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Job satisfaction of school-based physical therapists

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JOB SATISFACTION OF SCHOOL-BASED PHYSICAL THERAPISTS

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requirements for the degree of

DOCTOR OF EDUCATION

by

Leonard Elbaum

1994

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This dissertation, written by Leonard Elbaum, and entitled "Job Satisfaction of Physical Therapists Working in Public Schools", having been approved in respect to style and intellectural content, is referred to you for judgement.

We have read this dissertation and recommend that it be approved.

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I dedicate this dissertation to Harry, Ruth, Louis, Esther, Lauren, Daniel, Sara, and Jacalyn.

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ABSTRACT OF THE DISSERTATION

JOB SATISFACTION OF PHYSICAL THERAPISTS WORKING IN PUBLIC SCHOOLS

by

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Florida International University, 1994

Professor Stephen Strichart, Major Professor

ABSTRACT:

Recruitment and retention of Physical Therapists (PTs) by public school systems has been identified in the literature as a significant problem, and the resultant shortage of school-based PTs hinders the capability of school systems to deliver physical therapy services to exceptional students as mandated by federal statute. The purpose of this study was to assess the level of job satisfaction among physical therapists who currently work in public school settings. Job satisfaction can be an important factor affecting recruitment and retention.

A systematic sample of 462 school-based PTs was chosen to receive via mail a survey instrument which requested information regarding age, gender, highest academic degree, salary, and various aspects of their working environment. In addition, the survey instrument included the Minnesota Satisfaction Questionnaire-Short Form(MSQ), and three open-ended questions. There was a 67% return rate.

The results of the study showed that the majority of PTs working in public schools are satisfied with their jobs. Their principal sources of satisfaction included the opportunity for social service, job security, creativity, flexibility, autonomy, and the opportunity to work with children and to see them succeed. They were dissatisfied with school policies and procedures, opportunities for advancement, quality of supervision, high caseloads, and limited space and equipment. It was concluded that school administrators charged with recruitment and retention of PTs should consider inclusion of PTs in supervision and in the development of policies and procedures. They should also consider enhancements of available space and equipment.

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Chapter I

Introduction

Background of the Problem

Federal law requires every public elementary and secondary school system in the United States to offer physical therapy services for children with physical impairments. The legislation containing this requirement includes the Education of the Handicapped Act (EHA) (PL 94-142), the EHA Amendments of 1986 (PL 99-457), and the Individuals With Disabilities Education Act of 1990 (PL 101-476). In spite of these mandates, many children with physical impairments are unable to obtain physical therapy services because public school systems have difficulty recruiting and retaining physical therapists (PTs). Forty-seven states report shortages of school-based physical therapists, and approximately 19% of budgeted positions nationwide are unfilled (US. Department of Education, 1992).

Physical Therapists (PTs) frequently find school-based practice unsatisfying, and hence they pursue employment elsewhere (Blossom & Ford, 1991). Much of this dissatisfaction may be traced to the need to work in an "educational model" versus the traditional "medical model" of service delivery. Educational models emphasize consultative roles with the goal of facilitating student participation in educational programs. In contrast, medical models of service delivery emphasize a hands-on approach with the goal of optimizing motor functions that have been lost via illness or injury.

If the factors that contribute to job satisfaction and dissatisfaction among school-based physical therapists could be described and explained,

administrators charged with recruiting and retaining PTs might be more successful in their recruitment and retention efforts. As a result of this success, more school children with physical impairments would receive therapeutic services.

Purposes of the Study

The purposes of this study were to:

1. describe factors which influence job satisfaction of physical therapists working in public school settings
2. assess the overall level of job satisfaction of physical therapists working in public school settings
3. describe the demographic characteristics and selected aspects of the work environment of school-based PTs
4. examine the relationships between level of job satisfaction, various demographic characteristics, and selected aspects of the work environment

Statement of the Problem

Recruitment and retention of physical therapists by public school systems has been identified as a significant problem throughout the United States (APTA, 1990). Smith-Davis and others at the University of Maryland (1984) performed a nationwide survey of departments of education in all 50 states, Puerto Rico, Guam, the US Virgin Islands, and the District of Columbia regarding shortages of special education personnel. They found that 36 of the 54 jurisdictions reported shortages of PTs. The University of

Maryland group repeated their study in 1986, and found the number of jurisdictions reporting shortages of physical therapy personnel had increased to 47 (McLaughlin, et al, 1986). Among these 47 jurisdictions were the most populous states of New York, California, Texas, and Florida. The US Department of Education, in a report to congress regarding the implementation of the EHA, stated that 3,177 PTs were employed in public schools nationwide, with 745 posted vacancies (US Department of Education, 1992).

