to each question are presented and discussed in Chapters IV and V, respectively.

Participants

The population selected for this study was the practitioner membership of the National Association of School Psychologists (NASP). Consequently, findings are generalizable only to those members of NASP. NASP has approximately 7000 members and represents about one-third of all school psychologists in the United States. Members of NASP come from all 50 states and represent various ethnic groups, educational levels, urban and rural districts, and age groups. In addition, members vary in their salaries, years of experience, psychologist-to-student ratios, and case-loads. While members of NASP are a heterogeneous group and probably resemble non-members, caution is urged when attempting to generalize results to all school psychologists since non-members were not sampled.

Ramage (1979) found that practitioners constituted about 80% of NASP's membership. In addition, demographic data gathered from members in December 1981 and published in the 1982 NASP Membership Directory revealed that 78% of those responding were school psychologists, as opposed to administrators, consultants, or trainers. In order to approach a sample size of 364 practitioners (Krejcie & Morgan, 1970), 455 names were randomly selected from the membership list. This sample was one-half of a larger sample drawn for two studies. Participants in the first study were excluded from this study in order to enhance responses. Detailed sample characteristics are given in Chapter IV.

Instrumentation

Each of the 455 NASP members selected to participate in this study was asked to complete and return the Data Form and the modified version

of the Minnesota Satisfaction Questionnaire (MSQ). Responses to these two data gathering devices formed the basis for the results of this study.

Data Form

The Data Form (Appendix B) was used to gather information regarding sample characteristics and aid in the determination of relationships between demographic variables and overall job satisfaction. Participants were asked to check their primary role designation, sex, age, current degree status, number of coworkers, years of experience as a school psychologist, psychologist-to-student ratio, annual salary, and contract length. In addition, they were asked to check if they planned to remain in their current position for five more years and in the profession five more years. Finally, participants were asked to rate their level of overall job satisfaction. Response options to this question were: Very Dissatisfied, Dissatisfied, Satisfied, and Very Satisfied.

Minnesota Satisfaction Questionnaire

Original and modified versions of the MSQ appear in Appendices D and C, respectively. Wording changes in several original items and changes in response options (described in Chapter II) may alter statistical properties of the original scales. Therefore, caution is urged when making comparisons between results obtained on the original MSQ and the modified MSQ used in this study. Similarly, caution is urged when comparing scores obtained on this modified MSQ with norm tables

provided with the original instrument since different response weights are used.

The MSQ samples 20 sources of work reinforcement or job satisfaction. These sources, when combined, comprise overall job satisfaction. These sub-scales were retained on the modified version of the MSQ used in this study. These scales and brief descriptions (based on item wordings) are:

1. Ability utilization--The chance to make use of abilities.
2. Achievement--The feeling of accomplishment one derives from a job.
3. Activity--Being able to stay busy.
4. Advancement--The chances for advancement on the job.
5. Authority--The chance to tell others what to do.
6. Company policies and practices (reworded as School system policies and practices)--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 chance to try one's own methods.
10. Independence--The chance to work alone.
11. Moral values--The chance to do things which do not go against one's conscience.
12. Recognition--Being recognized for doing a good job.
13. Responsibility--The freedom to use one's judgment.
14. Security--The way a job provides for steady employment.

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

Each of the above scales was sampled by five items which asked respondents to rate their satisfaction with that particular aspect of their job. Response options on the modified version were: 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 a pre-letter, initial survey distribution, two follow-up mailings, and a personal phone call to selected non-respondents.

Pre-letter

Three days prior to the first mailing of survey materials, a pre-letter (Appendix A) was sent to all participants. The letter, endorsed by three recognized leaders in the field of school psychology, briefly described the purpose of the study, assured confidentiality of responses, and encouraged participation.

First Mailing

The initial mailing of survey materials occurred on April 16, 1982. Each packet contained an explanatory letter (Appendix A) and survey materials (Appendices B and C) along with a stamped, self-addressed envelope. Participants were informed that each packet was coded to facilitate follow-up activities and again assured of confidentiality. Surveys were printed on colored paper (light green) and accompanied by a packet of coffee.

First Follow-up

Three weeks after the initial survey mailing (May 10, 1982), a second packet of materials was sent to participants who had not responded by May 7. Each packet included a letter (Appendix A) and survey materials. The letter again assured confidentiality and urged response by May 24. Surveys were again printed on colored paper, accompanied by a coffee packet, and included a stamped, self-addressed return envelope.

Second Follow-up

Six weeks after the initial survey mailing (May 28, 1982), a third packet of materials was sent to participants who had not yet responded to the first two mailings. Packets contained a letter from the chairman of the dissertation committee (Appendix A) urging participants to respond. Surveys were printed on colored paper and accompanied by a stamped, self-addressed return envelope.

Telephone Follow-up

Eight and one-half weeks after initial survey distribution (June 16 & 17, 1982), a personal telephone call was placed to 10 randomly selected participants who had not responded to any of the three prior survey mailings. Those contacted were asked questions from the Data Form pertaining to their role designation, sex, age, degree status, psychologist-to-student ratio, annual salary, contract length, and estimated overall job satisfaction.

Data Analysis

Surveys returned by June 16, 1982 were coded onto optical scanning sheets which were read by the Test Scoring Center at Virginia Polytechnic Institute and State University. These sheets were then used to generate a deck of IBM cards for computer analysis at Virginia Polytechnic Institute and State University. Specific statistical procedures were selected on the basis of their ability to provide information related to the research questions enumerated above. These procedures included frequency counts, scale means and 95% confidence intervals, and multiple regression procedures.

Data Form

Responses to items on the Data Form were treated as ordinal variables with the exceptions of sex and decisions to remain in the profession and in current position. Annual salary and contract length were

combined to form a new variable, monthly salary, in order to place all respondents on an equal scale.

Minnesota Satisfaction Questionnaire

As mentioned above, each of the 20 scales of the modified MSQ was sampled by five items and response options were Very Dissatisfied (VDS), Dissatisfied (DS), Satisfied (S), and Very Satisfied (VS). These responses were assigned ordinal weights (e.g., VDS was assigned a value of 1 and VS was assigned a value of 4). Thus, increasing scores indicated increasing degrees of satisfaction. Summing the weights of the five items comprising each scale yielded scale scores which could range from 5 to 20.

