

TEST OF A MODEL OF JOB SATISFACTION FOR NORTH
CAROLINA SCHOOL PSYCHOLOGISTS

by

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(ABSTRACT)

Exploratory studies in the area of job satisfaction for school psychologists have pointed to a number of variables that predict job satisfaction, but research has not yet attempted to test a model of job satisfaction consistent with theory and previous research. The presented study developed and tested a theoretical model of the influences on job satisfaction for North Carolina school psychology practitioners. Affects of boundary role activities and role diversity, activities that extend beyond the traditional role of psychodiagnostician, were of particular interest.

North Carolina school psychologists were surveyed by mail. Data collection addressed personal variables (e.g., age, current degree status, and years of experience), static system variables (e.g., urban vs. rural communities, student-to-psychologist ratio, salary per month, and characteristics of supervision), fluid system variables

(e.g., opportunity to engage in boundary role activities and role diversity) and job satisfaction measured by the modified Minnesota Satisfaction Questionnaire (MMSQ). Two hundred and sixty-two of the 463 North Carolina school psychologists surveyed reported their primary role designation as practitioner and were included in the initial path analyses. Boundary role activities had a direct effect on job satisfaction, and characteristics of supervision had a smaller direct effect. Role diversity influenced boundary role activities which in turn affected job satisfaction.

After reviewing demographic data, delivery models used in North Carolina, job titles, and job descriptions, the sample was redefined and Charlotte/Mecklenburg Student Services Specialists were excluded. Path analyses conducted on the redefined sample found direct effects for boundary role activities and salary per month with smaller direct effects for characteristics of supervision and role diversity. Indirect effects were also found for urban vs. rural communities and role diversity.

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Chapter I

INTRODUCTION

Unprecedented growth in the field of school psychology stimulated by the enactment of Public Law 94-142 (1975) has proven to be a mixed blessing. Increased demands for school psychological services have been coupled with severe restrictions in students served and services provided (Benson & Hughes, 1985; Fagan, 1981a; Trachtman, 1981; Vensel, 1981). As a result, some school psychologists have argued that "more psychologists are enjoying their work less than ever" (Fagan, 1981a, p. 1). Investigation of the magnitude of the discrepancy between ideal and real roles (Benson & Hughes, 1985; Hughes, 1979; Jerrell, 1984; Neumeyer, 1981; Wright & Gutkin, 1981) and the effects of the lack of role diversity (Fagan, 1981a, 1981b; Guidubaldi, 1981; Hart, 1983; Trachtman, 1981; Vensel, 1981) logically evolved into the exploration of job satisfaction. Previous research suggests the selected demographic variables, intrinsic features of work, salary, and supervision influence job satisfaction for school psychologists (Anderson, 1982; Levinson, 1983; Solly, 1983) but these studies have been exploratory in nature. Job situations that encourage boundary role activities and role diversity have been found to use a wider range of psychologists' competencies and thus have potential to

enhance job satisfaction (Jerrell, 1984). The primary purpose of this study was to determine the effects of boundary role activities and role diversity on school psychologists' job satisfaction. Of equal importance, this research integrates findings of previous studies with current data for the purpose of developing and testing a theoretical model designed to specify factors that affect job satisfaction for North Carolina public school psychologists.

Job satisfaction, as defined by theory, is a perceptually-based experience that is influenced by interactions with co-workers, discrepancies between expectations and reality, and social cues. For example, equity becomes a satisfaction issue when people perceive that co-workers at comparative job levels are being treated differently (Adams, 1976). Although salary, in isolation, does not determine job satisfaction, the discrepancy between what a person expects to be paid for their job and what the job actually offers may affect job satisfaction (Ilgen, 1971; Locke, 1969, 1976). And finally, job satisfaction theory suggests that objective job characteristics and social cues combine to create job perceptions (Griffin, 1983; O'Reilly & Caldwell, 1979; Salancik & Pfeffer, 1978).

Research has identified a number of variables as

determinants of job satisfaction. In industrial settings, job differences rather than people differences (e.g., demographic variables) have been found to have more influence on job satisfaction (Muchinsky, 1983; Siegel & Lane, 1987; Weaver, 1980). Accumulated research further indicates that intrinsic features of work such as salary (Dyer & Theriault, 1976; Ilgen, 1971; Lawler, 1971; Schwab & Wallace, 1974) and supervision (House & Mitchell, 1974; Locke, 1970; Roethlisberger & Dickson, 1939; Yukl, 1971) combine to increase positive feelings toward one's job.

In contrast, research specific to school psychologists documents age (Aherns, 1977; Anderson, 1982; Anderson, Hohenshil, & Brown, 1984; Huberty & Huebner, 1988), professional experience (Aherns, 1977), and the opportunity for advancement (Anderson, 1982; Levinson, 1983; Solly, 1983) as variables affecting job satisfaction. Role diversity (e.g., Benson & Hughes, 1985; Fisher, Jenkins, & Crumbley, 1986; Meacham & Peckham, 1978; Pierson-Hubeny & Archambault, 1987), case load (e.g., Anderson et al., 1984; Clair, Kerfoot, & Klausmeir, 1972; Smith & Lyon, 1985), autonomy and responsibility (e.g., Levinson, Fetchkan, & Hohenshil, 1988; Miller, Witt, & Finley, 1981; Trachtman, 1981; Vensel, 1981), the importance of co-workers (e.g., Balinky, 1985; Miller et al., 1981), salary (e.g., Aherns, 1977; Levinson et al., 1988; Solly & Hohenshil, 1986), and

supervision (Anderson, 1982; Miller et al., 1981; Stewart, 1986) also contribute to favorable job perceptions. In addition, community characteristics (rural versus urban) (Ehly & Reimers, 1986; Fagan, 1981a, 1981b; Huebner, McLesky, & Cummings, 1984; Hughes, 1979; Hughes & Clark, 1981; Jerrell, 1984; Solly & Hohenshil, 1986) and the opportunity to engage in boundary role activities (Balinky, 1985; Hughes & Clark, 1981; Illback & Maher, 1984; Jerrell, 1984; Plas, 1981; Sepez, 1972) may also have a significant effect on job satisfaction for school psychologists.

Discrepancies in findings from general job satisfaction theory and job satisfaction for school psychologists may be attributed to inherent characteristics of the job. Demands of the role of school psychologists may vary radically from system to system, for schools within systems, as well as on a daily basis for individual psychologists. Role ambiguity is further complicated or enhanced, depending on one's perspective, by the fact that school psychologists are boundary role professionals. As boundary role professionals, they must interact with the family as well as a wide variety of community agencies to meet the needs of the students they serve. Figure 1 depicts the role of community liaison performed by school psychologists. Personal perceptions determine whether uncertainty inherent in the role of school psychologist is positively defined as

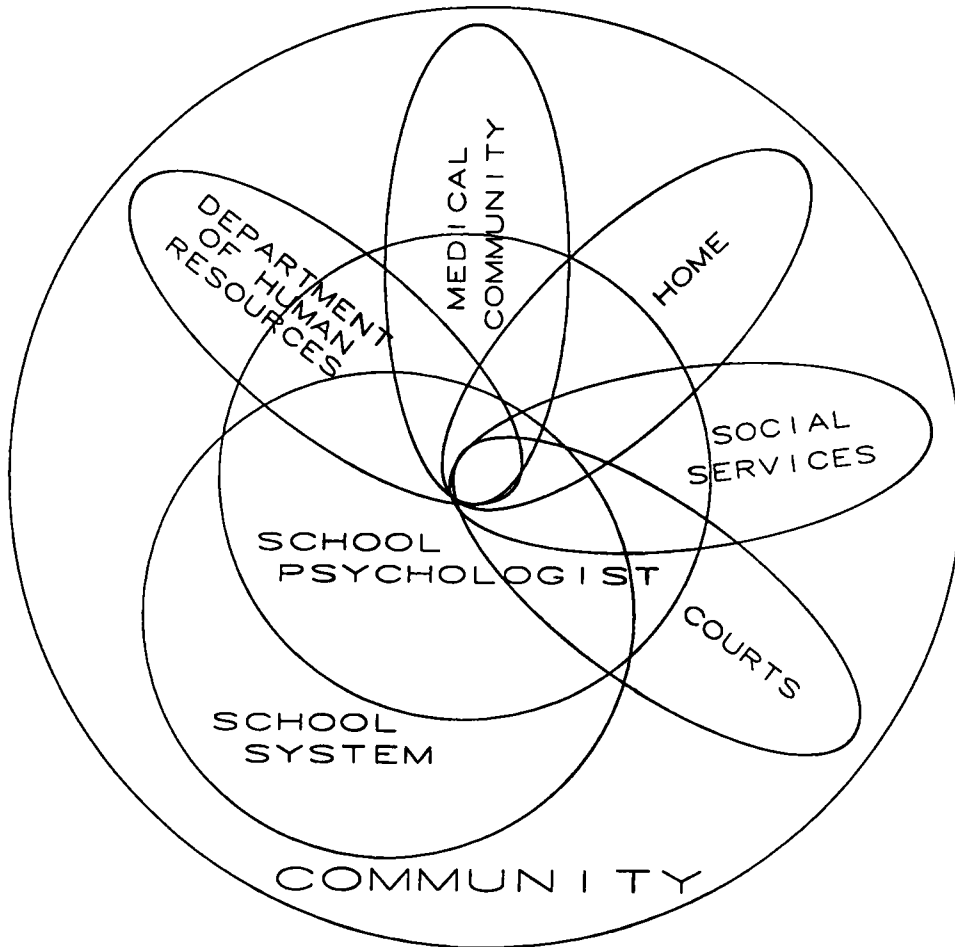


Figure 1. The overlapping consumers of school psychological services. School psychologists are, by definition, boundary role professionals because they must interact with multiple community agencies in order to accomplish their jobs.

flexibility or negatively interpreted as ambiguity. In addition, the role of school psychologist is an add-on position that has never been fully incorporated into public education. As a result, opportunities for advancement are minimal and salaries are frequently not commensurate with educational requirements and demands of the job.

Theory in the area of job satisfaction suggests that demographic variables and intrinsic features of work positively influence job satisfaction. Specific research concerning job satisfaction for school psychologists further indicates that such variables, along with boundary role activities, do indeed predict job satisfaction; but that research has used multiple regression in a primarily predictive fashion. Although prediction is a necessary first step in understanding the influences on job satisfaction, it does not tell us the extent to which one variable influences another; for that, an explanatory approach is needed (Pedhazur, 1982).

Causal path analysis provides one such theory-driven, explanatory approach. A number of researchers have argued that path analysis should be the method of choice for the valid analysis of nonexperimental data when the researcher is interested in knowing the influences of a number of variables on each other (e.g., Cohen & Cohen, 1983; Keith, 1988a). This study used path analysis to investigate

the influences of selected demographic variables, professional activities, and the opportunity to engage in boundary role activities on job satisfaction for North Carolina school psychologists. Briefly, path analysis begins with a general statement of the presumed causal relations among the variables of interest, with those variables arranged pictorially in a path model. The variables included, and their order, are based on previous research, relevant theory, and logic. The variables are arranged in what is called a weak causal ordering, meaning that one variable may not directly "cause" another, but that if the variables are causally related the cause is in the direction of the arrow, or path, rather than the reverse. When previous research, relevant theory, and logic fail to justify hypothesizing a causal relation a curved line (representing a simple correlation) is drawn between the variables (Keith, 1988a, 1988b; Pedhauzar, 1982; Wolfle, 1980).

The recursive path model used in this research is shown in Figure 2. It includes relevant Personal Background Variables which, based on previous research, need to be controlled in order for path analysis to provide valid results (age, degree, and years of experience). System Variables that are considered to be Static in nature are included because previous research has documented their

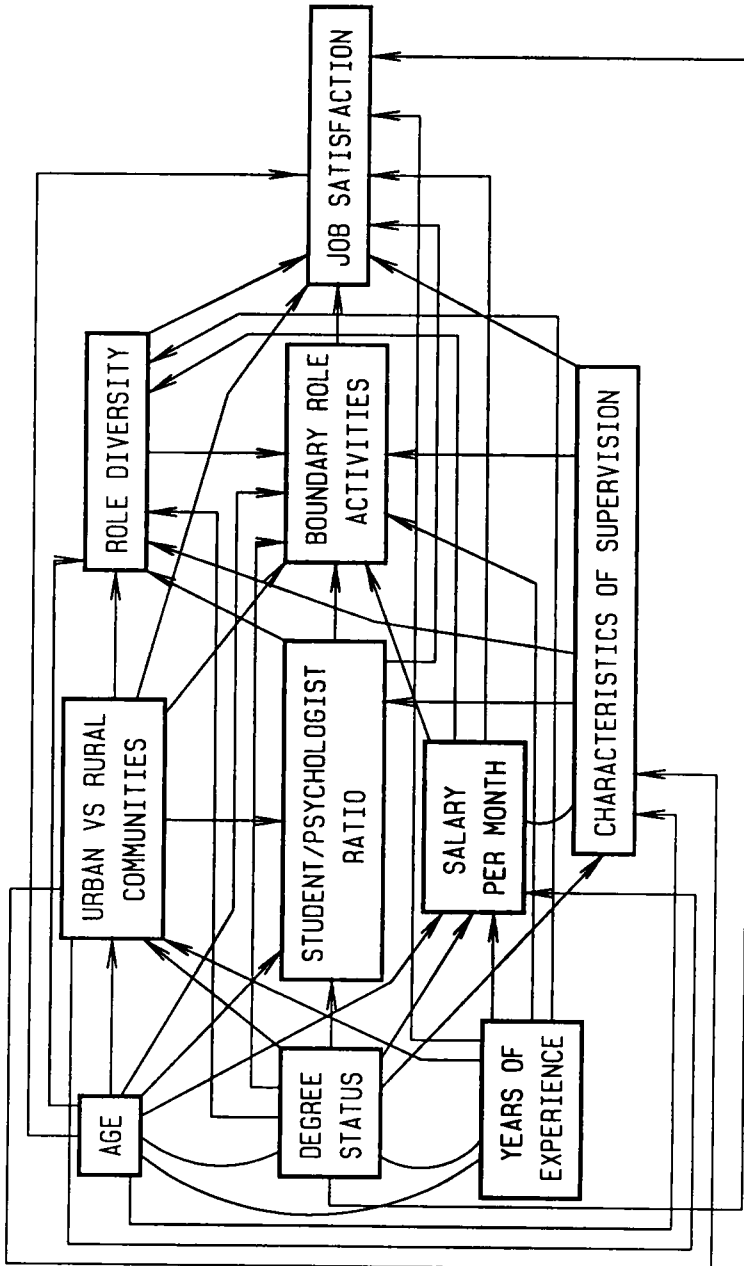


Figure 2. A path model to explain school psychologists' job satisfaction.

importance to job satisfaction. These variables include urban versus rural job setting, student-to-psychologist ratio, supervision, and salary.

The opportunity to engage in boundary role activities and to experience role diversity varies greatly from system to system. Changes in these areas are at the discretion of individual systems and can be used to enhance their standings in the job market. These variables are labeled as System Variables/Fluid. Job Satisfaction is represented by the overall score on the modified Minnesota Satisfaction Questionnaire (MSQ). The model was solved using multiple regression analysis. Direct, indirect, and total effects believed to influence school psychologists' job satisfaction were also calculated.

The presented model is designed to explain job satisfaction for school psychologist practitioners who are employed on a full time basis in North Carolina's public schools. This model may not be applicable to psychologists practicing in settings other than public school, school psychologists who perform a primary role other than practitioner, or school psychologists employed in states other than North Carolina.

Purpose of the Study

Researchers have studied job satisfaction in relation to the role of school psychologist and have made

suggestions about which factors are important for job satisfaction. A review of job satisfaction literature in school psychology yields a significant accumulation of data suggesting what school psychologists like about their jobs, but a cohesive picture as to what aspects of their jobs affect satisfaction is clearly lacking. The purpose of this study is to integrate findings from previous studies with current data for the purpose of developing and testing a theoretical model of influences on job satisfaction for school psychologists as measured by the modified MSQ. The transition from the exploratory (the accumulation of data) to the explanatory (model building) is, according to Kerlinger (1986), consistent with the appropriate process of scientific study. Of particular interest to this study is the effect of boundary role behaviors on school psychologists' perceptions of job satisfaction. Descriptive functions are contained within the context of this research. This study is designed to answer the following research questions:

1. With which aspects of their jobs are North Carolina school psychologists most satisfied?
2. Of the variables identified in previous research, which influence overall job satisfaction among North Carolina school psychologists?

3. Does the opportunity to engage in boundary role activities influence job satisfaction?

Definition of Terms

The research outlined in this study is based on the following operational definitions:

- (1) North Carolina School Psychologists are those individuals who:
 - (a) designate "practitioner" as their primary role and are currently employed by one of North Carolina's 140 school systems, eight Regional Educational Centers, or any other branch of the State Department of Education or State Department of Corrections (Juvenile Services) and are involved in direct educational services to North Carolina students in grades kindergarten through twelve.
 - (b) are employed on a full-time basis by the state of North Carolina.
 - (c) are currently certified (either provisionally, fully or permanently) as a school psychologist by the North Carolina Department of Public Instruction.
- (2) Job Satisfaction is the emotional state perceived by individuals when thinking about their jobs. This state is assumed to be reflected in the

summed overall job satisfaction score on the modified Minnesota Satisfaction Questionnaire (MMSQ).