A report issued in November 1992 by the Illinois State Board of Education stated that 82 PTs were employed directly by Illinois school systems. There were 20 unfilled positions, requiring that 929 hours of physical therapy service per week be contracted with outside agencies ("Illinois Schools," 1993). It was further reported that 44 additional budgeted positions were anticipated to open between the date of the report and November of 1997. They concluded that " . . . these figures indicate a shortage of physical and occupational therapy personnel that is quickly approaching crisis proportions." (p.3).

There is strong evidence that these figures may underestimate the shortage of PT's throughout the country. According to Catherine Knickerbocker, who coordinates Physical Therapy services for the Florida Department of Education/Bureau of Education for Exceptional Students, federal funding to school systems is dependent upon compliance with the EHA. Therefore, there is considerable reluctance among school administrators to report large numbers of vacancies (C. Knickerbocker, personal communication, July 8, 1993). Ms. Knickerbocker pointed out that many school systems contract with a private agency for the provision of

physical therapy services. When these systems file their annual reports to state and federal agencies, they are not required to report shortages of PTs, even when the contracting agency is unable to supply adequate numbers of PTs.

Further anecdotal evidence of this underestimation is available locally. According to Mary Beth Eby, PT/OT Coordinator for the Dade County Public Schools (which includes the Miami metropolitan area), only 7 of 35 budgeted positions are currently filled (M. Eby, personal communication, July 24, 1993).

In any business or profession, an important factor in recruitment and retention of employees is the level of job satisfaction they experience. The importance of job satisfaction increases when the unemployment level is low (Mobley, 1982). Because physical therapists have little difficulty obtaining positions, job satisfaction is likely to be an important factor in recruitment and retention of school-based PTs (APTA, 1987).

In summary, public schools are experiencing a shortage of PTs, and one of the reasons for this shortage may be the level of job satisfaction experienced by school-based PTs. Although there are many published studies of job satisfaction available in the literature, very few have been concerned with PTs, and none have investigated the job satisfaction of PTs working in public school settings.

Research Questions

The research questions were:

1. What is the overall level of job satisfaction among PTs working in public school systems in the United States?

2. What are the most important factors which contribute to job satisfaction and/or dissatisfaction within this group?

3. What are the demographic and work environment characteristics of school-based PTs for the following variables: age, gender, years of experience, type and level of training, location, salary, source of employment (independent contractor vs. direct hire) and type of setting (i.e. urban vs. rural)?

4. What are the relationships between level of job satisfaction, demographic characteristics, and work environment characteristics?

Significance of the Study

If the level of job satisfaction of public school based PTs was known, if the various factors contributing to satisfaction and/or dissatisfaction were understood, and if the relationships between level of job satisfaction and various demographic variables were understood, administrators of public school systems would be able to use this information to develop and/or

enhance programs designed to recruit and retain PTs. If the number of PTs working in public schools was increased, therapeutic services for school children with physical impairments would become more widely available.

CHAPTER II

Review of the Literature

What is Physical Therapy?

According to the American Physical Therapy Association (APTA), "Physical Therapy is the examination, evaluation, treatment or instruction of human beings to detect, assess, prevent, correct, alleviate and limit physical disability, bodily malfunction, and pain from injury, disease and any other bodily and mental conditions, and includes the administration, interpretation and evaluation of tests in the aid of diagnosis or treatment of any human condition and measurement of bodily functions and structures; the planning, administration and evaluation and modification of treatment and instruction, including the use of physical measures, activities and devices, for preventative and therapeutic purposes; and the provision of consultative, educational and other advisory services by physical therapists. for the purpose of reducing the incidence and severity of physical disability, bodily malfunction and pain." (APTA, 1990)

In order to gain licensure as a physical therapist (PT) in the United States, an individual must possess at least a bachelor's degree, and must complete a program of study in physical therapy accredited by the American Physical Therapy Association (APTA). In addition, a licensure examination must be passed (APTA, 1991).

The typical curriculum includes coursework in all the basic medical sciences (anatomy, physiology, pathology, etc.), orthopedics, neurology,

and specialized procedures and techniques courses relative to physical rehabilitation.