Satisfaction categories for the summed scale scores were based on original response options. Each response option was assumed to represent the mid-point of an interval (e.g., a response of VDS, weighted 1, actually represents the midpoint of an interval from 0.5 to 1.5). Simply multiplying these values by 5 for each option yielded sum intervals of 2.5 to 7.5 for Very Dissatisfied, 7.51 to 12.5 for Dissatisfied, 12.51 to 17.5 for Satisfied, and 17.51 to 22.5 for Very Satisfied. It should be noted that, in actuality, no sum can fall below 5 or above 20. This approach was adopted in order to facilitate interpretation of summed scores in a relative manner.

Overall job satisfaction scores were derived by summing response weights across the 100 items of the modified MSQ for each individual. Satisfaction categories again were based on response options: Multiplying response intervals by 100 yielded overall satisfaction ranges of

50 to 150 for Very Dissatisfied, 151 to 250 for Dissatisfied, 251 to 350 for Satisfied, and 351 to 450 for Very Satisfied. Again, it should be noted that in actuality no scores could fall below 100 or above 400.

Specific statistical analyses related to each research question were:

1. A frequency count based on the number of respondents in each overall job satisfaction category was used to describe the levels of overall job satisfaction in this national sample of school psychologists.
2. Means and 95% confidence intervals for each of the 20 scales on the modified MSQ were used to construct a hierarchy of job satisfaction sub-factors for school psychologists.
3. A multiple regression model was constructed to describe the relationships between selected demographic variables and overall job satisfaction.

Summary

This chapter reviewed the research methods used in this study. Guided by the research questions stated at the beginning, a target population was described. Randomly selected participants were sent instruments described in the following section. Next, data collection procedures were delineated. Finally, data manipulation and specific statistical procedures related to each research question were described.

Chapter IV

RESULTS OF THE STUDY

This chapter presents the results of the data analysis procedures delineated in Chapter III. The first section examines response rates for each data collection step and for the entire study. The second section presents demographic data collected from responses to the Data Form and describes the sample. The third section presents information related to job satisfaction. It includes discussions of questionnaire reliability and validity. Finally, the results of procedures relating to each research question are presented.

Survey Response

Data collection procedures were detailed in Chapter III. Briefly, there were five steps in the process: (1) a pre-letter, (2) the initial survey mailing to all participants, (3) the first follow-up mailing, (4) the second follow-up mailing, and (5) the telephone follow-up. Each respondent's survey was coded according to when it was received during the collection process. Five packets were returned by the Postal Service as undeliverable. These were deleted from the sample, yielding a total of 450 possible participants.

Return percentages for each data collection step are presented in Table 1. The final response rate, 86.89% (n = 391) included eight non-usable returns.

Table 1
Survey Response Rates

Step	Number Returned	Percent of Total
Initial Mailing	292	64.89
First Follow-up Mailing	61	13.56
Second Follow-up Mailing	28	6.22
Telephone Follow-up	<u>10</u>	<u>2.22</u>
Total	391	86.89

Note: There were 450 possible participants.

A randomly selected group of non-respondents contacted by telephone was composed of four practitioners, one student, and five private practitioners. The group was divided evenly between males and females.

In order to determine if non-respondents were different from respondents in terms of role designation (i.e., practitioner or non-practitioner), a crosstabulation analysis was performed. Results of this analysis are presented in Table 2. The non-significant Chi-square (2.42) indicated that responding to survey mailings was statistically independent of role designation. Thus, it appears that the tendency to respond to survey mailings was not related to role designation. Of the four practitioners contacted by telephone, three stated that they were satisfied and one stated that they were very satisfied in response to question 16.

Demographic Data

Practitioner responses to Data Form items were used to describe the sample. These responses were also used to determine relationships between demographic variables and overall job satisfaction scores. With the exception of primary role designation, all characteristics presented below were specific to practitioners. Comparisons, where possible, were made with the most recent source of demographic

Table 2
 Crosstabulation of Role Designation and
 Response to Mailings

Role		Response	
		Mail	Telephone
Practitioner	Observed	244	4
	(Expected)	(241.66)	(6.34)
Non-practitioner	Observed	137	6
	(Expected)	(139.34)	(3.66)

Chi-square = 2.42, $p > 0.05$.

information published by NASP: the 1982 Membership Directory. Information from that source was collected in December 1981.

Primary Role Designation

Practitioners employed by the public schools comprised 63.97% (n = 245) of this sample. Non-practitioners comprised the remaining 36.03% (n = 138). Demographic data published in the 1982 Membership Directory indicated that 78% of the respondents were school psychologists. Differences may be attributed to differences in response options. If the percentages of practitioners, private practitioners, students and interns (from Table 3) were combined into a single category labelled school psychologist, a total of 81.46% is obtained. Supervisors and administrators comprised 8.36% of this sample as opposed to 12% reported by NASP. At least some of the 35 individuals who checked "Other" would probably fall into this category.

Sex

Females formed 64.08% (n = 88) of this sample and males 35.92% (n = 157). The 1982 Membership Directory reports percentages of 58.8 and 41.2 for females and males, respectively.

Age

The number of respondents in each age category is presented in Table 4. These figures closely resemble percentages reported by NASP. Differences in the first two categories (20-25 & 26-31) probably reflect

Table 3
Primary Role Designation

Category	Number	Percent of Total
Practitioner	245	63.97
Non-practitioner (total)	138	36.03
Supervisor/ Administrator	32	8.36
Student	31	8.09
Intern	18	4.70
Trainer	4	1.04
Private Practitioner	18	4.70
Other	<u>35</u>	<u>9.14</u>
Grand Total	383	100.00

Note: Eight surveys were not usable.

Table 4
Age Distribution

Range	Number	Percent of Total	NASP (%)
20-25	1	0.41	3.6
26-31	61	25.00	30.4
32-37	75	30.74	24.7
38-43	38	15.57	13.7
44-49	27	11.06	11.8
50-55	19	7.79	8.2
56-61	17	6.97	5.8
62 and over	<u>6</u>	<u>2.46</u>	1.8
Total	244	100.00	

Note: One respondent failed to check this item.

the inclusion of students and interns as school psychologists in the NASP data.