- (3) Organizational Boundary Roles describes the nature and scope of job functions assigned to professionals. To fulfill job requirements professionals must cross over physical (e.g., architectural), temporal (e.g., normal working hours), and organizational norms (e.g., values of the workers) in order to facilitate the flow of information or materials (Illback & Maher, 1984). School psychologists involved in boundary role activities function as community liaisons networking among schools, social agencies, and the community at large.
- (4) Role Diversity addresses the allocation of professional time. Specifically, role diversity is concerned with the opportunity to engage in activities other than those directly related to the role of psychodiagnostician. These activities include direct and indirect interventions with students, parents, and fellow professionals, in-service presentations, professional development, research, and supervision of practicum and intern students.

Significance of the Study

School psychologists as professionals have a

significant effect on the lives and development of children that extends far beyond the limited span of the child's involvement in public education. General theory in industrial and organizational psychology indicates that job satisfaction influences productivity, job involvement, and withdrawal behaviors such as absenteeism and turnover. Influences on a variety of personal, social, and physical variables critical in assuring quality services and optimal educational benefits are also documented (Siegel & Lane, 1987; Anderson, 1982). Research suggests that opportunities to engage in professional boundary role activities have a positive effect on job satisfaction (Illback & Maher, 1984; Jerrell, 1984). Organizing roles and responsibilities to engage in these behaviors may provide direct avenues for increased quality of psychological services.

The results of this study will be useful to school psychology training programs, prospective employers, the North Carolina Department of Public Instruction, organizations representing school psychologists, and North Carolina school psychologists as they define their roles and functions within the limits of their own school system. University trainers will be better able to send their graduates into the field with realistic rather than idealistic expectations, thereby reducing the attrition

rate. Increased information regarding factors that contribute to job satisfaction can be used by school systems to facilitate recruitment as well as for job enrichment. Finally, results of this study can be used individually by school psychologists or collectively by professional organizations when engaging in long range planning activities and facilitating change.

Limitations

The sample for the presented study consisted of practicing school psychologists employed full-time in the public schools of North Carolina. Consequently, results may not be generalized to other types of psychologists, part-time psychologists, or to school psychologists within the state who are practicing outside of school settings. Additionally, since only school psychologists who designated "practitioner" as their primary role were included in the analysis, results may not be generalized to school psychologists employed in the public schools who perform a primary role other than "practitioner." For some of the same reasons that a large national study is not applicable to any one particular state, the results of this study may not be generalized outside the state of North Carolina.

Chapter II

REVIEW OF THE LITERATURE

Professional literature has long addressed the discrepancy between school psychologists' skills versus real world overemphasis on assessment (Fagan, 1981a; Vensel, 1981). The effects of the disparity between the ideal and realities of public school practice logically evolved into the study of job satisfaction. Concerned with overall job satisfaction, Ahrens (1977) surveyed psychologists practicing in schools, institutions, private practice, and administrative settings and found that school psychologists reported the highest levels of role conflict and the lowest levels of job satisfaction. Following this line of research, Anderson's (1982) national job satisfaction survey of the membership of the National Association of School Psychologists paved the way for a number of follow-up studies that addressed similar issues at state levels (Levinson, 1983; Solly, 1983). These studies focused on job satisfaction as measured by a modified form Minnesota Satisfaction Questionnaire (MMSQ). Findings specific to the MSQ that were consistent across the three studies suggested that school psychologists were most satisfied with the opportunity for social services, co-worker relationships, moral value, activity and independence. Areas of dissatisfaction were less

consistent but did include school system policies and practices, opportunities for advancement, working conditions and compensation (see Table 1) (Anderson, 1982; Levinson, 1983; Solly, 1983). Although a comparison of these studies failed to establish consistent influences for demographic variables these studies did find that overall most school psychologists were satisfied with their jobs. Other research suggests that participation in boundary-spanning activities may enhance job satisfaction for rural school psychologists (Jerrell, 1984). Finally, role diversity, reflected in the number of hours spent engaging in various professional activities, may also influence satisfaction with one's job (Fagan, 1981b; Fisher, Jenkins, & Crumbley, 1986; Huebner, McLeskey, & Cummings, 1984). Thus, research points to a number of plausible influences on school psychologists' job satisfaction. Yet, research concerning job satisfaction for school psychologists has consisted of isolated pieces of information that lack integration. Consequently, these findings have limited practical applicability.

Historically, job satisfaction has been a focus of concern for industrial and organizational psychologists. In this chapter, literature pertinent to the study of job satisfaction is presented from an interdisciplinary stance. Initially, issues concerning definition and measurement of

Table 1

Comparison of School Psychologists' Job Satisfaction
Studies Using the MMSQ

Variables	Study		
	Anderson (1982)	Solly (1983)	Levinson (1983)
Significant Predictors of Job Satisfaction			
Age	Significant*	-----	-----
Sex	-----	-----	-----
Degree Status	-----	-----	-----
No. of Co-Workers	-----	-----	-----
Psychologist/Student Ratio	Significant*	-----	-----
Salary	-----	Significant*	-----
Intent to Stay			
Profession	84.55%	81.1%	87.98%
Current Position (5 yrs)	58.30%	81.1%	66.92%
Supervisor			
Role Designation	-----	-----	-----
Training	-----	Significant*	-----
Organizational Membership	-----	-----	Significant*
Contract Length	-----	-----	Significant*
Expressed Satisfaction	85%	64.2%	84.27%
Subscales with components of Job Satisfaction			
Ability Utilization	S	S	S
Achievement	S	S	S
Activity	S	S	S
Advancement	DS	DS	DS
Authority	S	S	S
Policies and Practice	DS	DS	DS
Compensation	S	DS	S
Co-Workers	S	S	S
Creativity	S	S	S
Independence	S	S	S
Moral Values	S	S	S
Recognition	S	S	S
Responsibility	S	S	S
Security	S	S	S
Social Service	S	S	S
Social Status	S	S	S
Supervision	S	S	S
Human Relations	S	S	S
Technical	S	S	S
Variety	S	S	S
Working Conditions	S	DS	S
Job Satisfaction			
Very Dissatisfied	--	8.5%	4.53%
Dissatisfied	14.29%	27.4%	13.21%
Satisfied	80.67%	60.4%	63.40%
Very Satisfied	5.04%	3.5%	18.85%

* $p < .05$

Note: S = Satisfied
DS = Dissatisfied

job satisfaction are reviewed, and selected theories of job satisfaction detailed. Determinants of job satisfaction salient to the purpose of this study are discussed in terms of general theory and then translated into concepts specific to school psychology.

Job Satisfaction Theory and Research

Definition and Measurement of Job Satisfaction

Job satisfaction is an emotional response that defines the degree to which people like their jobs (Siegel & Lane, 1987). Attitudes toward work tend to reflect the appraisal of accumulated experiences in the work setting. Job satisfaction is not an all-or-nothing reaction to work but rather is influenced by a number of facets that serve as determinants of job satisfaction.

Previous investigations of job satisfaction have been accomplished through the use of interviews and surveys. Originally, researchers developed their own questionnaires which made it impossible to compare results across studies (Siegel & Lane, 1987). Problems inherent in interviews have resulted in their infrequent use (Siegel & Lane, 1987). Current research generally relies on one of three questionnaires: the Job Descriptive Index (JDI; Smith, Kendall & Hulin, 1969), the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England & Lofquist, 1967) and the Face Scale (Kunin, 1955). Since the MSQ includes

teachers in its norming sample, it is frequently used in studies involving educators.

Theories of Job Satisfaction

At the inception of the human relations movement in the early 1940's, it was assumed that satisfied workers were productive workers. When research failed to uphold the implicit logic of this connection, investigators refocused on the effects of job and professional involvement, organizational commitment, and withdrawal behaviors such as absenteeism and turnover (Batesman & Strasser, 1984; Porter & Steers, 1973; Saal, 1987; Steers & Rhodes, 1978). Job satisfaction research evolved from Taylor's 1911 research on productivity to the study of environmental factors and work performance documented in the famous Hawthorne Studies (Roethlisberg & Dickson, 1939). Questionnaires, in use as early as 1935 (Hoppock), have historically represented the instrument of choice for determining workers' job satisfaction. Job satisfaction theories, designed to explain affective and behavioral responses to the experience of work, provided direction for research.

Historically, job satisfaction theories viewed satisfaction and dissatisfaction as being extremes of the same continuum. In contrast, Herzberg's needs-based theory (1966, 1974) placed job satisfaction on two unipolar,

parallel continua. Parallel placement assumes that factors that contribute to job satisfaction are qualitatively different from those contributing to dissatisfaction. Recognizing that Herzberg's interpretation of job satisfaction represents an isolated stance, the more accepted explanation of job satisfaction as a part of a continuum, reflected in the Minnesota Satisfaction Questionnaire will be used (Weiss, Dawis, England, & Lofquist, 1967).

In contrast to, and possibly as a reaction against, the needs theories (e.g., Herzberg), Salancik and Pfeffer (1987) hypothesized that a person's affective response to a job may be as much a result of how one's co-workers react to the job as it is the result of objective characteristics of the job itself. Thus, job perceptions are seen as a composite of objective characteristics of the job and social cues from the work setting. Both lab and field research demonstrated that job satisfaction and task perceptions are influenced by social cues more than by actual job characteristics (Griffin, 1983; O'Reilly & Caldwell, 1979).

Discrepancy theories have focused on the differences between desires and outcomes. Edwin Locke (1969, 1976) defined job satisfaction or dissatisfaction as an emotional reaction to the discrepancy between what one wants from

one's job and what one perceives it as offering. Overall, job satisfaction is the sum of the evaluations of the discriminable elements that compose the job. Ilgen (1971) defined job satisfaction in terms of the magnitude of the discrepancy people perceive between what they expect to receive from their work and what they perceive that they are actually receiving. Based on this theory, pay in relation to job satisfaction is an expectancy rather than a needs issue.

Equity theory (Adams, 1965) presents a novel approach to understanding the interaction between co-workers and their work environment. The primary focus of equity theory is in defining what individuals consider to be fair and equitable and their reactions to situations they perceive as unfair. According to equity theory, people feel satisfied when their outcome/input ratio equals the outcome/input ratio of their comparison person (referent). Dissatisfaction results when their ratio is either greater than or less than their referent. Equity theory contends that people strive to maintain equitable situations by varying outcome/input ratios.

Operating from an eclectic rather than a purist stance, each of the presented theories provides elements salient to this study. First, job satisfaction or dissatisfaction is viewed as the discrepancy between what

a person expects from a job and what the job actually offers. The continuum from job satisfaction to dissatisfaction is measured by the modified Minnesota Satisfaction Questionnaire. Recognizing that social cues often outweigh actual characteristics of the job, special attention is paid to such variables as quality of supervision and expressed job satisfaction addressed on the Data Form. And finally, salary, seen as an expectancy rather than a needs issue, occupies a position of importance in the discussion of job satisfaction among North Carolina school psychologists. Determinations of pay were derived from information provided on the Data Form.

Determinants of Job Satisfaction

Many factors, including demographic variables, intrinsic features of work, pay, supervision, security, working conditions, recognition, and occupational levels have been investigated as possible determinants of job satisfaction. The opportunity to engage in boundary role activities also influences job satisfaction. Discussion is limited to factors salient to this research.

Demographic variables

Research suggests that demographic variables such as age, gender, and ethnicity account for less than 5 percent of variance in job satisfaction (Siegel & Lane, 1987). Despite this dismal finding, some general trends do exist.

Mean job satisfaction scores for blacks tend to be lower than for whites, older employees tend to be more satisfied than younger ones, and workers from higher occupational levels express more satisfaction than other workers (Weaver, 1980). Muchinsky (1983) contended that it makes more sense to consider job differences than people differences. Nevertheless, demographic variables have also been found to be positively correlated to job involvement (Saal, 1978) or the degree to which one's job is important to one's global perception of self. The intention of this study is to identify manipulable job characteristics that can increase job satisfaction for school psychologists.

Intrinsic Features of Work

By definition, an intrinsically motivated behavior is one that is performed for its own sake rather than for some anticipated tangible or social reward. Intrinsic features of work that have been related to job satisfaction include variety, difficulty, amount of work, responsibility, autonomy, control over work methods, complexity, and creativity (Locke, 1976). Hackman and Oldham (1980) contended that jobs should be designed to assure that workers experience internal motivation from their jobs by incorporating responsibility, meaningfulness, autonomy, and feedback. Although these variables are quite diverse, all require a certain level of mental challenge (Barnowe,

Mangione, & Quinn, 1972). If unchallenging jobs result in boredom and noninvolvement, then it logically follows that jobs which provide the appropriate levels of challenge should yield satisfaction (Locke, 1976). A number of studies have cited the quality of interactions among co-workers as being positively related to job satisfaction (George & Baumeister, 1981; Ilgen & Hollenback, 1977; Leonard, Margolis, & Keating, 1981).

Pay

Pay is a complex issue that traditionally has been downplayed as an essential element of job satisfaction. After reviewing a large number of studies, Lawler (1971) and Schwab and Wallace (1974) concluded that pay is an issue that traditionally and erroneously has been minimized. Recently, job satisfaction has been redefined as being partially a function of the absolute amount of pay received, the degree to which that pay meets expectations, and how pay is administered (Dyer & Theriault, 1976).

In contrast to the utilitarian role of money for needs satisfaction theorists, Ilgen (1971) defined pay as a discrepancy issue; he maintained that what is important is the difference between what is expected and what is received. The process of striving to maintain an equitable relation between pay and input is central to equity theory (Adams, 1965). Thus, individuals receiving either too much

or too little pay experience distress and dissatisfaction.

Supervision

The Hawthorne Studies (Roethlisberger & Dickson, 1939) documented the importance of developing a cooperative spirit between employees and supervisors. Employees prefer to work with considerate supervisors who are supportive, warm, and employee-centered rather than those who are hostile, apathetic, and job-centered. Job settings seem to influence preferences in leadership styles (House & Mitchell, 1974). Employees in ambiguous settings without clearly defined roles preferred supervision styles that helped control the confusion. In contrast, when expectations were clearly defined and employees felt competent, they tended to prefer less structured supervision.

Edwin Locke (1970) hypothesized that employee satisfaction with supervision requires two types of relationships: functional and entity. Functional relationships reflect the extent to which the supervisor helps employees satisfy job values that are important to the employee. Job values include mental challenge, pay, promotion, and recognition. Entity relationships are based on interpersonal attractions reflecting similar basic attitudes and values.

Job Satisfaction and Job Performance

Investigation of the paradigm "satisfaction causes performance" can be traced to its origin, the Hawthorne studies of the 1930s (Roethlisberger & Dickson, 1939). In more recent years, meta-analytic studies (Hackett & Guion, 1985; Iaffaldano & Muchinsky, 1985; Petty, McGee & Cavender, 1984) have attempted to clarify this issue by combining data from multiple studies in an effort to control for contaminants such as small sample size, range restriction, and unreliable measures (Glass, 1976; Hunter, Schmidt & Jackson, 1982). Results of these studies continue to document relative low correlations (.17) between job satisfaction and job performance (Iaffaldano & Muchinsky). However, meta-analyses which included a larger number of studies of professionals have yielded a third factor hypothesis (Petty et al., 1984). Findings for higher level employees yielded an average correlation of .31, indicating that job satisfaction and job performance may be moderated by job levels (Petty et al.). In other words, extrinsic and intrinsic rewards inherent in higher level jobs serve to enhance the correlation between job satisfaction and productivity.

Effects of Job Satisfaction: Withdrawal Behaviors

Although there is implicit appeal to the idea that job satisfaction and withdrawal behavior (absenteeism and

turnover) are causally related, research has not supported this hypothesis (Nicholson, Brown, & Chadwick-Jones, 1976; Nicholson, Wall, & Lischeron, 1977; Scott & Taylor, 1985). Intervening factors such as pressure, motivation, ability to attend and the status of the job market have been found to have situational effects on the correlation between job satisfaction and absenteeism (Steers & Rhodes, 1978). Thus, Steers and Rhodes' research may help to explain why the presumed relation between job satisfaction and absenteeism is not supported in the literature.

Research by Porter and Steers (1973) and Mobley (1982) defined absenteeism and turnover as qualitatively different responses to the work environment. A theoretical model developed by Mobley, Horner, and Hollingsworth (1978) helps to explain the phenomenon of turnover. Employees become dissatisfied with the job and begin to think about quitting. They then search for another job. Finally, they decide to either stay or quit. The importance of finding an acceptable alternative job before deciding to quit is stressed. An alternative model suggests that job dissatisfaction does not always lead to quitting one's job because of a poor self-concept or fear of the stigma of not having a job (Hulin, Roznowski, & Hachiya, 1985). Since withdrawal behaviors are defined as effects rather than causes of job satisfaction (e.g., Mobley, Horner, &

Hollingsworth, 1978; Hulin et al., 1981), intention to leave will not be included in the model presented in this paper.