School-based Physical Therapy

Virtually every public school system in the United States currently employs physical therapists directly, or purchases physical therapy services via contractual agreements. The provision of physical therapy as a "related service" is mandated by several federal laws: PL 94-142, the Education for All Handicapped Children Act of 1975 (EHA); PL 99-457, the EHA Amendments of 1986; and PL 101-476, the Individuals With Disabilities Education Act (IDEA) of 1990 (Rothstein, 1990).

The legal basis of the EHA is based on the philosophy expressed by the US Supreme Court in the famous *Brown vs. Board of Education* decision of 1954. The court held that "separate but equal" schools were ***not*** equal for the purposes of education in a case involving racial segregation. Legislation and litigation through the 1960's and early 1970's developed the principle that segregation based on physical or mental handicap was also inherently unequal. This philosophy was codified in the EHA, which stated that " . . . to the maximum extent appropriate, handicapped children . . . should be educated with children who are not handicapped, and that separate schooling, or other removal of handicapped children from the regular educational environment [should] occur only when the nature . . . of the handicap is such that education in regular classes with the use of supplementary aids and **services** [author's boldface] cannot be achieved satisfactorily" (Rothstein, 1990, p.109).

The term 'supplementary services' has a specific legal meaning under the EHA. Supplementary services were defined as ". . . supportive services; including speech pathology and audiology, psychological services (physical and occupational therapy, recreation, and medical and counseling services, except that such medical services shall be for diagnostic and evaluation purposes only) as may be required to assist a handicapped child to benefit from special education, and include the early identification and assessment of handicapping conditions in children" (Rothstein, 1990, p. 129).

Medical Versus Educational Models of Physical Therapy

The educational model of physical therapy is based on the wording of the EHA mentioned above, which stated the rationale for the provision of physical therapy services " . . . as may be required to assist a handicapped child to benefit from special education" (Rothstein, 1990, p. 129). This is not the rationale for the provision of physical therapy in traditional medical settings, and the limited scope of services mandated by the EHA language may represent a potential source of job dissatisfaction among school-based PTs (Blossom and Ford, 1991).

Physical therapy has traditionally been a rehabilitative service based on a medical model of service delivery. As such, the provision of physical therapy is a problem-oriented process which focuses on optimizing gross motor functions which have been lost via illness or injury. The medically-based PT has as his or her goal the optimization of gross motor function. According to the tenets of the EHA, the school-based PT has as his or her goal the amelioration of physical problems which interfere with the goals of

a special education program. Therefore, the school-based PT is restricted from addressing problems which do not interfere with the special education program, even though he or she may feel that these problems significantly hinder a child's overall quality of life.

Physical therapy, by law or custom, is usually practiced by medical referral only, under laws that are quite similar to those controlling pharmaceutical practice. A client/patient must present with a diagnosis from a licensed physician and a prescription for physical therapy. The referral may be specific (i.e. exercise for strengthening of a particular muscle), or may be general, for example, "evaluate and treat as appropriate".

For the medically-based PT, goals of treatment typically include the development, restoration, or maintenance of normal strength, endurance, cardiovascular fitness, mobility, coordination and functional skill (Kisner and Colby, 1990). Furthermore, when normality is not a feasible goal, the optimization of abilities in these areas is recommended. The typical mode of intervention used by medically-based PTs is direct, "hands-on" care, or direct supervision of hands-on care provided by technical personnel.

The school-based model of physical therapy is based on a different set of legal, administrative, and procedural structures. A child may be referred to a school-based physical therapist not only by a physician, but by a wide variety of individuals. These individuals might include a parent, classroom teacher, physical education teacher, or any member of the interdisciplinary team involved in special education, including the school psychologist, the speech therapist, or a school administrator on any level (APTA, 1990). Many states (including Florida) have clauses which

specifically exempt PTs in public school settings from requiring a physician's referral for screening, evaluation, or consultative services.

As mentioned previously, the overall goal of school based physical therapy is to " . . . assist a handicapped child to benefit from special education" (34 Code of Federal Regulations, Parts 300 to 399, Revised July 1, 1988). Therefore, in order to be eligible for physical therapy services a student must have a handicap, and that handicap must interfere with the student's education. Specific therapeutic goals under this rule might include improving freedom of movement within the school setting, maintenance of the student in the optimal physical position for various classroom tasks, improving the ability of the child to remain in school on a full-time basis, and optimizing the school's selection of adaptive equipment to facilitate a student's participation in programs within the least restrictive environment (Reed, Hylton, and Cicirello, 1987). In addition, goals, objectives and treatment plans must be agreed to via the Individualized Educational Plan (IEP) or the Individualized Family Service Plan (IFSP) models as described in PL 94-142 and PL 99-457. Modes of intervention in the school setting can include direct care, but priorities are usually given to other modes of treatment, including screening, consultation, and the development and delivery of educational programs in response to other members of the interdisciplinary special education team and parents.