Current Degree Status

There are 245 responses to this item. Percentages of respondents holding each degree and percentages reported by NASP are presented in Table 5. It appears from both samples that most practitioners are sub-doctoral level school psychologists. In addition, a majority in both samples hold the Masters plus degree designation.

Co-workers

Of the 245 responses to this item, 17.55% (n = 43) indicated that they worked in single psychologist school systems while 28.16% (n = 69) worked in systems employing from one to three other school psychologists. A total of 15.10% (n = 37) indicated that they worked with four to six other school psychologists, and 14.29% (n = 35) worked with seven to 10 others. A total of 24.90% (n = 61) worked in systems employing more than 11 other school psychologists.

Psychologist to Student Ratios

Information regarding psychologist to pupil ratios is presented in Table 6. Data from this sample indicate that about 84% of those responding work in districts with ratios of 1 to 3500 or less. This figure appears congruent with data presented in the 1982 Membership Directory.

Table 5
Degree Status

Degree	Number	Percent of Total	NASP (%)
B.A. or B.S.	0	0	0.1
Masters	29	11.84	19.7
Masters plus 30	151	61.63	54.4
Ed.S.	35	14.29	10.7
Doctorate	<u>30</u>	<u>12.24</u>	15.1
Total	245	100.00	

Table 6
Psychologist to Student Ratio

Ratio	Number	Percent of Total
Less than 1-1000	33	13.64
1-1000 to 1-1500	29	11.98
1-1500 to 1-2000	45	18.59
1-2000 to 1-2500	43	17.77
1-2500 to 1-3000	35	14.46
1-3000 to 1-3500	21	8.68
1-3500 to 1-4000	11	4.55
1-4000 and over	<u>25</u>	<u>10.33</u>
Total	242	100.00

Note: Three respondents did not check this item.

Annual Salary

Annual salary in this sample ranged from less than \$14,000 to \$40,000. Specific figures are given in Table 7. The 1982 Membership Directory reports that 84.6% of its respondents earned between \$16,000 to \$30,000 annually. In the sample used in this study, 82.56% fell within this annual salary range.

Contract Length

Participants were asked to check their current contract length. Responses indicated that 19.26% (n = 47) held nine month contracts, 56.56% (n = 138) had 10 month contracts, 10.66% (n = 26) had 11 month contracts, and 13.52% (n = 33) held 12 month contracts. One respondent failed to answer this question.

Years Experience as a School Psychologist

The number of years experience as a school psychologist in this sample ranged from 0 to 38. Comparisons with data from the 1982 Membership Directory appear in Table 8. This sample appears to parallel NASP information.

Remain in Current Position

This item asked participants if they planned to remain in their current position for five more years. Of the 235 participants responding to this item, 58.30% stated that they planned to remain in their current position; 41.70% stated that they did not plan to remain in their current position for five more years.

Table 7
Annual Salary

Range	Number	Percent of Total
\$14,000 or less	6	2.49
\$14,001-\$16,000	10	4.15
\$16,001-\$18,000	27	11.20
\$18,001-\$20,000	31	12.86
\$20,001-\$22,000	41	17.01
\$22,001-\$24,000	26	10.79
\$24,001-\$26,000	31	12.86
\$26,001-\$28,000	21	8.71
\$28,001-\$30,000	22	9.13
\$30,001-\$32,000	15	6.22
\$32,001-\$34,000	4	1.66
\$34,001-\$36,000	1	0.42
\$36,001-\$38,000	1	0.42
\$38,001-\$40,000	5	2.08
\$40,001 and over	<u>0</u>	<u>0.00</u>
Total	241	100.00

Note: Four respondents failed to check this item.

Table 8
Years Experience as a School Psychologist

Range	Number	Percent of Total	NASP (%)
0-5	103	42.92	45.7
6-10	79	32.92	28.7
11-15	33	13.75	13.8
16-20	20	8.33	6.6
21-25	3	1.25	3.2
26 or more	<u>2</u>	<u>0.83</u>	2.0
Total	240	100.00	

Note: Five respondents failed to check this item.

Remain in the Profession of School Psychology

Participants were also asked if they planned to remain in the profession of school psychology for five more years. Of the 233 participants responding, 84.55% stated that they planned to remain in the profession; 15.45% did not plan to remain in the profession of school psychology for five more years.

Overall Job Satisfaction

Participants were asked to rate their overall job satisfaction (Question 16). Of the 244 participants responding to this item, 4.10% checked "Very Dissatisfied," 16.39% checked "Dissatisfied," 55.74% checked "Satisfied," and 23.77% checked "Very Satisfied."

Job Satisfaction Among School Psychologists

The modified version of the Minnesota Satisfaction Questionnaire (MSQ) was used to collect information regarding job satisfaction among school psychologists. Results presented below are based on the summated scales described in Chapter III.

Questionnaire Reliability

Cronbach's Alpha was used to determine the internal consistency of the 20 scales of the MSQ. These reliability coefficients, presented in Table 9, ranged from 0.738 to 0.937, with a mean of 0.871.

Table 9

Cronbach's Alpha Reliability Coefficients for
the 20 Scales of the Minnesota Satisfaction Questionnaire

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

Cronbach's Alpha was also used to determine the internal consistency of the overall job satisfaction scores. Results indicated a reliability coefficient of 0.973 for this scale.

Concurrent Validity

Evidence for concurrent validity was sought by comparing overall job satisfaction scores from the MSQ with the overall job satisfaction rating from question 16 of the Data Form. A crosstabulation analysis (Table 10) resulted in a chi-square value of 97.85 ($p < 0.05$), indicating that overall job satisfaction ratings from the Data Form are not independent of total job satisfaction scores. Further, Eta (an index of the association between an interval variable and an ordinal variable) indicates that a relationship of 0.566 exists between overall job satisfaction ratings and total job satisfaction scores.

Levels of Overall Job Satisfaction

Overall job satisfaction scores were derived by summing response weights for the 100 items of the MSQ. These were then categorized into job satisfaction levels based on original response options. No summed scores fell within the "Very Dissatisfied" range. A frequency count revealed that 14.29% of the respondents fell within the "Dissatisfied" range, 80.67% scored within the "Satisfied" range, and the remaining 5.04% fell into the "Very Satisfied" range.