Organizational Boundary Role Activities

Jobs that require the person extend beyond the structural limits of the central organization are seen as having common characteristics, and are collectively identified as boundary-spanning roles. Literature on organizational boundary roles originated in social and organizational psychology (Berrien, 1968; Katz & Kahn, 1978) and business administration (Walton & McKersie, 1965). Organizational boundaries are imaginary lines of demarcation that provide a buffer between the organization and the external environment (the community) and serve as regulators of information and materials exchange (Adams, 1976; Aldrich & Herker, 1977; Leifer & Delbecq, 1978). A boundary role position requires the professional to cross organizational boundaries that are physical (e.g., architectural), temporal (e.g., length of work day) and normative (e.g., values and routines) (Illback & Maher, 1984). Effective job performance necessitates that boundary role professionals are amenable to change, able to identify problems, and capable of accurately evaluating and adapting to diverse situational demands. Activities delegated to these professionals tend to be unregulated and

nonroutine. Thus, successful execution of job demands requires that persons filling these positions be verbal, have a good memory, be people oriented and demonstrate effective interpersonal skills, and be cognitively flexible. The ability to tolerate ambiguity is also essential. Marketing and sales personnel, purchasing agents, admission and placement staff, and advertising and public relations representatives are typically thought of as boundary role professionals. In education, school psychologists serve in similar roles as community liaisons.

Since boundary role professionals have little or no formal authority over people they have to work with, knowledge and interpersonal skills are essential in gaining cooperation. Expert (knowledge of the field) and referent (interpersonal skills) power have been found to be the most functional forms of social influence for the boundary role professional (Organ, 1971; Organ & Greene, 1972; Maher, 1984). Effective use of social power contributes to job satisfaction by facilitating successful completion of assigned responsibilities. Expert power is derived from the status of the professional (French & Raven, 1959). For the boundary role professional, referent power comes from credibility gained in the organization through the effective use of personal skills (French & Raven, 1959; Illback & Maher, 1984). Characteristics of the role of

school psychologist makes effective use of referent and expert power essential.

Job Satisfaction in School Psychology

Enactment of the 1975 law designed to provide for the "Education for All Handicapped Children Act" (Public Law 94-142) resulted in a dramatic increase in the demand for school psychological services. Yet, funding through Exceptional Children's Programs proved to be a mixed blessing. Although P.L. 94-142 increased the demand for school psychologists, it seriously restricted the opportunity to provide diversified services to the general school population. Despite their vehement protests, school psychologists were soon perceived as "gatekeepers for special education" (Fagan, 1981a; Vensel, 1981). Consequently, although the number of school psychologists employed by school systems has increased, job satisfaction has not increased proportionately (Fagan, 1981a). Concerns about lack of role diversity (Fagan, 1981a; 1981b; Guidubaldi, 1981; Hart, 1983; Levinson, 1988; Trachtman, 1981; Vensel, 1981) and the discrepancy between job expectations and actual job demands began to dominate the literature (Benson & Hughes, 1985; Hughes, 1979; Jerrell, 1984; Neumeyer, 1981; Wright & Gutkin, 1981). Realistically, school psychologists knew they could not expect to find jobs that used the full range of roles and

functions (Trachtman, 1981), but in many systems practitioners were restricted to using only six hours (assessment skills) of their 60 hours of training (Fagan, 1981b). When discussing role expectations, it is important to keep in mind that self-determination is essential in accomplishing desired diversification of role and function.

Exploration and explanation of what affects job satisfaction has also been a prominent topic in the literature. Consistent with job satisfaction research conducted in industrial and business settings, demographic variables, intrinsic features of work, pay, and supervision have been found to influence job satisfaction for school psychologists (Anderson, 1982; Levinson, 1983; Solly, 1983).

Influences on School Psychologists' Job Satisfaction Demographic Variables

Job satisfaction studies in the area of school psychology have not only considered age, gender, and ethnicity as demographic variables but have also included years of professional experience, tenure, educational level, district size, and community characteristics (urban vs. rural). In contrast to previously reported research (Siegel & Lane, 1987; Weaver, 1980; Muchinsky, 1983), a number of school psychology surveys have found a positive relation between age and school psychologists' job

satisfaction scores (Aherns, 1977, Anderson, 1982; Anderson, Hohenshil & Brown; 1984; Hubert & Huebner, 1988; Obermann, 1986). It has been suggested that the correlation between age and job satisfaction indicates that with experience school psychologists are either able to modify their own job aspirations and needs or the job itself (Anderson, Hohenshil & Brown, 1984).

Consistent with studies conducted in business and industry, gender and ethnicity have not been found to affect job satisfaction for school psychologists. Therefore, these variables will not be included in the presented model (Anderson, 1982; Levinson, 1983; Solly, 1983). Tenure, professional experience, and education have all been found to be related to job satisfaction (Ahrens, 1977). Since school psychologists are neither teachers nor administrators, opportunities for professional advancement are frequently blocked by the organizational structure of public education. National as well as state studies have documented the lack of advancement opportunities as an area of job dissatisfaction (Anderson, 1982; Levinson, 1983; Solly, 1983). Based on presented research addressing job satisfaction for school psychologists, age, experience, salary, and community characteristics were included in the model analyzed for this study.

Urban vs. Rural Communities In recent years, issues

in rural school psychology have received increased attention in the literature, including a chapter in Best Practices in School Psychology (Thomas & Grimes, 1985) and an issue of School Psychology Review (Elliott, 1985). Rural schools constitute two-thirds of all schools in the United States and serve 32% of our school children (Helge, 1985). Although the term "rural" historically has referred to sparsely populated areas, population per square mile provides a more functional definition. Helge (1985) contended that this definition is more appropriate because it accounts for both the size and the population density of an area. Sparse populations, long distances to travel, isolation from related services, community or district lack of support services for school psychology, professional isolation, and high student-psychologist ratios are common problems in rural settings (DeMers, Cohen & Fontana, 1981; Cummings, McLeskey & Huebner, 1985; Helge, 1985). Hughes and Clark (1981) found that urban school psychologists have twice the number of years of professional experience and have been with their respective school systems twice as long as those in rural settings.

On the other hand, research documents that rural school psychologists have more diverse roles, spend less time engaged in traditional assessment activities, are more likely to engage in activities involving them at the

systems and community level, and are more satisfied with their work environment (Ehly & Reimers, 1986; Huebner, McLeskey & Cummings, 1984; Hughes, 1986; Hughes & Clark, 1981; Jerrell, 1984; Solly, 1983; Solly & Hohenshil; 1986). Boundary spanning functions, which may be fostered by rural settings, have been found to be related positively to job satisfaction (Jerrell, 1984). Thus, both community characteristics and boundary role activities will be included in the presented model as variables that affect job satisfaction for school psychologists.

Intrinsic Features of Work

Mental challenges result in job satisfaction (Barnowe et al., 1972). For school psychologists, terms like variety, amount of work, and control over methods translates into role and function, case load, flexibility, independence, autonomy, collegial relationships, and professionalism.

Role diversity. Research documents opportunity for role diversity as being a factor that increases job satisfaction (Fagan & Hughes, 1985; Fisher, Jenkins & Crumbley, 1986; Huebner, McLeskey & Cummings, 1984; Jerrell, 1984). Thus, role diversity is included in the causal model presented in Figure 2 (see Chapter 1). Responsibility for the discrepancy between real and ideal

roles appears to be multidimensional. Organizational expectations, case load demands, and practitioner motivation to extend beyond the conventional role of evaluator bear joint ownership; the school psychologist and the school system.

Benson and Hughes (1985) reported that school psychologists spend approximately 50% of their time in assessment related activities and 20% of their time in consultation activities with the remaining time divided among counseling, in-service, administration, counseling parents, research, and program evaluation. Although teachers and administrators agree that school psychologists should engage in activities other than assessment, priorities are not always in agreement (Hartshorne & Johnson, 1985; Hughes, 1979; Kaplan, Chrin & Clancy, 1977; Manley & Manley, 1978; Roberts, 1970). Consequently, the need for autonomy and control over work methods (intrinsic features of work) for individuals may be in conflict with organizational goals.

The generalist role ascribed to rural psychologists has been shown to provide considerable diversity, thereby enhancing job satisfaction (Fagan, 1985; Fisher, Jenkins & Crumbley, 1986; Huebner, McLeskey, & Cummings, 1984; Jerrell, 1984). Failure to reduce the discrepancy between ideal and real roles has been shown to have a negative

affect on job satisfaction (Miller, Witt & Finley, 1981; Reiner & Hartshorne, 1982; Trachtman, 1981; Vensel, 1981). Decreased student-to-psychologist ratios have been instrumental in increasing the opportunity for role expansion. However, school psychologists are primarily responsible for defining their roles within the context of the larger organization (Benson & Hughes, 1985; Fisher, Jenkins, & Crumbley, 1986; Illback & Maher, 1984; Jerrell, 1984; Meacham & Peckham, 1978; Pierson-Hubeny & Archambault, 1987; Smith, 1984; Wright & Gutkin, 1981; Wright & Thomas, 1982). Consequently, they must also be the origin of effective change.

Case loads. Higher case loads limit the opportunity to be engaged in activities other than those associated with the role of the psychodiagnostician. Therefore, student-to-psychologist ratio is included in this model. Meacham and Peckham (1978) conducted a nationwide survey during the 1975-76 school year designed to evaluate training/practice discrepancy. The study was replicated during the 1983-84 school year by Fisher, Jenkins and Crumbley (1986) and supported by Reschly (1984). The follow-up study revealed a dramatic decrease in the student-to-psychologist ratio. In 1975-76, the mean was 4,556 students to 1 psychologist while in 1983-84 the mean was 2,209 to 1. In addition, the Fisher, Jenkins and

Crumbley study (1986) documented fewer discrepancies among systems. Higher case loads have been found to limit the opportunity to do something beside test, thus decreasing job satisfaction (Anderson, 1982; Anderson et al., 1984; Clair, Kerfoot & Klausmeir, 1972; Reiner & Hartshorne, 1982; Smith, 1984; Smith & Lyon, 1985; Solly, 1983; Solly & Hohenshil, 1986; Wright & Gutkin, 1981). Furthermore, student-to-psychologist ratio has been found to influence the opportunity for role diversity and the ability to engage in boundary role activities (Jerrell, 1984; Smith & Lyon, 1985). Although increases in the number of school psychologists and a stabilization of the school-age population have served to decrease the student-to-psychologist ratio, these occurrences alone have not solved the problem. Allocation of professional time remains the primary responsibility of the individual practitioner.

Autonomy and responsibility. Autonomy addresses the degree to which a job provides the freedom, independence, and discretion for scheduling of work, and control over methods to be employed in accomplishing that task (Hackman & Oldham, 1980). According to Job Characteristic Theory (Hackman & Oldham), autonomy is required before an employee will experience the psychological feeling of responsibility. Autonomy and responsibility frequently have been reported as sources of job satisfaction

(Anderson, 1982; Anderson et al., 1984; Clair et al., 1972; Levinson, 1983; Levinson, Fetchkan, & Hohenshil, 1988; Miller, Witt & Finley, 1981; Solly, 1983; Solly & Hohenshil, 1986; Wright & Gutkin, 1981). Role and function has been reported as a source of dissatisfaction because of psychologists' limited control over how their jobs should be done (Miller et al., 1981; Reiner & Hartshorne, 1982; Trachtman, 1981; Vensel, 1981). Supervisors who are also school psychologists have been found to be more sympathetic to desires for autonomy and usually are willing to permit more self-determination (Stewart, 1986). Since role diversity affects the school psychologist's ability to experience autonomy and responsibility, this variable will appear in this model.

Co-workers. The opportunity to associate with colleagues has markedly expanded as the number of school psychologists has increased. Associating with competent colleagues has been identified as a positive influence on job satisfaction for school psychologists (Anderson, 1982; Clair et al., 1972; Levinson, 1983; Solly, 1983; Miller, et al., 1981; Wright & Gutkin, 1981). Professional isolation is seen as a significant problem in rural settings (Helge, 1985), although some researchers have suggested that professional organizations may help to fill the void (Levinson, 1983; Balinky, 1985). Recognizing that co-

workers include people in the same work setting and are not limited to relationships with persons in the same profession, this variable is difficult to measure accurately. Thus, although collegial relationships and affiliations with professional organizations are seen as an important influence on job satisfaction, the potential for ambiguity resulted in the exclusion of co-workers as a variable in the presented model.

Salary. The organizational structure of education was designed to accommodate teachers and administrators, and some writers argue that there is no place in the organizational structure or salary scale for school psychologists or other relative newcomers (Balinky, 1985). As a result, in many states school psychologists are paid on teacher salary scales even though their positions have the highest educational entry level requirements in education. The discrepancy between what is expected and what is received may negatively affect job satisfaction (Ahrens, 1977; Clair et al., 1984; Levinson et al., 1988; Solly, 1983; Solly & Hohenshil, 1986). In the state of North Carolina, most school psychology practitioners are paid on a teacher's salary scale with credit for advanced degrees. Therefore, salary is expected to be an important determinant for North Carolina school psychologists.

Supervision. Although the American Psychological

Association's Standards for Providers (APA, 1981) clearly states that school psychologists should only be supervised by doctoral level school psychologists, this is frequently not the case. A recent national survey funded by the Professional Standards and Employment Relations Committee of NASP reported that, in a majority of cases, supervision standards did not meet those mandated by NASP or APA (Zins, Murphy, & Weis, 1989). Less than 25% of the respondents indicated that they were currently receiving supervision. Although 70.3% of the supervisors had some training in school psychology, only 48.8% had terminal degrees in school psychology. If psychologists agree to this arrangement, they are violating professional standards. If they do not, they are at risk of being accused of insubordination (Balinky, 1985). The issue of appropriate supervision is more likely to occur in rural than in urban settings (Helge, 1985). The lack of supervision by individuals knowledgeable in the area of school psychology negatively affects job satisfaction (Anderson et al., 1986; Levinson, 1983; Levinson et al., 1988; Miller et al., 1981; Solly, 1983; Solly & Hohenshil, 1986). When supervision for practitioners is provided by other school psychologists, greater opportunities for autonomy and self-determination usually exist (Stewart, 1986). Research indicates that the training area of supervisors influences

job satisfaction for school psychologists, and thus, a variable measuring supervision is included in the model.

School Psychologists as Boundary Role Professionals

In a study of rural school psychologists in Pennsylvania, involvement in boundary role activities was found to be determined by personal preference, employment status, and congruence between psychologist's and administrator's preferences rather than a function of professional training, and organization or environmental demands (Jerrell, 1984). In recent years, school psychologists have begun to focus on their roles in the organizational structure of the schools (Maher & Illback, 1982). This orientation recognizes that public schools are composed of work roles and assigned territories. In order for the schools to meet consumer needs (students, parents, and faculty), they must work efficiently with other community agencies (Balinky, 1985; Hughes & Clark, 1981; Plas, 1981; Sepez, 1972). School psychologists coordinate efforts, communicate information regarding needs and services, and initiate community involvement (Brantly, Reilly, Beach, Cody, Fields & Lee, 1974; Plas, 1981; Sepez, 1972). In the process of planning and evaluating students, school psychologists work with classroom and resource teachers, parents, administrators, counselors, mental health personnel, juvenile court personnel and the medical

community to meet the needs of children. Figure 1 depicts the interactive nature of the job of school psychologist. Clearly, school psychologists must cross various physical, temporal, and normative boundaries to meet the needs of the children they serve (Illback & Maher, 1984); thus school psychologists function as organizational boundary role professionals.

Boundary relevance (consumers perceptions of importance of the job) is affected by the amount of contact school psychologists have with the school staff (Illback & Maher, 1984). Typically, supervisors functioning as role senders have limited understanding of what school psychologists do and request inappropriate activities resulting in role conflict (Illback & Maher). Consistent with other boundary role professionals, school psychologists have limited authority to control the actions of people inside and outside the system (Illback & Maher). An understanding of how the school psychologist fits in the organizational structure can facilitate role expansion, help identify organizational norms, increase efficiency, and improve job satisfaction (Illback & Maher).

The generalist role of rural school psychologists provides practitioners with the opportunity to extend beyond the organizational boundaries of the school into the community and engage in boundary role activities (Cummings

et al., 1985; Ehly & Reimers, 1986; Helge, 1985; Jerrell, 1984; Levinson et al., 1988). Jerrell (1984) reported that thirteen items from a boundary role questionnaire developed by Jemison (1980) were found to have significance for school psychologists. Consistent with the research in the area of role diversity, Jerrell found that motivation to engage in boundary role activities significantly influences the level of actual involvement. In rural systems, the opportunity to engage in boundary role activities was found to be associated with higher levels of job satisfaction and will be included in the proposed model.

Summary

The purpose of this chapter has been to summarize salient job satisfaction theories from industrial and organizational psychology and then translate these theories into practical application: what school psychologists do. Consistent with this interdisciplinary approach, theoretical and practical influences on job satisfaction were presented. Justification for each variable's inclusion or deletion from the model of job satisfaction has been discussed in this chapter (see Figure 1 in Chapter I). Since research has shown that the opportunity to engage in boundary role activities improves job satisfaction for school psychologists (Jerrell, 1984) special attention was directed toward understanding

boundary role functions and recognizing activities performed by school psychologists that define them as boundary role professionals.

Chapter III

METHODOLOGY

Methodological procedures salient to this study are outlined in this chapter. The target population is described and participant selection procedures are reviewed. Survey distribution, data collection and statistical treatments are delineated. Finally, research questions are repeated and expanded, and the analyses used to answer each research question are described.

Participants

Study participants were limited to school psychologists certified by the North Carolina Department of Public Instruction and North Carolina Department of Corrections (Juvenile Services) practicing in elementary, middle, and high schools. The Student Services Division of the North Carolina Department of Public Instruction provided the researcher with a list of school psychology positions and the people reported to be filling those positions. At the onset, this list was known to be incomplete. Therefore, the list was cross referenced with the 1988-89 Directory for North Carolina School Psychological Association (NCSPA). Names that appeared in the NCSPA Directory, but not on the State Department list, were included in the sample. Psychologists known to have a primary role designation other than practitioner were not included in the study. At the

initial mailing, surveys were mailed to 463 school psychologists. Five packets were returned to the researcher because of insufficient or incorrect addresses, dropping the relevant population for the study to 453. Because of the limited size of the total population available, all members of the population were include in the target sample for this study. Psychologists, consultants, students, or school psychologists who designated their primary role on the Data Form as something other than "practitioner" were not included in the sample which was used for final analysis of the data. To assure confidentiality, no participants were identified with their individual responses.

Instrumentation

Participants in this study were asked to complete and return a Data Form and a modified version of the Minnesota Satisfaction Questionnaire (MMSQ). Responses from these data gathering devices formed the basis for the variables used in this study.

Data Form

A Data Form was used to gather information about respondent characteristics and assisted in the identification of the relation between overall job satisfaction and demographic variables. Construction of the Data Form was modeled on Dillman's (1978) total design method. Participants in this study were asked to provide

the following information on the Data Form (see Appendix A): primary role designation, number of psychologists employed by the system, description of community, characteristics of their supervisor, intentions to leave their present position or the school psychology profession, allocation of professional time, age, present degree status, involvement in continuing education, professional experience, contract length, and annual salary. In addition, participants were asked to indicate their overall level of job satisfaction according to the following scale: Very Satisfied, Satisfied, Dissatisfied, Very Dissatisfied. Finally, participants were asked to estimate how often they perform a range of boundary role activities.

Minnesota Satisfaction Questionnaire (MSQ)

The MSQ consists of 20 subscales which are designed to examine sources of work reinforcement or job satisfaction (see Appendix B). The original MSQ was used primarily in non-educational settings; therefore a modified MSQ was be adapted for use in this study (see Appendix C). Consistent with modifications used in previous research, 21 items were modified to enhance the face validity for school psychologists (Anderson, 1982; Levinson, 1983; Solly, 1983). The MMSQ also deleted the neutral response option in order to simplify interpretation (Anderson, 1982; Levinson, 1983; Solly, 1983). In accordance with procedures used in

previous MMSQ research, each response option was assumed to represent the midpoint of an interval. Thus, a response of dissatisfied, value of 2, was assumed to represent a midpoint of the interval 1.5 to 2.5. Interval ranges were determined by multiplying the response value by the midpoint range yielding the following satisfaction categories: 7.5 or below for Very Dissatisfied, 7.51 to 12.5 for Dissatisfied, 12.51 to 17.5 for Satisfied, and 17.51 or above for Very Satisfied. A brief description of these scales follows:

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 opportunity for advancement on the job.
5. Authority- The opportunity to tell others their duties.
6. Company policies and practices (reworded as school system policies and practices)- The way system policies are implemented.
7. Compensation- Feelings about pay in contrast to the amount of work completed.
8. Co-workers- How one gets along with co-workers.

9. Creativity- The opportunity to try one's own methods.
10. Independence- The opportunity to work alone.
11. Moral values- The opportunity to do things that do not go against one's conscience.
12. Recognition- Being recognized for doing a good job.
13. Responsibility- The freedom to use one's judgement.
14. Security- The way a job provides for steady employment.
15. Social service- Being able to do things in service to others.
16. Social status- Having the respect of the community.
17. Supervision-human relations- The relationship between supervisors and employees.
18. Supervision-technical- The technical quality of supervision.
19. Variety- The opportunity to do different things.
20. Working conditions- Physical aspects of one's work environment.

Previous research using the modified Minnesota Satisfaction Questionnaire as a measure of job satisfaction for school psychologists documents strengths for both reliability and concurrent validity. Cronbach's Alpha, used to determine internal consistency within the 20 subscales of the MMSQ, yielded reliability coefficients ranging from a low of 0.738 for Activity to a high of 0.937

for Working Conditions (Anderson, 1982). Internal consistency of overall job satisfaction in studies conducted by Anderson (1982) Levinson (1983), and Solly (1983) yielded reliability coefficients between 0.957 and 0.973. In addition, all three studies documented a significant relation between overall job satisfaction as measured by the MMSQ and levels of satisfaction reported on the Data Form (Question 12).

Variables in the Path Model

Personal Variables

Age was obtained from the Data Form. Participants were asked to state their age on Question 15. Respondents were asked to indicate their current degree status on Question 16 of the Data Form. Options were listed. Years of experience, Question 18 on the Data Form, asked participants to provide the number of years they had functioned as a school psychologist.

System Variables

Characteristics of the school systems employing survey participants were derived based on responses to questions on the Data Form. Question 5 asked participants to define their school systems as either urban or rural. Rural communities, defined in a footnote at the bottom of the page, included those with fewer than 150 inhabitants per square mile or counties in which 60% or more of the population

live in communities no larger than 50,000 inhabitants (Helge, 1985). Urban and rural were assigned dummy codes of 1 and 2, respectively.

Student-to-psychologist ratio was determined by dividing the number of students enrolled in the school system (Question 3) by the number of full-time psychologists (Question 2) employed by the system. When inconsistencies were noted among respondents from the same system, official enrollment figures from the North Carolina State Department of Public Instruction (NCSDPI) were substituted (NCSDPI, 1987).

In order to assure that all respondents were on an equal scale, contract length (Question 19) and annual salary (Question 20) were combined to form a new variable, salary per month. Length of contract was entered as days and then recoded into months. Contract lengths ranged from 9 months (180 days) to 12 months (more than 240 days).

Role designation, level of education, and area of training of the respondent's primary supervisor (Questions 6, 7, and 8) were recorded and summed to produce a single index called Characteristics of Supervision. Supervisors holding titles of Director, Coordinator, or Supervisor of Psychological Services or Chief Psychologist were assigned a score of one. Other responses were assigned zero. Scores for levels of training of primary supervisors ranged from

zero for a bachelors degree to three for a doctorate. Supervisors with primary training in the area of school psychology received a one. Zero was entered for all other options.

Item 13 (a through n) on the Data Form addressed the number of hours per week participants engaged in a variety of professional activities. Role diversity was derived by summing hours invested in nontraditional activities (direct intervention, indirect intervention, inservice presentations, professional development, research, supervision and administration).

Responses to item 14 (a through m), designed to assess boundary role functioning, were assigned weights with 1 = never and 5 = daily. Items in this section were summed to derive a total score with increasing scores indicating higher involvement in boundary role activities.

Outcome Variable

The MMSQ was used to assess respondents job satisfaction. When respondents answered three or more items per subscale, an individual subscale mean was calculated. The subscale mean was multiplied by 100 to produce a subscale score for each of the 20 subscales. If respondents answered 60 questions or more on the MMSQ, a total mean was calculated. This total mean was multiplied by 100 (total number of questions for the MMSQ) and rounded off to the

nearest whole number so that calculated scores could be compared to previous research.

Data Collection

The survey materials used in collecting data were delivered and returned by mail. The approach to survey research utilized in this study represents an efficient and economical modification of procedures developed by Pucel, Nelson, and Wheeler (1969). Steps designed to achieve the highest overall survey response ratio included the use of colored paper, sending an introductory letter of endorsement, and a packet of coffee. Three steps comprised the data collection process. These steps included initial survey distribution, a follow-up mailing to non-respondents, and a personal telephone call to those individuals not responding to the two mailings.

Survey packets contained an introductory letter from this author (Appendix D), a letter from the North Carolina Department of Public Instruction Assistant State Superintendent for Support Services expressing endorsement of the study and urging cooperation of school psychologists (Appendix D), the Data Form, the modified Minnesota Satisfaction Questionnaire, a packet of coffee, and a stamped, self-addressed envelope. The introductory letter briefly described the study, assured confidentiality, specified return deadlines, and invited requests for the

results of the study. Survey materials were printed on light colored paper (Letters-White; Data Form-Yellow; MMSQ-Green; MMSQ Instructions-Pink).

The initial survey distribution took place on January 10, 1989. Approximately two weeks later (January 26, 1989) a second packet of survey materials was mailed to all individuals who had not responded. This packet included a letter encouraging prompt completion and return of the survey materials, duplicate copies of the Data Form and the MMSQ and a stamped, self-addressed envelope. Both packets were sent to the office address of each North Carolina school psychologist. Beginning two weeks after the second mailing (February 8, 1989) a personal phone call was placed to the remaining non-respondents. Those contacted were asked to return their questionnaires or, if they preferred, to respond to the survey items over the telephone.

Data Analysis

Surveys returned by February 25, 1989 were coded onto optical scanning sheets which were read by the Test Scoring Center at Appalachian State University and then transferred to the mainframe computer at Virginia Polytechnic Institute and State University. Specific statistical procedures were selected based upon their ability to provide information required to answer research questions. Procedures included frequency counts, percentages, subscale means and 95%

confidence intervals, correlations, analyses of variance, and multiple regression procedures.

Means and 95% confidence intervals were calculated to determine levels of job satisfaction for each of the 20 subscales of the modified MSQ. Response options (Very Dissatisfied to Very Satisfied) were assigned ordinal weights (e.g., Very Dissatisfied was assigned a value of 1 and Very Satisfied was assigned a value of 4). Thus, increasing scores indicate increased satisfaction. Sums of the subscales consisting of five items each ranged from 5 to 20. Overall job satisfaction was derived by summing the weights of all 100 items resulting in a possible range of 100-400. Satisfaction categories and intervals included: Very Dissatisfied: 150 or below; Dissatisfied: 151 to 250; Satisfied: 251 to 350; Very Satisfied: 351 to 400.

Multiple regression analysis was used to estimate the path model described in Chapter I (Kenny, 1979). Categorical variables (e.g., primary role designations; urban vs. rural; expressed job satisfaction) were dummy coded (Pedhazur, 1982) transforming the data into a form appropriate for multiple regression analysis. Direct, indirect, and total effects of influences on job satisfaction were calculate using the SPSS-X (SPSS, Inc, 1983), LISREL (Jöreskog & Sörbom, 1984), and GEMINI (Wolfle & Ethington, 1985) programs.

Research Questions

Methodological procedures described within the context of this study are designed to address the following research questions:

1. What aspects of their jobs are North Carolina school psychologists most satisfied with? This question was answered by calculating means and 95% confidence intervals for each of the 20 MMSQ subscales and the overall job satisfaction score to determine the aspects of their jobs with which school psychologists are most satisfied and least satisfied.
2. Of the variables identified in previous research, which influence overall job satisfaction among North Carolina school psychologists? The theoretical model introduced in Chapter I was tested using least squares multiple regression analysis. This study focused on the influence of personal variables (e.g., age, degree, and years of experience) and systems variables (e.g., rural or urban, supervision, salary, and student-to-psychologist ratios) on overall job satisfaction as measured by the modified MSQ. The .05 level of significance was used to decide whether a path represented a significant effect on satisfaction. Magnitudes

of significant influences were also compared.

3. Does the opportunity to engage in boundary role activities influence job satisfaction? Previous research indicated that the opportunity to engage in boundary role activities may positively influence perceptions about one's job. Path analysis was used to test for expected effects. Paths with a probability of .05 or less were judged as significant effects.

Chapter IV

RESULTS OF THE STUDY

This chapter delineates the results of the data analysis procedures introduced in Chapter III. Initially, response rates for each data collection step and the total study are presented. Demographic information obtained from the Data Form is summarized, and characteristics of variables related to job satisfaction are reviewed. Results of analysis procedures used to answer the research questions are discussed. Regression analyses, used to determine path values for variables included in the model of job satisfaction for North Carolina school psychology practitioners, are presented. Justifications for revision of the original data set are presented, and a path model based on a subsample is provided. Direct, indirect, and total effects for variables included in the path model are presented for original and revised samples.

Survey Responses

Data collection procedures were detailed in Chapter III. Briefly, data collection consisted of three steps: (a) an initial mailing of survey materials to 463 school psychologists whose names either appeared on a list of practitioners provided by the Department of Public Instruction or in the membership directory of the North Carolina School Psychology Association, (b) a follow-up

mailing to those individuals who did not respond to the initial mailing, and (c) a telephone follow-up of all remaining non-respondents. Five packets were returned by the Postal Service as undeliverable. Consequently, those individuals were deleted from the target population for a total of 458 possible participants. Duplications due to name changes and transfers among systems resulted in the deletion of five more potential participants for a total of 453 possible participants.

Table 2 presents survey response rates and percentages at each stage of the data collection process. The final response total of 399 represents 88.08% of possible participants.

Demographic Data

Sample characteristics were derived from participant responses to the Data Form. The first item of the Data Form was used to differentiate practitioners from non-practitioners. If respondents indicated their primary role designation as something other than practitioner, they were instructed to discontinue and return the survey. Thus, demographic information is only available for practitioners.

Primary Role Designation

An analysis of respondent's primary role designation is presented in Table 3. Respondents who checked their

Table 2

Survey Response Rate

Step	Number Returned	Percent of Total
Initial Mailing	249	54.97
Follow-up Mailing	96	21.19
Telephone Follow-up	54	11.92
Total	399	88.08

Note: There were 453 possible participants.

Table 3

Primary Role Designation

Category	Number Returned	Percent of Total
Practitioners (full-time)	271	59.82
Practitioners (part-time)	12	2.65
Private Practitioners	20	4.42
Supervisor/ Administrator	37	8.17
Intern	5	1.10
Student	12	2.65
University Professor/ Trainer	2	.44
Other	40	8.83
Total	399	88.08

Note: There were 453 possible participants.

primary role designation as that of full-time practitioner comprised 59.82% ($n=271$) of the total sample. Nine full-time practitioners failed to complete 80% or more of the items from one or more of the MMSQ subscales, and therefore were deleted from the sample. Consequently, 262 practitioners were included in further analyses.

Part-time practitioners comprised only 2.65% of the respondents. Twenty respondents (4.42%) indicated that they were engaged in private practice. Non-practitioners (21.19%) included supervisors and administrators, interns, students, trainers, and others. Forty respondents (8.83%) indicated that they had left the field of school psychology. Considering the fact that North Carolina had as least 50 vacant positions this year, the loss of even one school psychologist is too many. Eight psychologists who indicated that they were not full-time practitioners were on maternity leave; most reported that they intended to return to the field upon completion of their leave. The remaining participants were employed out-of-state or by hospitals, developmental evaluation centers, community colleges, businesses, or industry.

Age

Table 4 presents the age distribution for school psychologist practitioners in the state of North Carolina. Respondents between the ages of 24 and 43 comprised 77.82%

Table 4
Age Distribution

Age Range	Number	Percent of Total
24-25	2	.81
26-31	53	21.37
32-37	75	30.24
38-43	63	25.40
44-49	30	12.10
50-55	14	5.64
56-61	9	3.63
62 or over	2	.81
Total	248	100.00
<u>M</u>	38.39	
<u>SD</u>	8.09	

Note: Fourteen participants failed to respond to this item.

of the sample. Twelve respondents (4.84%) were between 55 and 65 years old. The mean age for North Carolina practitioners who responded to this study was 38. The youngest respondent was 24 years old and the oldest was 65 years old. Fourteen respondents failed to answer this question. North Carolina's age distribution is reasonably consistent with that of the 1982 NASP study, but is slightly older than the 1983 studies conducted in Virginia and West Virginia. This trend may reflect a general maturation of the field rather than a characteristic specific to North Carolina.

Years of Experience

Years of experience for North Carolina school psychologists ranged from 0 to 40 with a mean of 8.9 years. Specific results are presented in Table 5.

Current Degree Status

Percentages of respondents holding each degree category are presented in Table 6. Most practitioners in the state of North Carolina are sub-doctoral level school psychologists. Thirty-seven (14.28%) practitioners have completed their doctorates, and three (1.16%) are doctoral candidates. In addition, a number of respondents indicated that they are either exploring or are applying for entry to doctoral level training programs.

Table 5
 Years Experience as a School Psychologist

Range	Number	Percent of Total
0 - 5	80	30.77
6 - 10	87	33.46
11 - 15	70	26.92
16 - 20	17	6.54
21 - 25	4	1.54
26 or more	2	.77
Total	260	100.00
<u>M</u>	8.89	
<u>SD</u>	5.50	

Note: Two participants failed to respond to this item.