Table 10
 Crosstabulation of Job Satisfaction Ratings
 and Total Job Satisfaction Scores

Rating		Total Satisfaction Scores		
		Dissatisfied 151-250	Satisfied 251-350	Very Satisfied 351-400
Very Dissatisfied	Observed	3	7	0
	(Expected)	(1.4)	(8.1)	(0.5)
Dissatisfied		23 (5.7)	17 (32.4)	0 (1.9)
Satisfied		6 (18.8)	123 (106.1)	2 (6.1)
Very Satisfied		2 (8.0)	45 (45.4)	9 (2.6)

Chi-square = 97.85, $p < 0.05$.

Eta = 0.566.

Sources of Job Satisfaction

In order to determine sources of job satisfaction for school psychologists, a hierarchy of MSQ scales was constructed. For each scale, the mean and 95% confidence interval was obtained. This hierarchy appears in Table 11. Based on original response options, it is apparent that school psychologists feel satisfied with 18 of the 20 factors comprising overall job satisfaction (i.e., scores between 12.55 and 17.50). Two scales, School System Policies and Practices and Advancement, had means and confidence intervals completely within the "Dissatisfied" range.

Relationship Between Overall Job Satisfaction

Scores and Selected Demographic Variables

A multiple regression analysis was employed to determine relationships between overall job satisfaction scores and selected demographic variables. Regressions were run under the Statistic Analysis System's (SAS) General Linear Model (SAS Institute, 1979).

Prior to analysis, a correlation matrix was constructed (Appendix E) to aid in the detection of multicollinearity. Variables included in that matrix were: Sex, Age, Degree Status, Number of Co-workers, Psychologist-to-Student Ratio, Years Experience, Monthly Salary, and Total Job Satisfaction Scores. Experience was intercorrelated with Age (0.66) and Monthly Salary (0.54). Therefore, experience was dropped from analysis.

Table 11

Hierarchy of Minnesota Satisfaction Questionnaire Scales

Scale	Mean	Standard Deviation	95% Confidence Interval
Social Service	16.256	2.541	15.963-16.609
Moral Values	16.004	2.272	15.716-16.293
Activity	15.681	2.208	15.004-15.961
Co-workers	15.565	2.933	15.192-15.939
Independence	15.365	2.433	15.056-15.675
Responsibility	15.294	2.367	14.993-15.595
Achievement	14.895	2.538	14.573-15.217
Ability Utilization	14.513	3.336	14.089-14.936
Variety	14.256	3.082	13.865-14.648
Creativity	14.239	3.410	13.806-14.673
Social Status	14.156	2.813	13.798-14.514
Authority	14.134	2.635	13.008-14.469
Security	13.735	3.528	13.287-14.184
Recognition	13.508	3.452	13.070-13.947
Supervision-Human Relations	13.497	3.937	12.996-13.996
Compensation	13.277	3.727	12.804-13.751
Working Conditions	13.147	3.605	12.689-13.605
Supervision-Technical	12.689	3.917	12.191-13.187
Policies and Practices	11.651	3.405	11.219-12.084
Advancement	11.248	3.547	10.797-11.699

The first regression model predicted job satisfaction scores with sex, age, degree status, monthly salary, number of co-workers, and psychologist-to-student ratio. The results of this analysis are reported in Table 12. The total model explains 8.23% of the variance in overall job satisfaction scores. Age is the only variable which contributes significantly to the prediction of overall job satisfaction scores.

In order to detect the presence of non-linear relationships between demographic variables and total job satisfaction scores, scatterplots were made for each variable. A visual inspection of these scatterplots revealed that two variables, number of co-workers and psychologist-to-student ratio, appeared to be curvilinear when plotted against total job satisfaction scores.

Several transformations of these variables were attempted. The "best" model which emerged is presented in Table 13. This transformed model explained 8.67% of the variance in overall job satisfaction scores. This increase in explained variance of total job satisfaction scores (0.44%) was not significant. Nevertheless, two variables emerged as significant predictors of overall job satisfaction: age and the square root of psychologist-to-pupil ratio. The correlation between overall job satisfaction and age, while controlling for psychologist-to-pupil ratio (partial correlation) was 0.34. The partial correlation between overall job satisfaction scores and psychologist to pupil ratio while controlling for age was -0.163.

Table 12
Multiple Regression Summary

Source	DF	Sum of Sq.	Mean Sq.	F
Regression	6	26,252.58	4375.43	3.36*
Error	<u>225</u>	<u>292,696.99</u>	1300.88	
Total	231	318,949.57		

<u>Estimate</u>	<u>b Value</u>	<u>Std. Error</u>	<u>F</u>
Intercept	290.58	17.36	
Sex	-3.35	5.10	0.43
Age	4.53	1.60	8.05*
Degree Status	-3.09	3.02	1.05
Monthly Salary	0.002	0.005	0.21
Co-workers	-1.03	1.69	0.37
Psychologist to Student Ratio	-2.16	1.16	3.45

*p < 0.05.

Note: b values are partial regression weights.

Table 13
Multiple Regression Summary

Source	DF	Sum of Sq.	Mean Sq.	F
Regression	6	27,710.73	4618.45	3.57*
Error	<u>225</u>	<u>291,238.84</u>	1294.39	
Total	231	318,949.57		

<u>Estimate</u>	<u>b Value</u>	<u>Std. Error</u>	<u>F</u>
Intercept	298.40	18.69	
Sex	-3.23	5.08	0.40
Age	4.97	1.59	8.00*
Degree Status	-3.08	3.01	1.05
Monthly Salary	0.002	0.005	0.23
Co-workers ²	-0.17	0.27	0.37
<u>√Psy. to Student Ratio</u>	-9.35	4.45	4.42*

*p < 0.05.

Note: b values are partial regression weights.

Summary

This chapter has reviewed the results of this study. The first section described response rates. The second and third sections described the sample and presented data pertaining to each research question, respectively.

Chapter V

DISCUSSION AND RECOMMENDATIONS

This chapter is divided into six sections for the purpose of discussing results of the study. The first section reviews the research questions and methods. The second section is a summary of findings and conclusions. The third section is a discussion of results. The fourth section provides implications of findings. The fifth and sixth sections present recommendations for future study and for the profession, respectively.

Review of the Problem and Research Methods

The purpose of this study was to investigate job satisfaction among school psychologists. The specific research questions which guided the selection of methodological procedures were:

1. In a national sample of school psychologists, what are the levels of overall job satisfaction?
2. On the whole, what degree of satisfaction do school psychologists express with each sub-factor of job satisfaction?
3. What is the relationship between overall job satisfaction and selected demographic variables?

Survey distribution and collection was accomplished through the mail. Initially, 455 randomly selected members of the National Association of School Psychologists were sent a Data Form and a modified

version of the Minnesota Satisfaction Questionnaire (MSQ). The former collected demographic information; the latter supplied data regarding job satisfaction.

A total of 391 NASP members responded to the survey. This number represents a response rate of 86.87%. Eight responses were not usable. Of the remaining responses, 245 were practitioners employed by public school systems, defined in Chapter I as school psychologists. Their responses were analyzed statistically with the assistance of computers at Virginia Polytechnic Institute and State University.

School psychologists' responses to MSQ items comprised scores for 20 job satisfaction subscales and one total satisfaction rating. A frequency tabulation was used to determine the levels of job satisfaction of this group. Group means and confidence intervals were used to construct a hierarchy of the 20 MSQ scales in order to determine their relative importance. Multiple regression was used to determine the relationship between total job satisfaction scores and selected demographic variables.

Summary of Findings and Conclusions

The research questions, which served as the foundation of this study, will be used as the framework for summarizing findings and conclusions.

1. In a national sample of school psychologists, what are the levels of overall job satisfaction?

The finding of this study indicated that 14.29% of the school psychologists responding were dissatisfied with their jobs while 85.71%

were satisfied or very satisfied (80.67% and 5.04%, respectively). Most school psychologists, then, are satisfied with their current jobs.

2. On the whole, what degree of satisfaction do school psychologists express with each sub-factor of job satisfaction?

The MSQ sampled 20 components of overall job satisfaction. Respondents indicated satisfaction with 18 of the scales and relative dissatisfaction with opportunities for advancement and school system policies and practices. Advancement refers to the chances to get ahead in a job. School system policies and practices refers to policies and the way in which they are administered. An examination of the hierarchy of sub-factors contributing to overall job satisfaction indicates that school psychologists are satisfied with most aspects of their jobs.

3. What is the relationship between overall job satisfaction and selected demographic variables?

A multiple regression model using age, sex, degree status, monthly salary, and transformations of the number of co-workers and the psychologist-to-student ratio was able to account for 8.67% of the variance in school psychologists' overall job satisfaction scores. Age and psychologist-to-student ratio emerged as significant predictors of overall job satisfaction.

Further analysis of these two significant predictors revealed that a positive relationship exists between age and overall job satisfaction scores, indicating that as school psychologists grow older, then overall job satisfaction increases. A negative relationship was found between overall job satisfaction scores and psychologist-to-pupil ratios. That is, as the ratio increases, job satisfaction decreases.

It should be noted, however, that while this variable was a statistically significant predictor of overall job satisfaction, the actual proportion of variance explained was small.

Discussion

The findings of this study were organized around three research questions, each examining a different aspect of job satisfaction among school psychologists. Discussions related to each question are presented below.

Levels of Overall Job Satisfaction

Recent studies of the U. S. workforce generally reported that between 80% and 90% of all workers were satisfied with their jobs (Barbash, 1976; Kasl, 1977; Portugal, 1976; Quinn et al. 1974; Strauss, 1975). The relative significance of the proportion of dissatisfied workers has been debated for some time. Despite this, it has become apparent that job dissatisfaction may result in negative outcomes for the employee and employer.

Job satisfaction has become a concern in the professional literature of school psychology. A past-president of NASP stated that increasing numbers of school psychologists derived less enjoyment from their work than before (Fagan, 1981a). Trachtman (1981) went one step further and stated that it is necessary for school psychologists to be unhappy in their jobs.

The findings of this study indicated that school psychologists are neither more satisfied, nor more dissatisfied, than the workforce in general. These results also seem to contradict Trachtman's statement.

It may be that success as a school psychologist is more related to dissatisfaction with particular aspects of the job (e.g., restrictive administrative policies) than to overall job satisfaction.

Some studies have used turnover as an indication of job dissatisfaction (Ewen, 1966; Farris, 1971; Hoppock, 1935; Smits, 1972). Others have attempted to separate position satisfaction from profession satisfaction (Harman, 1966). Kilpatrick, Shook, and Swanson (cited in Vensel, 1981) reported that nearly one-half (48%) of their respondents planned to leave the profession of school psychology within the next five years.

The results of this study indicated that 41.70% of the respondents plan to leave their current positions within five years; 15.45% plan to leave the profession of school psychology. Comparing these two percentages indicates that school psychologists are fairly mobile in regards to specific positions, but are generally satisfied with their career choice.

Components of Overall Job Satisfaction

Several factors have been identified in the literature as possible sources of school psychologists' job satisfaction and dissatisfaction. The identification of sources of satisfaction or dissatisfaction suggests areas which enhance job satisfaction and, hopefully, school psychological services. Both Fagan (1981b) and Guidubaldi (1981) have expressed concern over the discrepancy between school psychologists' extensive training and actual service demands. Kilpatrick, Shook, and Swanson (cited in Vensel, 1981) reported that their respondents listed the opportunity to help children and autonomy as the major reasons

for satisfaction. Reasons given for dissatisfaction were salary and advancement.

School psychologists participating in this study were generally satisfied with the pay they received for the amount of work they performed and with the extent to which their abilities were utilized. In addition, means and confidence intervals for the achievement, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical, variety, and working conditions scales all fall within the satisfied range.

Examination of the hierarchy of sub-factors contributing to overall job satisfaction indicates that school psychologists are satisfied with most aspects of their jobs. Dissatisfaction with advancement opportunities probably reflects the nature of school psychology positions. School psychologists are typically neither teachers nor administrators. Opportunities for career advancement in public school systems are available largely within the administrative domain. Since school psychologists are often not perceived as part of this administrative structure, opportunities for advancement may be limited. In short, school psychologists encounter problems accessing the administrative career ladder. The position of school psychologist may be unique in that it is both an entry level and, often, a terminal position.