Table 6

Current Degree Status

Degree	Number	Percent of Total
Masters	8	3.09
Masters Plus: Multiple Masters Masters + 30 semester (45 Quarter) Hours; Ed.S., or C.A.G.S.	211	81.47
All But Dissertation	3	1.16
Doctorate	37	14.28
	259	100.00

Note: Three respondents failed to report their degree status.

Continuing Education

Fifty-four of 258 respondents indicated that they are currently involved in some type of continuing education activity. Areas of study noted were predominantly in, although not limited to, the field of school psychology.

Salary Per Month

Respondents were asked to provide the length of their current contract in days and their annual salary. The number of days were used to determine months of employment, with 180 days equating to a nine month contract. Annual salary was divided by the number of months to compute salary per month. Salaries ranged from \$1,800 to \$4,111 per month with \$2,682 being the mean (see Table 7). As expected, years of experience and classification on the salary scale (teacher versus supervisor) accounted for some of the salary variance. Comments on the Data Form further suggested that additional variance was due to vast differences in local supplements (range \$100 or less to thousands of dollars per year).

Intention to Stay

Although most respondents intended to stay in school psychology throughout most of their professional careers, they estimated that tenure in their current position would be relatively short (See Table 8). Table 9 summarizes alternate areas of occupational interest reported by

Table 7

Salary Per Month

Salary Range	Number	Percent of Total
\$1,800 - \$2,099	13	5.39
\$2,100 - \$2,299	27	11.20
\$2,300 - \$2,499	39	16.18
\$2,500 - \$2,699	64	26.56
\$2,700 - \$2,899	26	10.79
\$2,900 - \$3,099	29	12.03
\$3,100 - \$3,299	17	7.05
\$3,300 - \$3,499	12	4.98
\$3,500 - \$3,699	8	3.32
\$3,700 - \$3,899	5	2.08
\$3,900 and over	1	.42
Total	<u>241</u>	<u>100.00</u>
<u>M</u>	\$2,682.21	
<u>SD</u>	\$ 437.07	

Note: Twenty-one participants failed to respond to this question.

Table 8

Percentages for Reported Intention to Stay in Present
Position and in Profession

Years	In Present Position (<u>N</u> =240)	In Profession (<u>N</u> =233)
0-2	24.20	6.00
3-5	31.70	14.60
6-8	11.70	9.90
9-11	13.70	19.30
12-14	2.50	5.60
15-17	6.70	12.40
18-20	5.80	16.30
21-23	.40	1.70
24 or more	3.30	14.20
Total	<u>100.00</u>	<u>100.00</u>
<u>M</u>	7.38	13.49
<u>SD</u>	6.44	7.91

Table 9

Areas of Interest for Next Position

Areas	Number	Percent of Total
Another Position in School Psychology- unspecified	4	1.98
In North Carolina	29	14.36
Out of State	37	18.32
Another Specialty in Psychology	45	22.28
School Psychology Training Programs	8	3.96
Administration	34	16.83
Retirement	14	6.93
Business and Industry	4	1.98
Private Practice	17	8.41
Undecided	10	4.95
Total	<u>202</u>	<u>100.00</u>

Note: Sixty respondents expressed no interest in changing positions.

respondents. Of the 202 participants who responded to this question, 65.43% indicated that they were interested in a position other than practitioner. Most of those indicating that they would continue as practitioners were interested in positions outside of North Carolina. The North Carolina Department of Public Instruction reported at least 50 vacant positions at the beginning of the 1988-89 school year. Recognizing that intention to leave does not always directly translate into job turnover, expressed interest in leaving the state still represents a focus of concern in a state with a large number of vacancies.

Student-to-Psychologist Ratio

Respondents were asked to list the number of full-time psychologists employed by their system and student enrollment for their systems. Reporting errors were corrected using system enrollment figures provided by the North Carolina State Department of Public Instruction (1987). Student-to-psychologist ratios were derived by dividing the number of students by the number of psychologists.

Table 10 depicts student-to-psychologist ratios for survey respondents. A review of the raw data reveals that ratios of 1000:1 or less describe settings where the school psychologist provides a number of student services roles (social worker, counselor, and psychologist) within a

Table 10

Student-to-Psychologist Ratio

Ratio	Number	Percent of Total
Less than 1000:1	67	25.67
1001:1 to 1500:1	7	2.68
1501:1 to 2000:1	30	11.49
2001:1 to 2500:1	42	16.10
2501:1 to 3000:1	42	16.10
3001:1 to 3500:1	22	8.43
3501:1 to 4000:1	20	7.66
4001:1 to 4500:1	8	3.06
4501:1 or more	23	8.81
Total	261	100.00
<u>M</u>	2,609.90	
<u>SD</u>	1,862.05	

Note: Deletion of essential data resulted in the inability to calculate this ratio for one respondent.

single school. The upper limits of the continuum represent systems where a single school psychologist serves an entire county.

Urban versus Rural Communities

Although North Carolina school systems are predominantly rural, urban systems usually have more psychologists on staff. This relation is reflected in the participant responses to Question 5 on the Data Form. One hundred forty-one (53.80%) full-time practitioners were from urban school systems, while one hundred twenty-one (46.20%) worked in rural systems (See Table 11).

Characteristics of Supervision

Research cited in Chapter II documented not only the importance of supervision on job performance, but also addressed the negative effects of inappropriate supervision on job satisfaction for school psychologists. Based on recommendations for NASP, APA, and current research, the role designation, area of training, and level of training of supervisors were surveyed in this study. Tables 12, 13, and 14 present response patterns of the full-time practitioners included in the study.

North Carolina practitioners reported 51.55% of their supervisors were trained in the area of school psychology with 37.45% having doctorates. In the 1989 national survey conducted by the Professional Standards and Employment

Table 11

Description of School System

Descriptor	Number	Percent of Total
Urban	141	53.80
Rural	121	46.20
Total	<u>262</u>	<u>100.00</u>

Note: This total reflects responses for subjects who indicated that they were full-time practitioners only.

Table 12

Supervisor's Role Designation

Role Designation	Number	Percent of Total
Director/Coordinator/ Supervisor of Psychological Services or Chief Psychologist	97	37.16
Director/Coordinator/ Supervisor of Special Education or Pupil Services	114	43.69
Other		
Principal	18	6.90
Assistant Supervisor of Pupil Support Services	17	6.51
Specialist Area Student Services	8	3.06
Director of Student Services	6	2.30
Area Lead Psychologist	1	.38
Total	<u>261</u>	<u>100.00</u>

Note: One participant failed to respond to this question on the Data Form.

Table 13

Supervisor's Area of Training

Area	Number	Percent of Total
School Psychology	133	51.55
General Education	11	4.26
Special Education	44	17.05
Educational Administration	45	17.44
Counselor Education	5	1.94
Clinical or Developmental Psychology	11	4.26
Experimental Psychology	2	.78
Organizational Management	1	.39
Audiologist	1	.39
Unknown	5	1.94
Total	<u>258</u>	<u>100.00</u>

Note: Four respondents did not complete this question on the Data Form.

Table 14

Supervisor's Level of Training

Degree	Number	Percent of Total
Bachelors	1	.39
Masters	103	39.77
Ed.S., C.A.G.S., or Masters +30 semester (45 Quarter) Hours	58	22.39
Doctorate	97	37.45
Total	<u>259</u>	<u>100.00</u>

Note: Three respondents failed to complete this question on the Data Form.

Relations Committee of NASP, 70.3% of the respondents reported that their supervisors had some training in school psychology and 48.8% had doctoral degrees in school psychology (Zins, Murphy, & Weis, 1989). The committee considered these findings to be substandard. Essential characteristics of supervision for North Carolina school psychologists clearly fall below both national trends and standards established by best practices.

Characteristics of supervision, a composite score, was calculated using a simple weighting procedure. Supervisors who were identified as Directors, Coordinators, or Supervisors of Psychological Services or Chief Psychologists with a doctorate in school psychology were given the highest weight. Of the 257 respondents, 83.7% reported less than ideal characteristics of supervision. The provision of adequate supervision may represent an area of need that will result in job enhancement, and can reasonably be addressed by most school systems.

Again, a review of the data revealed a subset within the sample that reported their primary supervisor as being someone other than a Director of Psychological Services Director of Special Education, or Director of Pupil Services. Primary supervisors for this group were identified by job titles included in the category of other.

Role Diversity

Role diversity is an index of time spent in selected activities valued by professionals, but not typically performed by practitioners who serve as psychodiagnosticians. Activities included hours spent in direct intervention, indirect intervention, inservice presentations, professional development, research, and supervision of practicum or intern students. Hours spent in these activities were summed to create a total score for each respondent. Failures to respond to these items were interpreted as indicative of no professional time spent in the activity. Table 15 presents the means and standard deviation of time spent in each activity, with activities rank ordered from most to least time consuming. Respondents report that they spend most of their time engaged in activities associated with the conventional role of gatekeeper for Exceptional Children Programs. Mean hours for role diversity was 9.56 with a standard deviation of 7.17 hours per week spent in nontraditional activities ranged from a low of 0 to a high of 32. One hundred and twenty-nine practitioners reported spending seven hours or less in these activities while 13 respondents were at the upper extremes (25 to 32 hours).

Boundary Role Activities

School psychologists are boundary role professionals

Table 15

Hierarchy of Weekly Allocation of Professional Time

Types of Activities	Mean Hours	Standard Deviations
Psychoeducational Assessment	11.36	5.94
Report Writing	6.69	3.90
Direct Interventions ¹	3.89	4.70
Staff/SBC Meetings	3.56	2.49
Interviewing Parents and Teachers	3.25	2.43
Indirect Interventions ¹	3.06	2.48
Interpreting Results	2.73	1.78
Administrative Duties	1.98	3.01
Classroom Observations	1.83	1.30
Other Duties	1.53	3.81
Professional Development ¹	.98	1.26
Research	.93	1.85
Inservice Presenters ¹	.40	.62
Supervision of Practicum and Intern Students ¹	.30	.88

1

These activities were summed to create the role diversity composite variable.

because they must interact with multiple community groups in order to do their job successfully. Responding practitioners were asked to indicate how often they engaged in 13 boundary role activities that previous research documented as consistent with the role of school psychologist (Jerrell, 1984). Response options ranged from never (weighted 0) to daily (weighted 4). Table 16 summarizes percentages for each category (Never to Daily). Practitioners reported that they most frequently met with parents and students to make specific recommendations concerning services within and outside their school system. Decisions about transmission of information are frequently made by responding school psychologists. School psychologists are also involved in the acquisition of information from outside the school system. Weighted ratings were summed to obtain the composite index used in the path model. Scores on this index ranged from 0 to 40 with a mean of 17.29. Sixty-two respondents had scores of 10 or less, and 25 had scores of 30 or more.

The opportunity to engage in boundary role activities might be interpreted as an aspect of role diversity, and thus it seemed important to determine whether these variables were distinct or merely the same variables with different names. Factor analysis was used to determine if role diversity and boundary role activity questions were measuring essentially

Table 16

Percentage of Respondents Engaging in Boundary Role Activities by Frequency of Occurrence

Boundary Role Activities	Never (0)	Less than Monthly (1)	Monthly (2)	Frequency of Occurrence			Mean	Standard Deviation
				Monthly (3)	Weekly (4)	Daily (5)		
Formally providing information to groups outside your school system.	54.1 (138)	39.6 (101)	5.5 (14)	.8 (2)	--- (0)	.53	.64	
Informally providing information to groups outside school system designed to create a favorable image of your school system.	29.0 (75)	45.2 (117)	18.1 (47)	6.9 (18)	.8 (2)	1.05	.90	
Exercise primary responsibility for deciding on external resources needed to supplement or enhance programs offered by your school system.	60.3 (155)	22.2 (57)	10.5 (27)	5.8 (15)	1.2 (3)	.65	.96	
Exercise primary responsibility for deciding when to acquire external resources to supplement or enhance programs offered by your school system.	60.1 (155)	24.8 (64)	8.9 (23)	5.4 (14)	.8 (2)	.62	.91	
Decide what portions of information acquired from external resources should be transmitted to others within the system who will make use of it.	27.5 (71)	29.8 (77)	22.9 (59)	14.3 (37)	5.4 (14)	1.40	1.19	
Decide when to transmit externally obtained information to others in your school system.	19.9 (51)	29.3 (75)	27.3 (70)	18.4 (47)	5.1 (13)	1.59	1.15	
Decide to whom information received from outside your school system should be conveyed.	18.6 (48)	26.7 (69)	27.1 (70)	19.8 (51)	7.8 (20)	1.71	1.20	

Table 16 continued

Percentage of Respondents Engaging in Boundary Role Activities by Frequency of Occurrence

Boundary Role Activities	Never	Less than Monthly	Frequency of Occurrence			Mean	Standard Deviation
			Monthly	Weekly	Daily		
	(0)	(1)	(2)	(3)	(4)		
Acquire information formally from outside school system that is needed by your department within the system.	19.1 (49)	37.5 (96)	23.0 (59)	19.1 (49)	1.2 (3)	1.46	1.04
Acquire information informally from specific individuals or groups outside your school your school system that is needed by your department within the system.	15.5 (40)	36.8 (95)	24.8 (64)	18.6 (48)	4.3 (11)	1.59	1.09
Meet with students and parents to recommend special services or programs within your system.	3.9 (10)	8.1 (21)	14.0 (36)	56.2 (145)	17.8 (46)	2.76	.97
Meet with students and parents to recommend specified services or programs outside your system.	6.6 (17)	27.6 (71)	33.9 (87)	27.6 (71)	4.3 (11)	1.95	.99
Decide what kind of students and services or programs your system will pursue.	43.7 (111)	31.1 (79)	16.5 (42)	6.3 (16)	2.4 (6)	.92	1.03
Monitor other services being offered by your community or in other districts in order to provide effective services in your own school system.	31.8 (82)	42.2 (109)	17.4 (45)	8.1 (21)	.4 (1)	1.03	.92

different activities. With only two exceptions, role diversity questions loaded on different factors than boundary role activities; the two activities do appear to be distinct.

Job Satisfaction

Expressed job satisfaction (Data Form-Question 12) and measured job satisfaction, derived by summing the 20 subscales of the modified MSQ, were used to evaluate respondents' job satisfaction. Most (56.92%) of the respondents indicated that they were satisfied with their jobs (See Table 17), although the mean for expressed job satisfaction was at the lower end of the satisfied range. Expressed and measured job satisfaction were found to be positively correlated (0.63). Means and standard deviations for measured and expressed job satisfaction were computed and differences between the means were analyzed by use of a t-test for correlated samples. A significant difference was noted between the means of the indices of job satisfaction (t=126.59, df=245, p<.000).

Involvement in job related continuing education implies investment in a person's profession. One-way analysis of variance was used to determine if there were any differences between measured and expressed job satisfaction and involvement in continuing education activities. Mean differences among involvement in continuing education and the 2 measuring job satisfaction failed to reach significance (F=.12, df=1/243).

Table 17

A Comparison of Two Measures of Job Satisfaction

Indicator of Job Satisfaction	Very Dissatisfied	<u>Percentages</u>		Very Satisfied
		Dissatisfied	Satisfied	
Expressed (Question 12 on Data Form)	3.85 (10)	21.8 (57)	56.5 (148)	17.2 (45)
<u>M</u>	1.87			
<u>SD</u>	.73			
Measured (Total MMSQ Score)	0 (0)	20.6 (51)	78.2 (194)	1.6 (4)
<u>M</u>	279.55			
<u>SD</u>	34.74			

Note: Two participants failed to respond to Question 12 on the Data Form. Total job satisfaction scores could not be calculated for fourteen respondents.

Also, there was no significant difference between job satisfaction (expressed or measured) based on involvement in continuing education activities ($F=.10$, $df=1/255$).

Sources of job satisfaction for school psychologists were identified by constructing a hierarchy of MMSQ scales. Table 18 presents a hierarchical arrangement of means with standard deviations for each of the 20 subscales of the MMSQ. North Carolina school psychologists expressed satisfaction with 17 of the 20 factors that comprised overall job satisfaction (scores between 12.55 and 17.50). Area of dissatisfaction (scores between 7.51 and 12.5) included policies and practice (implementation of system policies), advancement (opportunities to advance on the job), and compensation (equity between demands of the job and pay earned).

Internal consistency of the 20 modified MSQ scales was estimated using Cronbach's Alpha. Reliability coefficients presented in Table 18 ranged from 0.79 to 0.95. Authority (0.79) has historically been found to be least reliable for school psychologists (Anderson, 1982; Levinson, 1983). Cronbach's Alpha was also used to estimate the internal consistency of the overall job satisfaction scores. Overall job satisfaction scores appear highly reliable ($r_{xx} = .97$).

North Carolina school psychologists rated social

Table 18

Means, Standard Deviations, Cronbach's Reliability
Coefficients and Confidence Intervals for Hierarchy of
Subtests of the Modified Minnesota Satisfaction Questionnaire

Scale	Mean	Standard Deviation	Reliability Coefficient	95% Confidence Interval
Social Service	15.942	2.32	0.89	15.65-16.23
Co-Workers	15.84	2.51	0.89	15.52-16.15
Moral Value	15.81	2.17	0.85	15.54-16.09
Activity	15.66	2.10	0.87	15.53-15.80
Independence	15.45	2.22	0.89	15.16-15.73
Security	15.27	2.32	0.82	14.97-15.56
Responsibility	14.86	2.39	0.81	14.70-15.02
Supervision- Human Relations	14.48	3.80	0.94	14.00-14.96
Achievement	14.40	2.42	0.85	14.10-14.71
Variety	14.35	3.32	0.91	13.93-14.77
Ability Utilization	14.25	3.16	0.92	13.85-14.65
Creativity	14.23	3.07	0.89	13.84-14.61
Authority	14.17	2.12	0.79	13.89-14.45
Supervision- Technical	14.05	3.44	0.91	13.82-14.27
Social Status	13.57	2.69	0.89	13.22-13.92
Recognition	13.09	3.12	0.94	12.69-13.49
Working Conditions	12.56	3.46	0.95	12.12-13.00
Policies and Practices	11.14	3.36	0.93	10.72-11.57
Advancement	10.37	3.27	0.94	10.15-10.58
Compensation	9.75	3.53	0.92	9.30-10.20

service, co-workers, moral value, activity, and independence as being those components of job satisfaction with which they were most satisfied. Although there was some variation in order, previous studies (Anderson, 1982; Levinson, 1983; Solly, 1983) ranked the same five subscales as those with which respondents have the greatest satisfaction. Similarities were found at the lower extremes of the list. In current research, as well as in previous studies, school psychologists are least satisfied with working conditions, policies and practice, compensation, and advancement.

Effects on Job Satisfaction

Variable means and standard deviations used in the path analysis are presented in Table 19, along with the intercorrelations among the variables. The results of the path analysis (see Table 20), explaining job satisfaction as a function of age, degree, years of experience, urban versus rural communities, student-to-psychologist ratio, salary per month, characteristics of supervision, role diversity, and boundary role activities are presented in Figure 3. As previously prescribed in the method section, the .05 level of significance was used to determine meaningful effects.

Boundary role activities had the strongest direct effect on job satisfaction (path = .29). Characteristics of supervision had a greater effect on job satisfaction than was

Table 19

Variable Correlations, Means, and Standard Deviations for North Carolina School Psychologists

Variables	1	2	3	4	5	6	7	8	9	10
1. Age	1.00									
2. Degree	.15	1.00								
3. Years of Experience	.57	.06	1.00							
4. Urban/Rural Community	.06	-.14	.04	1.00						
5. Student-to-Psychologist Ratio	.22	.05	.15	.38	1.00					
6. Salary Per Month	.59	.26	.56	-.20	.01	1.00				
7. Characteristics of Supervision	-.06	.08	-.07	-.43	-.24	.12	1.00			
8. Role Diversity	-.12	.04	-.10	-.29	-.36	.02	.02	1.00		
9. Boundary Role Activities	-.03	-.07	.02	.05	.02	.02	-.04	.22	1.00	
10. MMSQ Total Job Satisfaction	.03	-.03	.02	.05	.06	.11	.14	.07	.31	1.00
<u>M</u>	38.39	2.27	8.88	1.46	2609.90	2682.15	.001	9.56	17.29	279.55
<u>SD</u>	8.09	.74	5.50	.50	1862.052	437.07	2.22	7.17	8.20	34.74

Note: N = 264; minimum pairwise N = 232

Table 20

Direct, Indirect, and Total Effects of Age, Degree, Years of Experience, Urban vs. Rural Communities, Student-to-Psychologist Ratio, Salary per Month, Characteristics of Supervision, Role Diversity, and Boundary Role Activities on Job Satisfaction for North Carolina School Psychology Practitioners

Variable	Effects		
	Direct	Indirect	Total
Age	-.026	.054	.028
Degree	-.048	.015	-.033
Years of Experience	-.054	.067	.013
Urban/Rural	.149	-.100	.048
Student/Psychologist Ratio	.086	-.014	-.072
Salary Per Month	.162	.033	.195*
Characteristics of Supervision	.217*	-.024	.194*
Role Diversity	.062	.084*	.146*
Boundary Role Activity	.289*	.000	.289*

Note: $N = 232$
 * $\underline{p} < .05$

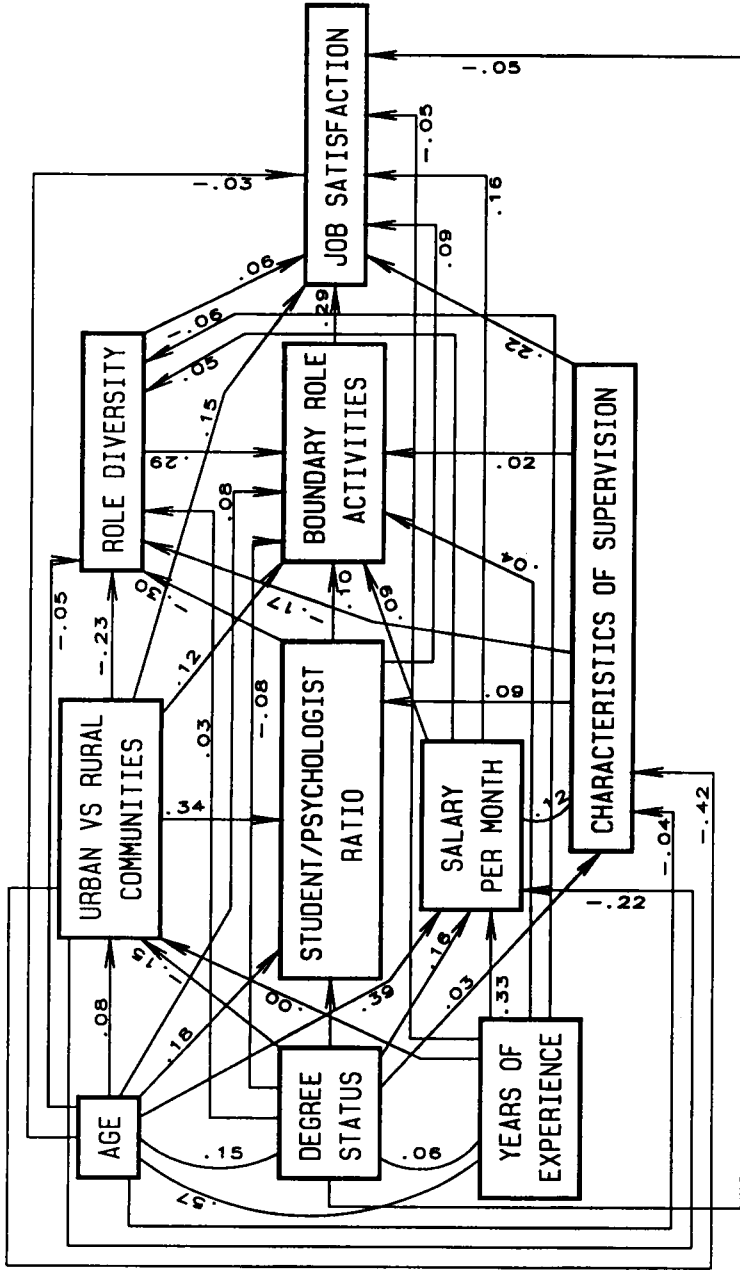


Figure 3. The effects of age, degree status, years of experience, urban vs. rural communities, student-to-psychologist ratio, salary per month, characteristics of supervision, role diversity, and boundary role activities on job satisfaction for North Carolina school psychologists.

expected (path = .22). No other variables were found to have significant direct effects on job satisfaction. However, role diversity did influence on boundary role activities (path = .29), which in turn affected job satisfaction. Thus, the indirect effect of role diversity on job satisfaction ($.29 \times .29 = .08$, $p < .01$) was significant. Although salary per month did not have significant direct or indirect effects, its total effect on job satisfaction was significant (.195, $p < .05$). Direct, indirect, and total effects for each of the variables included in the path model are shown on Table 20. These results support a conclusion that the opportunity to engage in boundary role activities, salary, characteristics of supervision, and role diversity have meaningful effects on job satisfaction for North Carolina school psychologists responding to this study.

Redefining the Sample

A review of demographics collected via the Data Form combined with the knowledge that Charlotte/Mecklenburg Schools (the largest system in the state) uses a model for delivery of school psychological services that differs significantly from other systems, raised questions about the appropriateness of considering all respondents as members of the same population. Elementary school psychological services in Charlotte/Mecklenburg are

provided by Student Services Specialists. The tripartite role of Student Services Specialists includes duties and responsibilities normally included in the job description of school psychologist, school social worker, and guidance counselor. Figure 4 depicts the varied roles that comprise the job of Student Services Specialist. At initial implementation, people holding certification in any one of the three areas were allowed to add to their primary training. Currently, school psychology must be the primary area of training, with additional coursework and certification in social work and guidance counseling. Performance appraisal includes major functions of all three roles.

Typically, the Student Services Specialist serves one elementary school with 200 to 900 students. They are school-based with the principal considered to be their primary supervisor. Although duties and responsibilities tend to be defined by the characteristics of the school population, Student Services Specialists usually spend a large proportion of their time engaging in social work activities, do few evaluations (approximately 25 per year), and usually do not do therapy (Lisbet Nielsen, personal communication, July 21, 1989; Kathy Durban, personal communication, September 14, 1989).

When completing the Data Form, a number of the

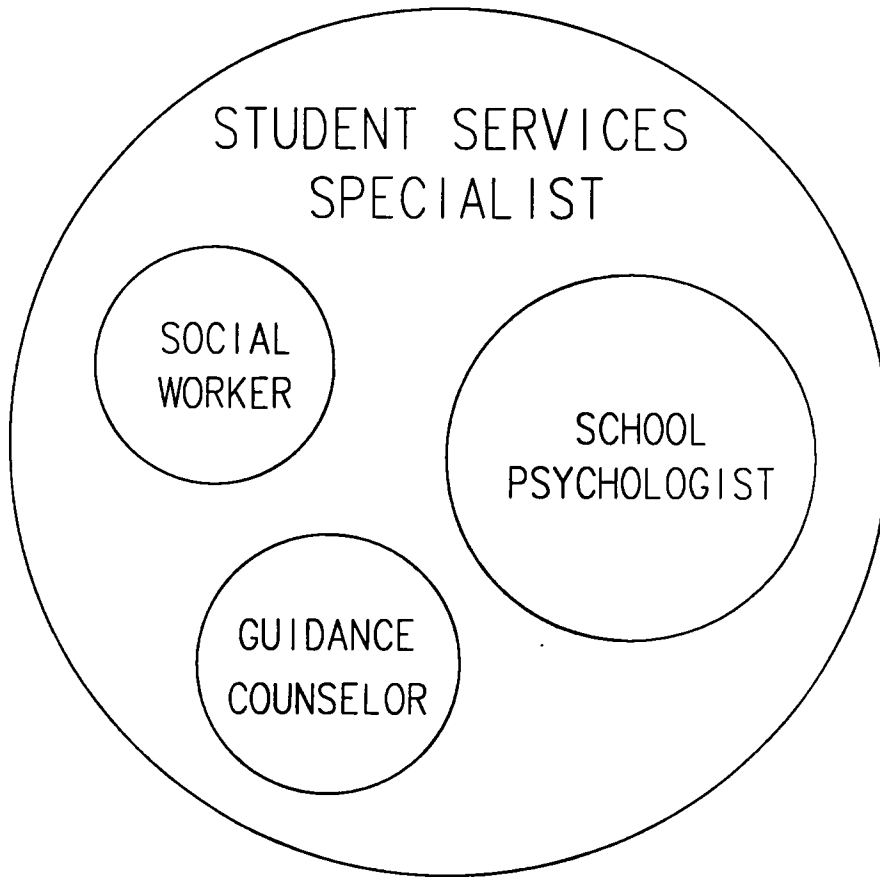


Figure 4. The role of the Student Services Specialist. The tripartite role of Student Services Specialist used by Charlotte/Mecklenburg schools for elementary and middle school services differs significantly from the standard job description utilized by North Carolina school systems. At the time of this study, components of appraisal instruments for social worker, guidance counselor and school psychologist were combined to appraise the Student Services Specialist.

respondents employed as Student Services Specialist questioned the appropriateness of including them in a study of school psychology practitioners. In addition, Student Services Specialists have a different job description, are evaluated on different performance standards, are employed by a single urban school system, have a lower student-to-psychologist ratio, do fewer evaluations, and report characteristics of supervision that are different from most North Carolina school psychologists. Thus, it appeared worthwhile to analyze the path model shown in Figure 3 separately for school psychologists employed within and outside of Charlotte/Mecklenburg. Small sample size and maintenance of respondent confidentiality prevented the presentation of a separate path model based on data collected from participants employed by the Charlotte/Mecklenburg system. The results of the analysis for psychologists excluding Charlotte/Mecklenburg are presented below.

Effects on Job Satisfaction Excluding
Charlotte/Mecklenburg School Psychologists

Comparison of the roles of Student Services Specialist and school psychologist provides ample justification for separating these heterogeneous groups. Therefore, results presented in this section are based on the revised data set which excludes respondents from the Charlotte/Mecklenburg

system. Table 21 presents variable means, standard deviations, and intercorrelations used in path analysis of a second model based on the revised data set.

Figure 5 depicts the effects of age, degree, years of experience, urban versus rural settings, student-to-psychologist ratio, salary per month, characteristics of supervision, role diversity, and boundary role activities on job satisfaction for North Carolina school psychologists with duties and responsibilities limited to the practice of school psychology. Boundary role activities continued to have the strongest direct effect (path = .26) on job satisfaction. In addition, salary per month (path = .26), characteristics of supervision (path = .20), and role diversity (path = .17) also had significant effects on job satisfaction. Age, years of experience, degree status, and student-to-psychologist ratio had no direct effect on job satisfaction.

Indirect effects were calculated by multiplying and summing paths. Inspection of the path model revealed significant indirect effects for urban versus rural settings (path = -.16) and role diversity (path = .09) on job satisfaction. Urban versus rural settings had an influence on both salary per month (path = -.22) and characteristics of supervision (path = -.52) which in turn affected job satisfaction. In addition to having a

Table 21
 Variable Correlations, Means, and Standard Deviations for North Carolina School Psychologists
 Excluding Charlotte/Mecklenburg

Variables	1	2	3	4	5	6	7	8	9	10
1. Age	1.00									
2. Degree	.16	1.00								
3. Years of Experience	.61	.10	1.00							
4. Urban/Rural Community	.03	-.19	-.02	1.00						
5. Student to Psychologist Ratio	.23	.04	.12	.14	1.00					
6. Salary Per Month	.59	.27	.60	-.24	.05	1.00				
7. Characteristics of Supervision	-.09	.11	-.08	-.53	-.28	.10	1.00			
8. Role Diversity	-.03	.08	-.02	-.04	-.15	.01	.06	1.00		
9. Boundary Role Activities	-.01	-.02	.01	.01	-.03	.06	-.08	.32	1.00	
10. MMSQ Total Job Satisfaction	.02	.03	.00	.06	-.05	.17	.16	.26	.32	1.00
<u>M</u>	38.75	2.27	9.24	1.61	3159.57	2670.01	-.05	7.50	17.67	283.14
<u>SD</u>	8.25	.76	5.63	.49	1821.53	430.03	2.35	6.00	8.20	34.72

Note: \bar{n} = 199; minimum pairwise \bar{n} = 175

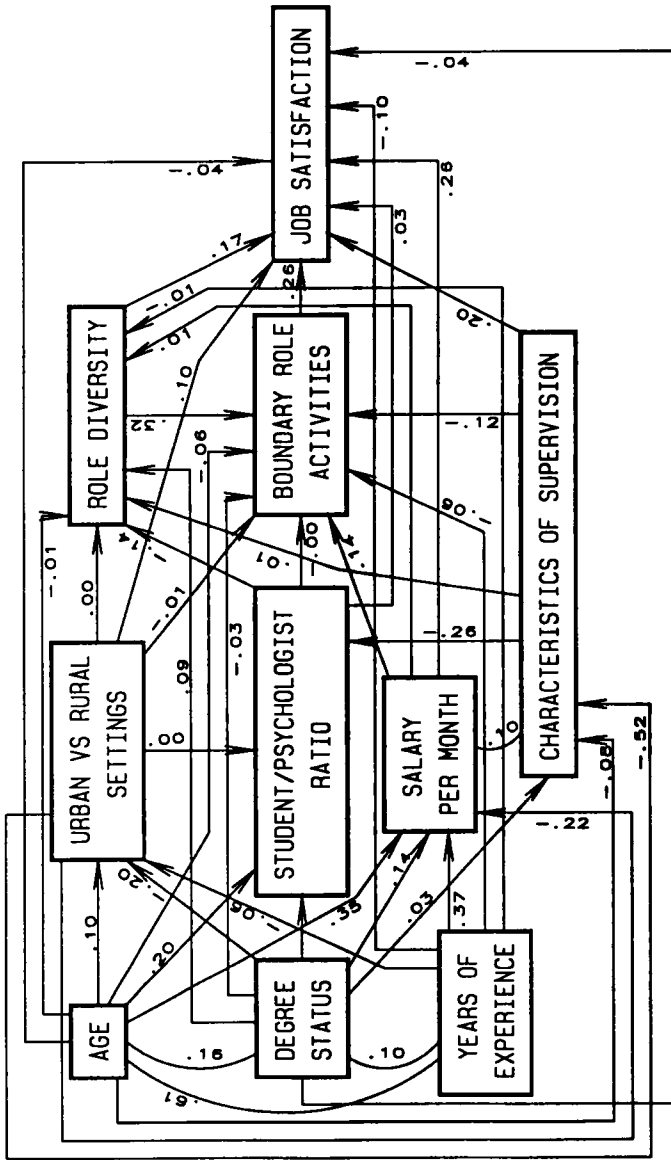


Figure 5. The effects of age, degree status, years of experience, urban vs. rural settings, student-to-psychologist ratio, salary per month, characteristics of supervision, role diversity, and boundary role activities on job satisfaction for North Carolina school psychologists excluding Charlotte/Mecklenburg.

meaningful direct effect of job satisfaction, role diversity is necessary if practitioners are to engage in boundary role activities (path = .32). These results suggest that lower salaries and substandard supervision, common in rural communities, negatively influences job satisfaction. This negative indirect effect is somewhat nullified by a positive direct effect. In addition, engaging in boundary role activities necessitates divergence from the standard role of the psychodiagnostician, which in turn increases involvement in nontraditional activities and enhances job satisfaction.