A major factor which may effectively prevent many school psychologists from attaining higher positions in the public school system is the lack of teaching experience. In many states supervisory and administrative certifications require prior certification as a teacher.

Many school psychologists, however, do not possess a teaching certificate and thus are not eligible for these positions. This problem may be compounded by a failure of training programs to fully explore administrative certification requirements with their students. Outside the public education system, however, school psychologists probably do not encounter this career ladder problem.

The fact that school psychologists are not perceived as either teachers or administrators probably contributes to their dissatisfaction with school system policies and practices. School psychology positions are often located somewhere between the instructional and administrative classifications. Consequently, the power and authority inherent in the position is obscured, hampering effective change strategies.

Overall Job Satisfaction and Demographic Variables

Numerous studies have examined relationships between job satisfaction and salary (Barbash, 1976; Ewen, 1966; Kasl, 1977; Ronan, 1970), co-workers (Farris, 1971; Kasl, 1977), age (Barbash, 1976; Sheppard & Herrick, 1973), sex (Mortimer, 1979), and education (Klein & Maher, 1976; Phillips & Hayes, 1978). In addition, Ahrens (1977) examined the relationship between caseload and job satisfaction.

A positive relationship was found between age and school psychologists' job satisfaction scores. That is, as age increases, job satisfaction increases. This finding is congruent with the majority of studies reviewed. A visual inspection of the scatterplot did not reveal the U-shaped relationship reported by Herzberg et al. (1957). The relationship between age and job satisfaction appears to be linear

for school psychologists. Since age and job satisfaction are positively related, it appears that school psychologists, like most other workers, eventually succeed in effecting the development of job satisfaction through changes in their own aspirations and needs or in the job itself. This may, in part, explain the mobility which is characteristic of school psychologists as a whole. Mobility may reflect the search for a position which meets individual needs and aspirations.

Ahrens (1977) reported that job satisfaction was not related to caseload. It is possible that caseload was not a sensitive index of school psychologists' workload. A negative relationship was found between psychologist-to-student ratio and overall job satisfaction scores. That is, as the psychologist-to-student ratio increases, job satisfaction declines. It is reasonable to assume that as psychologist-to-student ratios increase, the actual workload increases since more clients must be served. It appears that, in an extreme case, ratios which are too high can result in job dissatisfaction simply because school psychologists may be overworked. Excessive work may also hamper the development of satisfaction with other aspects of the job such as variety.

Implications of the Study

Several implications may be drawn from this study which might be significant to trainers and employers of school psychologists, as well as to the National Association of School Psychologists.

1. On the basis of responses to the Minnesota Satisfaction Questionnaire, it appears that most school psychologists are satisfied in their current positions. Although a majority plan to remain in their

current position for five more years, school psychologists tend to be fairly mobile. Further, it appears that most school psychologists plan to remain in the profession for five more years.

2. Results identified two aspects of school psychologists' jobs which are in need of examination: opportunities for advancement, and school system policies and practices. Regarding advancement, school psychologists who have not moved into their positions from within the system may not be initially aware of how they can access the administrative career ladder. Part of this problem may be due to a failure of training programs to more fully explore ways in which school psychologists can move into the administrative hierarchy. The problem may be further confounded by school psychologists' administrative classification. Because school psychologists' positions are often located between teaching and administrative structures, they lack access to administrative advancement opportunities.

Dissatisfaction with school system policies and practices may also reflect school psychologists' administrative classification. Operating between the teaching and administrative spheres, while not belonging solely in either, may effectively negate chances for successful changes in the system. At times, school psychologists' opinions of what might be best for students may be at odds with prescribed school system policies. Also, many administrators simply do not perceive student needs in the same light as school psychologists, leading to conflicts. School psychologists could probably benefit from pre- and inservice training in the area of organizational structures and change.

3. The results of this study indicated that a statistically significant relationship exists between psychologist-to-student ratios and overall job satisfaction scores. It was concluded that as these ratios increase, job satisfaction scores decrease. The amount of variance attributed to this variable was, however, relatively small and may not reflect practical significance. Nevertheless, employers and state departments of education should monitor this relationship and consider possible effects when projecting personnel needs and standards of service delivery.

Recommendations for Future Research

1. Longitudinal studies of job satisfaction among school psychologists would be useful in determining changes in levels and components of job satisfaction over time (e.g., in regards to legislative changes).
2. It is recommended that this study be replicated with school psychologists who are not NASP members to see if results are comparable.
3. Future studies should seek to increase their explanation of variance in job satisfaction scores. This might be accomplished during the variable specification process.
4. Studies comparing demographic data with the various components of overall job satisfaction might provide more insight into job satisfaction among school psychologists.
5. Studies exploring school psychologists' opportunities for advancement might provide insight into the problem of

developing a career ladder for these professionals and suggest strategies for change.

Recommendations for the Profession

The findings of this study served as the basis for the following recommendations for the profession of school psychology, state departments of education, and trainers of school psychologists.

1. School psychologists, on the whole, appear satisfied with their jobs. Nevertheless, relative dissatisfaction was expressed with opportunities for advancement. In order to remediate this area of dissatisfaction, it is recommended that state and national associations of school psychologists begin to examine possible career ladders for this group of professionals and how to achieve access. Training programs for school psychologists should also examine their career advisement processes and coverage of advancement techniques. State departments of education may want to examine the organizational structure of school systems in light of this problem.
2. An examination of the organizational structure of the school system would probably also reveal that school psychologists are neither administrators nor teachers. This fact may lead to problems effecting change and hamper effectiveness. State and national associations working with appropriate educational agencies should begin to examine the feasibility of integrating school psychologists into existing organizational structures

and make appropriate changes. Trainers, in particular, should be sensitive to this problem and advocate the development of organizational re-development skills for their students.

3. High psychologist-to-student ratios are associated with decreased job satisfaction. It is recommended that NASP continue its efforts to implement ratios of one to 2000 or less. State departments of education and local school systems should be made aware of this finding through their respective state associations of school psychologists. It is also recommended that trainers use these results to alert students to the possible effects of high ratios.

FOOTNOTES

¹The choice of a sample size for survey research is widely debated. This particular number is based on Krejcie and Morgan's (1970) work. In order to achieve a sample size of 364 in light of Ramage's (1979) finding that practitioners constitute 80% of NASP's membership, 455 names were selected. In light of the design, goals, and statistical procedures used in this study, a sample this large should be sufficient.

²Permission to alter item wordings was given by the University of Minnesota's Work Adjustment Project staff.

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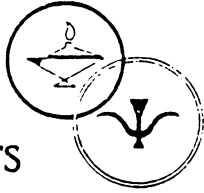
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APPENDICES

APPENDIX A

Survey Letters

NATIONAL
ASSOCIATION
OF
SCHOOL
PSYCHOLOGISTS



OFFICE OF COMMITTEE CHAIRPERSON

April 13, 1982

Dear NASP Member:

We are writing to urge your participation in a study being conducted by Tucker Anderson, a doctoral candidate in the Virginia Tech/James Madison University cooperative doctoral program.

The study is designed to determine the job satisfaction of school psychologists. Tucker's study has been endorsed by the NASP National Committee on Vocational School Psychology which will help disseminate its results to practitioners and training programs. Your individual responses will be kept in strict confidence since only group data will be used in the analysis.

We hope that you will assist Tucker Anderson and NASP by taking 15-20 minutes to complete and return the materials you will receive in a few days. His study will generate valuable data to assist the further development of the school psychology profession.

Thomas H. Hohenshil
Professor and Dissertation
Director
Virginia Tech

Douglas T. Brown
Dissertation Committee
Member
James Madison University

John Guidubaldi
Kent State University
Dissertation Consultant
and Adjunct Professor
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COLLEGE OF EDUCATION
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

207 UCOB (703)961-5106

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

16 April 1982

Dear NASP Member,

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.

Enclosed with this letter are an information form and a questionnaire regarding your job satisfaction. The materials I am asking you to complete will require 15 to 20 minutes of your time. Please take a few minutes and have a cup of coffee while you review the materials.

The study, endorsed by the NASP National Committee on Vocational School Psychology, is directed primarily toward public school practitioners. Therefore, those NASP members who check Supervisor/Administrator, Trainer, Private Practitioner, Intern, or Student as their primary role designation (question 1) may stop and return their materials in the enclosed envelope. Your response is needed to aid in follow-up activities.

Practitioners and others who complete their materials are urged to do so by April 30th. All information will be kept confidential: You will not at any time be identified with your answers. The number which appears on the forms will be used to keep materials together and aid in follow-up. Only group scores will be reported.

Thank you, in advance, for your assistance. The success of this study depends on your help.

Sincerely,

Tucker Anderson
School Psychologist
Doctoral Candidate

Enclosures



COLLEGE OF EDUCATION
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

May 10, 1982

Dear NASP member,

I am writing to follow-up my survey of job satisfaction of school psychologists. To date more than 60% of your fellow school psychologists have returned their completed materials.

As you may know, references to job satisfaction are becoming more frequent in our literature. It is for this reason, I believe, that my study has been endorsed for the NASP National Committee on Vocational School Psychology.

My records reveal that you have not yet responded to my request for information. Perhaps you misplaced the materials, or put them aside for response at a less busy time. Won't you please take a few minutes and have a cup of coffee now while you complete the materials?

Your individual response, while confidential, is essential for the success of my study. Representativeness and validity of my results depend on the largest possible response rate.

Please respond by the 24th. I look forward to hearing from you.

Sincerely,

Tucker Anderson
School Psychologist
Doctoral Candidate

encl.

P.S. If you have already responded, please disregard this letter. Thank you.



COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

214 UCOB

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

28 May 1982

Dear Colleague:

About four weeks ago, 455 NASP members in the United States were asked to participate in a study conducted by Tucker Anderson. The response of our fellow school psychologists has been tremendous. At the present time 75% have responded by completing and returning the survey materials.

According to Tucker's records, he has not received your completed materials. Since we want the highest possible rate of participation, I will appreciate it very much if you will assist Tucker with his study. Your responses are vital to his findings. The results are intended to provide information on school psychologists' job satisfaction across the nation. All individual responses will be held in strictest confidence.

Enclosed are duplicate survey forms and a stamped, self-addressed envelope. Won't you please take a few minutes to complete and forward the information to Tucker?

Thanks for your help.

Sincerely yours,

Thomas H. Hohenshil
Professor
School Psychology

APPENDIX B

Data Form

No. _____

The following information is needed from all NASP members cooperating with this study.

1. What is your primary role designation?

- | | |
|--|--|
| <input type="checkbox"/> Practitioner employed by public schools | <input type="checkbox"/> Trainer of school psychologists |
| <input type="checkbox"/> Supervisor/Administrator | <input type="checkbox"/> Private Practitioner |
| <input type="checkbox"/> Student | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> Intern | _____ |

PRACTITIONERS PLEASE CONTINUE

2. What is your sex? Male Female

3. Please check your age group.

- | | |
|----------------------------------|--------------------------------------|
| <input type="checkbox"/> 20 - 25 | <input type="checkbox"/> 44 - 49 |
| <input type="checkbox"/> 26 - 31 | <input type="checkbox"/> 50 - 55 |
| <input type="checkbox"/> 32 - 37 | <input type="checkbox"/> 56 - 61 |
| <input type="checkbox"/> 38 - 43 | <input type="checkbox"/> 62 and over |

4. What is your current degree status?

- | | |
|---|------------------------------------|
| <input type="checkbox"/> BA or BS | <input type="checkbox"/> Ed. S. |
| <input type="checkbox"/> Masters | <input type="checkbox"/> Doctorate |
| <input type="checkbox"/> Masters plus 30 semester (or 45 quarter) hours | |

5. How many other school psychologists are employed by your school system?

- | | |
|--------------------------------|-------------------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 7 - 10 |
| <input type="checkbox"/> 1 - 3 | <input type="checkbox"/> 11 or more |
| <input type="checkbox"/> 4 - 6 | |