Direct and indirect effects were summed to determine total effects. Table 22 shows that salary per month, characteristics of supervision, role diversity, and boundary role activities all have important total effects on job satisfaction for the Charlotte-excluded subsample. In other words, it appears that North Carolina school psychology practitioners who are better paid, receive adequate supervision, are allowed to make better use of the skills they acquired during training, and engage in boundary role activities are more satisfied with their jobs.

Table 22

Direct, Indirect, and Total Effects of Age, Degree, Years of Experience, Urban vs. Rural Communities, Student-to-Psychologist Ratio, Salary per Month, Characteristics of Supervision, Role Diversity and Boundary Role Activities on Job Satisfaction for North Carolina School Psychology Practitioners Excluding Charlotte/Mecklenburg

Variable	Effects		
	Direct	Indirect	Total
Age	-.045	.066	.021
Degree	-.040	.063	.023
Years of Experience	-.109	.104	-.005
Urban/Rural	.104	-.159*	-.055
Student/Psychologist Ratio	.033	-.038	-.006
Salary Per Month	.263*	.039	.302*
Characteristics of Supervision	.202*	-.028	.173*
Role Diversity	.171*	.086*	.257*
Boundary Role Activity	.264*	.000	.264*

Note: $n = 175$
 $*p < .05$

Chapter V

DISCUSSION AND RECOMMENDATIONS

The research questions provided the framework for this chapter. Chapter V summarizes, synthesizes, and integrates the findings of the presented study. The first section reviews methodology used in the presented study. Next, a summary of findings and pertinent conclusions are presented for each research question. Section three discusses results of the study, and section four outlines implications of the findings. The final section presents recommendations for future study and for the profession, respectively.

Review of Methodology

This study was designed to investigate job satisfaction for school psychology practitioners employed by North Carolina public schools. A list of 463 North Carolina school psychologists was developed by cross-referencing the 1988-89 Directory for the North Carolina School Psychological Association with a roster of school psychologists employed by the North Carolina Department of Public Instruction during the 1988-89 school year. Duplications and undeliverable packets reduced the population to 453 subjects. Survey packets containing a Data Form and Modified Minnesota Satisfaction Questionnaire were mailed to survey participants and follow-up packets

were sent to non-respondents. Finally, telephone calls were made to those who did not respond to previous mailings. Three hundred and ninety-nine people responded to the request for information, yielding a return rate of 88.08%. By definition, subjects for this study were limited to full-time practitioners which automatically excluded 128 respondents, who reported another primary role designation, from the sample used for data analysis. In addition, nine of the surveys failed to meet the criterion for completion. Final statistical analysis was conducted on 262 cases.

Percentages were calculated for descriptive demographic data. Composite scores were derived for characteristics of supervision, role diversity, and boundary role activities. Responses to the MMSQ provided scores for the 20 job satisfaction subscales and the overall job satisfaction index. A hierarchical arrangement of subscales was used to determine major components of job satisfaction and dissatisfaction for North Carolina school psychologists. Finally, path analysis was used to determine direct, indirect, and total effects of selected demographic variables, system variables, professional activities, and boundary role activities on job satisfaction of North Carolina school psychologists.

Summary of Results and Conclusions

The research questions provide the structure for summarizing the results and conclusions of this explanatory research.

1. With which aspects of their jobs are North Carolina school psychologists most satisfied?

Results of this study indicate that most North Carolina school psychologists are satisfied with their jobs. Two measures of job satisfaction were collected in the course of this study. Expressed job satisfaction was measured by a single Data Form item that asked respondents, "Overall, how satisfied are you with your present position?", while measured job satisfaction was derived from total job satisfaction score on the MMSQ. Means for expressed and measured job satisfaction were found to be significantly different at the .0001 level of significance with subjective statements indicating higher job satisfaction.

Based on total scores for the MMSQ no North Carolina school psychologists were very dissatisfied with their jobs, but 20.56% were dissatisfied with their jobs. A majority, 78.23%, attained scores that fell in the satisfied range, and 1.6% were very satisfied.

North Carolina school psychologists reported satisfaction with 17 of the 20 subscales of the MMSQ that comprised the total job satisfaction index. The

opportunity for social service, co-worker relationships, moral value, activity, and independence headed the list of areas of satisfaction. School system policies and practices, opportunities for advancement, and compensation fell in the dissatisfied range. These findings were consistent with the results of previous job satisfaction studies of school psychologists.

2. Of the variables identified in previous research, which influence overall job satisfaction among North Carolina school psychologists?

The path model presented in Chapter I hypothesized that job satisfaction for North Carolina school psychologists was affected by personal variables (age, degree, years of experience) and system variables including urban versus rural communities, student-to-psychologist ratio, salary per month, characteristics of supervision, role diversity, and opportunity to engage in boundary role activities.

Analysis suggested that personal variables are not important determinants of job satisfaction for North Carolina school psychologists. Boundary role activities and characteristics of supervision were the only variables found to have meaningful direct effects on job satisfaction. However, role diversity did indirectly influence job satisfaction through boundary role

activities. Total effects for salary per month, characteristics of supervision, role diversity, and boundary role activities on job satisfaction were found to be significant at the .05 level.

Wording of this research question assumes that subjects included in the sample were members of a homogeneous population. However, accumulated evidence including divergent patterns in demographic information collected in this study, knowledge of models for delivery of school psychological services used in the state, and differences in job titles and job descriptions implied the presences of divergent populations within the same sample; Charlotte/Mecklenburg Student Services Specialists and other North Carolina School Psychologists. Therefore, Charlotte/Mecklenburg was deleted from the sample and the data were analyzed again. Generally, trends remained fairly consistent regardless of the inclusion or deletion of respondents from Charlotte/Mecklenburg, however differences were noted in path values and levels of significance for direct, indirect, and total effects.

When Charlotte/Mecklenburg was excluded, the number of variables found to have significant direct effects on job satisfaction doubled. Salary per month, characteristics of supervision, role diversity, and boundary role activities were all found to have a significant influence on job

satisfaction. Urban versus rural settings indirectly and negatively affected job satisfaction through salary per month and characteristics of supervision. Urban psychologists earned higher salaries and received supervision more consistent with standards established by APA and NASP. Psychologists who receive appropriate supervision and higher salaries are more satisfied. Conversely, opportunities for role diversity and engaging in boundary role activities do serve to increase job satisfaction for rural psychologists. Role diversity influenced boundary role activities which in turn increased job satisfaction. Again, significant total effects were found for salary per month, characteristics of supervision, role diversity, and boundary role activities. As noted earlier, personal variables were not important influences on job satisfaction.

3. Does the opportunity to engage in boundary role functions influence job satisfaction?

The opportunity to engage in boundary role activities surfaced as one of the dominant positive influences on job satisfaction for both the total sample and the subsample which excluded respondents from the Charlotte/Mecklenburg system. Role diversity was the only variable found to have a significant positive effect on boundary role activities. These results suggest that school psychologists who are

involved in decisions concerning the acquisition and dissemination of information, who participate in program development, and who serve as a liaison between their school system and community agencies are happier with their jobs.

Discussion

Consistent with the stated format of this chapter, three research questions provided the framework for discussion of findings derived from this study.

Variables Affecting Overall Job Satisfaction

When compared to previous studies of job satisfaction for school psychologists (Anderson, 1982; Levinson, 1983; Solly, 1983), indications are that North Carolina school psychology practitioners are slightly less satisfied than respondents to the national study, but are more satisfied than participants of studies in Virginia and West Virginia. Consistent with previous studies, North Carolina school psychologists report having the respect of the community (social service), relationships with co-workers, not being asked to do things to which they are morally opposed (moral value), staying busy (activity), and working alone (independence) as being positive aspects of their jobs. Advancement and policies and practices were rated as areas of dissatisfaction for all three studies. North Carolina and West Virginia respondents were also dissatisfied with compensation.

The dual dilemma of low compensation and limited opportunities for advancement are clearly interdependent. In the state of North Carolina, entry level for the position of School Psychologist II requires advanced certification, but the state salary structure places most school psychologists on the same schedule as classroom teachers who can enter their profession with undergraduate degrees. Opportunities for advancement in public schools are generally limited to administrative positions that require teacher certification which most school psychologists do not have. Since most school psychologists typically cannot access the administrative ladder, the position has the unique status of concurrently being an entry level and a terminal position. The negative impact on recruitment for both training programs and positions seems a likely natural consequence.

A Model of Job Satisfaction for North Carolina

School Psychologists

Theories of job satisfaction and previous research specific to job satisfaction for school psychologists, resulted in the model (See Figure 1) presented in Chapter I. Data collected in this study were used to derive path values shown in Figure 3. After reviewing demographic data, delivery systems for school psychological services used in the state, job titles, and job descriptions for study

participants, evidence indicated that the inclusion of respondents from Charlotte/Mecklenburg Schools violated the assumption that all respondents were members of a homogeneous population. Path analysis was then conducted using a subsample that excluded respondents from Charlotte/Mecklenburg Schools (See Figure 5).

Results of this study support Munchinsky's (1983) contention that job differences are more important than people differences. Personal variables including age, degree status, and years of experience did not significantly influence job satisfaction for North Carolina school psychologists. However, system variables including the opportunity to engage in boundary role activities, role diversity, salary per month, and characteristics of supervision had significant effects on job satisfaction for North Carolina school psychologists with job descriptions limited to school psychology services.

Findings further indicate that job satisfaction for school psychology practitioners is substantially influenced by the opportunity to engage in boundary role activities and experience role diversity. Moreover, practitioners who are better paid, and who experience quality supervision consistent with best practices established by NASP and APA, are more satisfied with their jobs. In addition, urban versus rural settings was found to affect both salary per

month and characteristics of supervision which in turn influenced job satisfaction.

It is not surprising to find that older school psychologists with more years of experience and advanced training earn higher salaries. Practitioners who work in rural settings are less likely to have their doctorates, usually earn less money, and probably are not adequately supervised. Finally, in settings with high student-to-psychologist ratios, practitioners are usually older and are less likely to receive supervision consistent with standards delineated in best practices. Unfortunately, it seems likely training for the aforementioned psychologists may be less recent, resulting in limited exposure to current trends in the field.

Influences of Boundary Role Activities on Job Satisfaction

Based on their job description, school psychologists are boundary role professionals because they must interact with multiple community agencies in order to accomplish their jobs. Participants in this study report that the opportunity to engage in boundary role activities is a primary contributor to their job satisfaction.

Furthermore, data also indicates that in order for school psychologists to engage in boundary role activities they must make full use of the diverse skills they receive in training. Thus, boundary role activities and role

diversity are interdependent, and essential for school psychologists to experience job satisfaction.

By encouraging school psychologists to participate in interagency councils which also serve to open lines of communication with other agencies in the human services delivery system, school systems can not only expand available services for their students, but can also enhance job satisfaction for valuable employees. Role diversity, the utilizing of the broad range of skills acquired during training, increases options available for problem solving and expands services available to parents, students, and faculty, while simultaneously increasing school psychologists' satisfaction with their jobs. These options for job enrichment are available to even the most isolated rural school system with the lowest tax base.

Implications of the Study

Historically, studies of job satisfaction for school psychologists have been exploratory in nature, focusing primarily on factors that predict job satisfaction. Building on theory, logic, and previous research, this study developed a theoretical model designed to explain job satisfaction for North Carolina school psychology practitioners. The results have implications for trainers, employers, and practitioners.

1. Responses to the Modified Minnesota Satisfaction

Questionnaire indicated that most North Carolina school psychologists are satisfied with most aspects of their jobs. Consistent with previous studies, they value the opportunity to be of social service and interactions they have with their co-workers. Participants believe they perform a job that increases the quality of life for those who receive their services. They describe their jobs as demanding enough to keep them busy and they like having the opportunity to function independently. Conversely, North Carolina school psychologists express dissatisfaction with school system policies and practices, believe that they do not have adequate opportunity for advancement, and think that compensation is not commensurate with the demands of their job.

2. Compared with previous studies, there is a slight upward trend in the number of school psychologists pursuing degrees beyond requirements- for initial certification. Although these findings are specific to North Carolina school psychologists, they are consistent with reported national trends (Curtis & Zins, 1989).
3. Although most respondents indicated that they would probably remain in school psychology for the duration of their working lives, all but sixty people expressed an interest in changing positions. Thirty-seven respondents

indicated an interest in school psychology positions outside the state of North Carolina. This finding is of special concern because at the beginning of the 1988-89 school year, the North Carolina Department of Public Instruction reported at least 50 unfilled positions.

4. These results suggest that adequate supervision positively affects job satisfaction. However, a vast majority of respondents (83.7%) report provision for supervision below national trends and standards established by best practices. Approximately half (51.55%) of North Carolina's practitioners have supervisors with training in school psychology, but only 37% of these supervisors have doctorates. Provisions for supervision consistent with standards prescribed as best practices would increase job satisfaction, and might also enhance the quality of services provided by the practitioner as well as facilitate recruitment.
5. In the case of professionals, research has shown a positive correlation between job satisfaction and job productivity (Petty, McGee & Cavender, 1984). One of the stated objectives of this study was to provide school systems with knowledge of manipulable variables that could be used to enhance job satisfaction for their school psychologists. School systems can insure that the role of school psychologist includes opportunities

to work with other community agencies when making decisions about meeting the needs of students.

Expectations of the psychologist should extend beyond the restricted role of psychodiagnostician to include such activities as crisis counseling, psychoeducational interventions, development of behavioral management programs, and in-service presentations. Although salary increases may be a little more difficult to manage for an individual system, some systems currently pay their psychologists on a supervisory salary scale with local supplements. In addition, administrators can advocate upgrading the salary schedule for school psychologists.

6. School psychologists who make full use of the wide array of skills they mastered during training report higher levels of job satisfaction and are more involved in boundary role activities.

Recommendations for Future Research

1. It is recommended that this study be replicated with a national sample of school psychology practitioners to see if the model developed in the course of this study is applicable at the national level.
2. Both previous research and the present study have found the Modified Minnesota Satisfaction Questionnaire to be a reliable instrument with good internal consistency. Thus, it is recommended that future research in the

area of job satisfaction use the short-form of the MMSQ. The short form of the MMSQ consists of 20 questions and three subscales (Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction).

3. The personal variables included in this study are demographic in nature. Boundary role professionals such as school psychologists must be able to cope with multiple stressors and have good communication skills. Consequently, personality characteristics which influence an individual's ability to engage effectively in interpersonal relationships are necessary for successful execution of boundary role positions. Thus, it is recommended that this study be expanded to explore individual characteristics such as internal and external locus of control, self-concept, and the interpersonal communication skills which supposedly are necessary for successful job performance.
4. Further investigation of boundary role functions for school psychologists and characteristics that facilitate successful execution of these functions is strongly recommended.
5. Do school psychologists who provide a diversity of services provide better services? A study surveying school psychologists and their resource teachers would afford a basis for comparing perceptions of service

providers and consumers.

6. The presented investigation of supervision should be extended beyond simple characteristics to include quality of supervision.

Recommendations for the Profession

The findings of this study provide the basis for the following recommendations for the profession of school psychology, the North Carolina Department of Public Instruction, school systems in the state, organizations presenting the profession, and professors of school psychology.