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

- | | |
|---|---|
| <input type="checkbox"/> 1 - 1000 or less | <input type="checkbox"/> 1 - 2500 to 1 - 3000 |
| <input type="checkbox"/> 1 - 1000 to 1 - 1500 | <input type="checkbox"/> 1 - 3000 to 1 - 3500 |
| <input type="checkbox"/> 1 - 1500 to 1 - 2000 | <input type="checkbox"/> 1 - 3500 to 1 - 4000 |
| <input type="checkbox"/> 1 - 2000 to 1 - 2500 | <input type="checkbox"/> 1 - 4000 and over |

PLEASE CONTINUE ON BACK

7. Please check your annual salary.

<input type="checkbox"/> \$14,000 or less	<input type="checkbox"/> \$28,001 to \$30,000
<input type="checkbox"/> \$14,001 to \$16,000	<input type="checkbox"/> \$30,001 to \$32,000
<input type="checkbox"/> \$16,001 to \$18,000	<input type="checkbox"/> \$32,001 to \$34,000
<input type="checkbox"/> \$18,001 to \$20,000	<input type="checkbox"/> \$34,001 to \$36,000
<input type="checkbox"/> \$20,001 to \$22,000	<input type="checkbox"/> \$36,001 to \$38,000
<input type="checkbox"/> \$22,001 to \$24,000	<input type="checkbox"/> \$38,001 to \$40,000
<input type="checkbox"/> \$24,001 to \$26,000	<input type="checkbox"/> \$40,001 and over
<input type="checkbox"/> \$26,001 to \$28,000	

8. What is your current contract length?

<input type="checkbox"/> 9 months	<input type="checkbox"/> 11 months
<input type="checkbox"/> 10 months	<input type="checkbox"/> 12 months

9. Do you plan to remain in your current position for 5 more years?

yes no

10. Do you plan to remain in the profession of school psychology for 5 more years?

yes no

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

12. In what year were you first certified as a school psychologist? _____

13. Where did you receive the majority of your training in school psychology?

14. Please list any additional certifications you hold.

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

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

Very Dissatisfied Dissatisfied Satisfied Very Satisfied

APPENDIX C

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 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 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 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

March 1, 1982

Tucker Anderson
College of Education
207 UCOB
Virginia Polytechnic Institute & State University
Blacksburg, VA 24061

Dear Mr. Anderson:

Thank you for expressing interest in the instruments published by Vocational Psychology Research.

You have our permission to use the following copyrighted instrument in your research:

Minnesota Satisfaction Questionnaire, Long Form

We would appreciate receiving a copy of any papers or reports which result from your use of the above instrument.

Sincerely,

David J. Weiss
Professor and Director
Vocational Psychology Research



UNIVERSITY OF MINNESOTA
TWIN CITIES

Vocational Psychology Research
Department of Psychology
Elliott Hall, N 620
75 East River Road
Minneapolis, Minnesota 55455

March 12, 1982

Mr. Tucker Anderson
207 UCOB
Virginia Tech
Blacksburg, VA 24061

Dear Mr. Anderson:

The changes that you have proposed in the 21 items from the MSQ are acceptable to us for your dissertation research. As you have realized, the statistical properties of the instrument will be altered. Results that you obtain may be specific to the modified instrument, even though there should be good generalibility between the two forms.

The modifications you have developed will produce far more specific results and comparisons among school psychologists only. This will not consider other workers in other occupations and their levels of satisfaction and may limit your comparisons with any norm groups. Interpret according to established norms with caution. If I can provide any assistance to you along the way please feel free to contact me.

Sincerely,

Nancy Holt
Administrative Assistant

NCH/KN

APPENDIX D

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.

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

APPENDIX E
Correlation Matrix

	Total Job Satisfaction	Sex	Age	Degree	Co-workers	Co-workers ²	Psychologist to Student	√Psychologist to Student	Annual Salary	Contract	Experience
Total Job Satisfaction	1.00	-0.038	0.234	-0.079	-0.099	-0.106	-0.164	-0.135	0.155	0.017	0.136
Sex		1.00	0.085	-0.089	0.051	0.044	0.057	0.061	-0.153	-0.011	-0.087
Age			1.00	-0.011	-0.075	-0.079	-0.128	-0.119	0.394	-0.040	0.665
Degree				1.00	0.185	0.183	0.100	0.091	0.181	0.098	0.055
Co-workers					1.00	0.979	0.148	0.172	0.163	-0.095	0.053
Co-workers ²						1.00	0.157	0.176	0.139	-0.077	0.047
Psychologist to Student							1.00	0.989	-0.029	0.204	0.011
√Psychologist to Student								1.00	-0.015	0.181	0.017
Annual Salary									1.00	0.188	0.555
Contract										1.00	0.090
Experience											1.00

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the scanned document**

JOB SATISFACTION AMONG SCHOOL PSYCHOLOGISTS

by

Wm. Tucker Anderson

(ABSTRACT)

Concerns over job satisfaction among school psychologists have become prominent in the literature. Reviews of research, however, reveal that few empirical studies of job satisfaction among school psychologists have been conducted. This study was designed to describe job satisfaction among members of the National Association of School Psychologists (NASP) employed by public school systems across the nation. Specific research questions addressed the levels of job satisfaction in the sample, relative satisfaction with various components of overall job satisfaction, and relationships between selected demographic variables and overall job satisfaction. A total of 450 members of NASP were selected to participate in the study and were mailed survey materials including the Minnesota Satisfaction Questionnaire. A response rate of 86.89% was attained. Results of the study indicated that most school psychologists are satisfied with their current jobs (85.71%). Participants were relatively dissatisfied with their chances for advancement and school system policies and practices. Multiple regression analysis revealed that age and psychologist to student ratios were significant predictors of overall job satisfaction scores ($p < 0.05$). Further analysis revealed a positive relationship between age and overall job satisfaction and a negative relationship

between psychologist to student ratio and overall job satisfaction. It was concluded that most school psychologists in NASP are satisfied with most aspects of their jobs. Two notable exceptions were chances for advancement and school system policies and practices. Part of this dissatisfaction is seen as a product of school psychologists' failure to establish a career ladder in the school system. It was also concluded that school psychologists, individually and as a group, should continue to advocate for lower psychologist to student ratios.