1. Although implications of the presented model of job satisfaction are limited to North Carolina school practitioners and can not be generalized to other states because of the sample used in the study, this study does represent the first attempt at explaining which variables contribute to job satisfaction for school psychology practitioners. Individual practitioners, state departments of public instruction, training programs, and national and state organizations may find this model helpful when determining what variables contribute to job satisfaction for the field as a whole.
2. Although North Carolina school psychologists are generally satisfied with their jobs, results of the

MMSQ did indicate dissatisfaction with policies and practices of school systems, limited opportunities for advancement, and compensation. Previous research documents the same concerns at the national level as well as for the states of Virginia and West Virginia. It is recommended that state and national organizations continue to focus lobbying efforts on clarification of the position of school psychologist within the organizational structure of public education. Given the influence that salary had on job satisfaction, the North Carolina School Psychology Association should continue its efforts to get all school psychologists moved to the administrators' salary schedule.

3. Superintendents, Directors of Exceptional Children Programs, and administrators in charge of Student Support Services in the state of North Carolina need to be made aware of the important influence boundary role activities and role diversity have on job satisfaction for school psychologists. A joint effort by the North Carolina School Psychology Association and the state Department consultant for School Psychology to inform administrators of the wide range of services that school psychologists can perform is recommended.
4. School psychologists hold primary responsibility for defining their roles within the context of the larger

organization. Although school psychology training programs provide their graduates with a wide range of technical skills, they typically fail to include courses in organizational structure needed to accomplish effectively organizational change. Training programs should review their curricula to determine if they adequately prepare their graduates to meet all of the demands placed on them.

5. Supervision standards that are consistent with best practices recommended by NASP and APA not only help to assure the quality of psychological services, but also were found to increase job satisfaction for North Carolina school psychology practitioners. This finding adds credence to the call for quality supervision support by NASP and APA, and underscores the increased need for school psychologists with doctoral level training.

Summary

Most North Carolina school psychology practitioners report that they are satisfied with their jobs. Subscales on the MMSQ that were identified as being as primary areas of job satisfaction included social service, co-workers, moral value, activity, and independence. North Carolina school psychologists were dissatisfied with advancement, compensation and policies and practices of their school

systems. These findings were consistent with previous studies.

Charlotte/Mecklenburg Student Services Specialists were excluded from the sample of North Carolina school psychology practitioners because they represent a divergent subsample of North Carolina practitioners. Path analysis was used to determine direct, indirect, and total effects of selected variables on job satisfaction. Using the redefined sample, boundary role activities, role diversity, salary per month, and characteristics of supervision were found to have significant direct effects on job satisfaction. In addition, role diversity also influenced job satisfaction through boundary role activities. Urban versus rural setting indirectly influenced job satisfaction through both salary per month and characteristics of supervision. Implications of the study were discussed, suggestions for future research were presented, and implications for the profession were summarized.

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APPENDICES

APPENDIX A

No. _____

DATA FORM

The following information is needed from all North Carolina School Psychologists cooperating with this study.

Q- 1 What is your primary role designation?

_____ Practitioner employed by a county or city school system

_____ Practitioner employed by the North Carolina Department of Corrections

_____ Trainer of School Psychologist

_____ Supervisor/Administrator

_____ Other (Please Specify) _____

*****PRACTITIONERS PLEASE CONTINUE*****

Q- 2 How many school psychologists are employed by your school system?

Number of full-time _____

Number of part-time _____

Q- 3 How many students are enrolled in your school system? _____

Q- 4 What is your average annual evaluation case load? _____

Q- 5 How is your school system best described?

_____ urban

_____ rural*

Q- 6 What is the role designation of your primary supervisor?

_____ Director/Coordinator/Supervisor of Psychological Services or Chief Psychologist

_____ Director/Coordinator/Supervisor of Special Education/Pupil Personnel Services

_____ Other (Please Specify) _____

*Rural: Number of inhabitants fewer than 150 per square mile or counties in which 60% or more of the population live in communities no larger than 50,000 inhabitants (Helge, 1985).

Q- 7 What is the level of training of your primary supervisor?

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

Q- 8 What is the area of training of your primary supervisor?

- General Education
 School Psychology
 Special Education
 Education Administration
 Unknown
 Other (Please Specify) _____

Q- 9 What is your estimate of the number of years you will remain in your present position? _____

Q-10 What is your estimate of the number of years you will remain in the profession of school psychology? _____

Q-11 If you intend to leave your present position, what is your planned direction of movement?

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

Q-12 Overall, how satisfied are you with your present position?

- Very Dissatisfied
 Dissatisfied
 Satisfied
 Very Satisfied

Q-13 Please estimate the approximate number of hours during an average week you spend working within each area listed below:

- | | Actual Hours |
|--|--------------|
| a. Psychoeducational Assessment
(e.g., administering, scoring tests,
and reviewing records) | _____ |
| b. Report Writing | _____ |
| c. Interviewing parents, teachers and
others significant to the case | _____ |
| d. Classroom Observations | _____ |
| e. Interpreting and explaining
assessment results to parents,
teachers or others | _____ |
| f. Staffing/SBC Meetings (e.g., initial
placement, end of year review, three-year
review, conferences) | _____ |
| g. Direct Intervention (e.g., individual
or group counseling of students or parents,
time spent following up this type inter-
vention | _____ |
| h. Indirect Intervention (e.g., develop-
ment of a behavior modification program
to be implemented by others, teacher
consultation, team meetings, time spent
following up this type intervention) | _____ |
| i. Inservice Presenter (e.g., presenting
a workshop for teachers) | _____ |
| j. Professional Development (attending
inservice, classes) | _____ |
| k. Research (including your own research
and reviews of research in preparation for
interventions, inservices, etc.) | _____ |
| l. Supervision of Practicum or
Intern Students | _____ |
| m. Administrative Duties
(compiling rosters, monthly logs,
supervising other psychologists) | _____ |
| n. Other _____ | _____ |

Q-14 How often do you engage in the following professional activities: (Please check appropriate column.)

	Never	Once a Month	Monthly	Weekly	Daily
a. Formally provide information to groups outside your school system designed to create a favorable image of your system.					
b. Informally provide information to groups outside your school system designed to create a favorable image of your system.					
c. Exercise primary responsibility for deciding on the external resources necessary for supplementing or enhancing the programs offered by your system (e.g., funds, equipment, special therapy or training, testing).					
d. Exercise primary responsibility for deciding when to acquire the external resources to supplement or enhance programs offered by your system (e.g., special training, therapies, testing, funds, or equipment).					
e. Decide what portions of information acquired from sources outside your system to transmit to others within the system who will make use of it.					
f. Decide when to transmit to others in your school system information acquired in your dealings with sources outside the system.					
g. Decide to whom information received from outside your school system should be conveyed.					
h. Acquire information formally from specific individuals or groups outside your school system that is needed by your department within the system (e.g., professional organizations, community agencies consultants).					
i. Acquire information informally from specific individuals or groups outside your school system that is needed by your department within the system.					
j. Meet with students and their parents to recommend specific services or programs within your system.					
k. Meet with students and their parents to recommend specific services or programs outside your school system.					
l. Decide on what kinds of students and services or programs your school system will pursue (conduct or develop).					
m. Monitor other services being offered by your community or in other districts in order to provide effective services in your own school system.					

Q-15 Please indicate your age. _____

Q-16 What is your current degree status?

_____ BA/BS

_____ MA/MS

_____ MA/MS + 30 sem (60 sem hours, 90 qt hours total)

_____ Ed.S/CAS

_____ Doctorate

_____ Other (Please explain _____)

Q-17 Are you currently continuing your education or pursuing a degree?

_____ yes

_____ no

If so, indicate degree and area of study _____

Q-18 How many years of experience do you have as a school psychologist?

_____ years

Q-19 What is the length of your current contract in days?

_____ days

Q-20 Indicate your annual salary. _____

PLEASE CONTINUE

APPENDIX B

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.

Keep 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.

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

	VDS	DS	N	S	VS
On my present job, this is how I feel about . . .					
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 worthwhile.....					
60. Being able to stay busy.....					
61. The chance to do things for other people.....					
62. The chance to develop new and better ways to do the job.....					
63. The chance to do things that don't harm other people.....					
64. The chance to work independently of others.....					
65. The chance to do something different every day.....					
66. The chance to tell people what to do.....					
67. The chance to do something that makes use of my abilities.....					
68. The chance to be important in the eyes of others.....					
69. The way company policies are put into practice.....					
70. The way my boss takes care of 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?

S 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 . . .					
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 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 in North Carolina, 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.

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 conditions (heating, lighting, etc.) on 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.....	_____	_____	_____	_____

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
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 chances of 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.....	___	___	___	___
51. The way my job provides for steady employment.....	___	___	___	___
52. How my pay compares with that of similar positions in other school systems..	___	___	___	___
53. The pleasantness of the working conditions.	___	___	___	___
54. The way promotions are given out on this position.....	___	___	___	___

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
55. The way my supervisor delegates work to other 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 worthwhile.....	_____	_____	_____	_____
60. Being able to stay busy.....	_____	_____	_____	_____
61. The chance to do things for other people...	_____	_____	_____	_____
62. The chance to develop new and better ways to do the job.....	_____	_____	_____	_____
63. The chance to do things that don't harm other people.....	_____	_____	_____	_____
64. The chance to work independently of others	_____	_____	_____	_____
65. The chance to do something different every day.....	_____	_____	_____	_____
66. The chance to tell people what to do.....	_____	_____	_____	_____
67. The chance to do something that makes use of my abilities.....	_____	_____	_____	_____
68. The chance to be important in the eyes of others.....	_____	_____	_____	_____
69. The way school system policies are put into practice.....	_____	_____	_____	_____
70. The way my supervisor takes care of complaints brought to him/her by the staff	_____	_____	_____	_____
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 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..	_____	_____	_____	_____

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
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 FOR YOUR COOPERATION

Appendix D
Survey Letters

PEGGY R. SOUTH, M.A.

P. O. BOX 507
BOONE, NC 28607

LICENSED PSYCHOLOGIST
PSYCHOLOGICAL ASSOCIATE
LICENSED NO. 372
CERTIFIED SCHOOL PSYCHOLOGIST II

TELEPHONE 1-704-264-5277

June 13, 1988

Coordinator, Vocational Psychology Research
University of Minnesota
Department of Psychology
Elliott Hall
75 East River Road
Minneapolis, Minnesota 55455

Dear Sir:

The purpose of this letter is to formally request permission to make limited revisions in the Minnesota Satisfaction Questionnaire.

I am a doctoral student at Virginia Tech in the area of Vocational School Psychology. After reviewing potential dissertation topics, I have decided to focus on the impact of job satisfaction on the role of the school psychologist practicing in the state of North Carolina. Model development will be addressed. A review of the literature revealed three dissertations by prior Virginia Tech graduate students with a similar focus. Dissertations completed by William Tucker Anderson (1982), David Solly (1983) and Edward Levinson (1983) used a modified form of the Minnesota Satisfaction Questionnaire. The aforementioned authors requested and were granted permission to make limited revisions in the MSQ for the purpose of enhancing face validity for school psychologists. Copies of letters from your department granting permission for revisions are included with this correspondence. Upon completion of this study, I will provide your department with a copy of my dissertation.

Your attention to this request is greatly appreciated. Please contact me at 704-264-5277 (home) or 919-667-1121 (office) if further information is needed.

Sincerely,

Peggy'H. South
Doctoral Candidate
Vocational School Psychology
Virginia Tech



UNIVERSITY OF MINNESOTA
TWIN CITIES

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

July 27, 1988

Peggy South, M. A.
PO Box 507
Boone, NC 28607

Dear Ms. South:

Thank you for your interest in materials published by Vocational Psychology Research. Our instruments are all copyrighted and therefore we only allow photoduplication or modification in certain circumstances. In your case we may be willing to grant permission for your request but first we need the following:

1. A brief description of the study and why it is necessary for you to copy rather than purchase the booklets.
2. Payment of royalty fees of \$.30 for the Long Form or \$.15 for the Short Form for each booklet you will be creating or photocopying.

After we receive the above we will grant permission if applicable. Please be sure to contact us if you have any questions or concerns.

Sincerely,

Bill Handschin
Assistant Director
Vocational Psychology Research

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PEGGY R. SOUTH, M.A.
P. O. BOX 507
BOONE, NC 28607

LICENSED PSYCHOLOGIST
PSYCHOLOGICAL ASSOCIATE
LICENSED NO. 372
CERTIFIED SCHOOL PSYCHOLOGIST II

TELEPHONE 1-704-264-5277

December 10, 1988

Theodore R. Drain
Assistant State Superintendent,
Support Services
Department of Public Instruction
116 W. Edenton Street
Raleigh, North Carolina 27603-1712

Dear Mr. Drain:

This correspondence is a follow-up to our telephone conversation of 5 December, 1988 in which I informally requested your endorsement of my doctoral research. Briefly in reivew, I have been employed as a school psychologist for Wilkes County Schools for the past ten years. Currently, I am working on my doctorate at Virginia Tech in Vocational School Psychology which emphasizes secondary psychological services. My cognate is in Industrial and Organizational Psychology.

Over the past two decades research has explored variables that predict job satisfaction for school psychologists. Although prediction is a necessary first step in understanding the influences on job satisfaction, it does not tell us the extent to which one variable influences another; for that, an explanatory approach is needed. In this vein, I plan to use path analysis to test a model of job satisfaction for North Carolina school psychologists. A draft of my first three chapters is included with this letter.

Participants will include certified school psychology "practitioners" serving elementary, middle and high school students in the state of North Carolina. Instrumentation includes a data form and the Minnesota Satisfaction Questionnaire. Prescribed data collection procedures require that letter of endorsement accompany the survey packet.

Information gained through this research will be useful to school psychology training programs, prospective employers, the North Carolina Department of Public Instruction, organizations representing school psychologists, and to practioners themselves. Recruitment and long range planning activities will also be facilitated.

I have requested and received a list of school psychologists positions in the state from the School Psychology Section. Both Carolyn and Cynthia indicated that this list is not current but to date it's the best they have to offer. Would it be possible to get a list of all school psychologists currently certified by the Division of Certification?

Sincerely,

Peggy South
Licensed/Certified School Psychologist II



**NORTH CAROLINA
DEPARTMENT OF
PUBLIC INSTRUCTION**

**CRAIG PHILLIPS
STATE SUPERINTENDENT**

16 West Edenton Street • Education Building
Raleigh • 27603-1712

**THEODORE R. DRAIN
ASSISTANT STATE SUPERINTENDENT
SUPPORT SERVICES**

December 29, 1988

Ms. Peggy R. South
P. O. Box 507
Boone, North Carolina 28607

Dear Ms. South:

Thank you for sharing with me your plans to test a model of job satisfaction for North Carolina school psychologists. As we plan for program growth and improvement, it is important that we understand those factors that contribute to the success of the people who work in those programs.

The information which should result from your research will be helpful not only to the Department of Public Instruction but to college and university training programs in planning appropriate pre-service and in-service training. It also will be beneficial to our agency and to local school systems in recruitment activities.

I endorse the concept which you have proposed and request that you share the results with us as soon as they are available.

Sincerely,

Theodore R. Drain

TRD/mh

PEGGY R. SOUTH, M.A.

P. O. BOX 507
BOONE, NC 28607LICENSED PSYCHOLOGIST
PSYCHOLOGICAL ASSOCIATE
LICENSED NO. 372
CERTIFIED SCHOOL PSYCHOLOGIST II

TELEPHONE 1-704-264-5277

January 10, 1989

Dear North Carolina School Psychologist,

As a school psychologist interested in relationships among factors that account for job satisfaction or dissatisfaction for school psychologists, I am requesting your help in the collection of data pertaining to such an investigation.

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

This study is primarily directed towards public school practitioners. Therefore, those North Carolina school psychologists 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 January 24, 1989. All information will be kept confidential; you will not, at any time, be identified with your responses. The number which appears on the form will be used to keep materials together and to aid in the follow-up of non-respondents. Only group scores will be reported. Please feel free to contact me at the above address for a copy of the results. In addition, results of this survey will be shared with the State Department of Public Instruction, Support Services and the Research Committee for the North Carolina School Psychological Association.

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

Sincerely, ,

Peggy South
Licensed/Certified School Psychologist II

PHS:lak

PEGGY R. SOUTH, M.A.

P. O. BOX 507

BOONE, NC 28607

LICENSED PSYCHOLOGIST
NORTH CAROLINA PSYCHOLOGICAL ASSOCIATE
LICENSED NO. 372
CERTIFIED SCHOOL PSYCHOLOGIST II

TELEPHONE 1-704-264-5277

January 25, 1989

Dear North Carolina School Psychologists,

I am writing to follow-up my survey of job satisfaction for school psychologists in North Carolina. To date, more than 49% of your fellow school psychologists have returned their completed materials.

My records indicate that you have not responded to my request for information. If you recently mailed your questionnaire, please disregard this letter. Perhaps you misplaced the materials or put them aside for response at a less busy time. The enclosed coffee is a small token of my thanks for your participation in this study. Won't you please take a few minutes and have a cup of coffee while you complete the materials?

This study is primarily directed towards public school practitioners. Therefore, North Carolina school psychologists 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 individual response, while confidential, is essential to the success of my study. Representativeness and validity of my results depend on the largest possible response rate.

Please respond by February 8, 1989. I look forward to hearing from you.

Sincerely,

Peggy South
Licensed/Certified School Psychologist II

PHS:lak

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