Because the current training of PTs is almost exclusively based on the medical model, it seems likely that a source of frustration among school-based PTs is the perception that their "hands are tied" by not being allowed to offer what they perceive to be state-of-the-art therapeutic services (Blossom and Ford, 1991). It has been this author's experience as a school-

based PT that physical problems are frequently identified which, because they do not directly interfere with participation in special education programs, cannot be addressed in the school setting. These physical problems include unsightly limps, abnormalities of muscle tone, and postural abnormalities.

Blossom and Ford (1991) addressed these issues quite clearly in the preface to their book "Physical Therapy in Public Schools."

> "There are major differences between physical therapy practice in traditional settings and practice in schools. First, the PT is traditionally surrounded by numerous health care providers who support her efforts. In public schools, physical therapy is a related service, and the valuable resources of a medical environment cannot quickly be accessed. Second, in a clinical environment, the physical well-being of the child is the primary objective of treatment. But in schools, the child's educational achievement is the primary focus of physical therapy intervention" (p. xi).

Similar statements have appeared in other books on school-based physical therapy, including those by Reed, Hylton, and Cicirello (1987) and Zimmerman (1988).

Definitions of Job Satisfaction

Job satisfaction has been extensively studied by researchers in psychology, industrial engineering, sociology, education, and several other fields. According to one report, no less that 2,000 studies on job satisfaction have been published in refereed journals since 1935 (Purohit & Lambert, 1983). A more recent source has suggested that the number far exceeds 5,000 (Cranny et al, 1992).

Gruneberg (1979) wrote: "The reason for the popularity of the subject [job satisfaction] is not hard to explain. Most individuals spend a large part of their working lives at work, so that an understanding of factors involved in job satisfaction is relevant to improving the well-being of a large number of individuals in an important aspect of their lives. Another important reason for investigating job satisfaction is the belief that increasing job satisfaction will increase productivity and hence, the profitability of organizations" (p.1).

Many definitions of job satisfaction have appeared in the literature. Lofquist and Dawis (1969) defined job satisfaction as " . . . a function of the correspondence between the reinforcer system of the work environment and the individual's needs" (p. 53). Locke (1976) defined job satisfaction as " a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300). Locke and Henne (1986) wrote that the ". . . achievement of one's job values in the work situation results in the pleasurable emotional state known as job satisfaction" (p. 21). Cranny defined job satisfaction as ". . . an affective (that is, emotional) reaction to a job that results from the incumbent's comparison of

actualoutcomes with those that are desired (expected, deserved, and so on)" (Cranny et al, 1992, p.1).

A Brief History of the Concept of Job Satisfaction

Gruenberg reviewed the history of the concept of job satisfaction in his book titled Understanding Job Satisfaction (1979). He traced the origins of the concept in recent times to the industrial revolution, when "craftsmanship was replaced by machine-minding" (p. 5).

Gruneberg cited the work of Elton Mayo, who studied workers and working conditions at the Hawthorne plant of the Western Electric Company during the 1920's. Mayo initially studied the effects of improved lighting on productivity, and discovered that it did, indeed, improve productivity. In fact, Mayo went on to discover that any change in illumination improved productivity. He concluded that improved performance occurs in almost every experimental situation, because subjects perceive interest and attention on the part of the experimenter; this is now known as the "Hawthorne Effect." Additional studies by Mayo and his group led them to conclude that the social atmosphere, or the "friendliness" in the workplace was critical to job satisfaction and to optimal productivity.

Gruneberg then reviewed the contribution of Hoppock, who is credited with performing the first major research project to use survey methods and attitude scales to examine job satisfaction. Hoppock's work emphasized the linkage between job satisfaction and satisfaction with living conditions as a whole. Hoppock also pointed out that job longevity may not be due to satisfaction, but to resignation. In other words, over time,

workers become increasingly satisfied because they progressively lower their expectations for job satisfaction.

In the 1950's Herzberg developed the "two-factor" theory of job satisfaction. This theory proposed that the level of job satisfaction is not a continuum, and that the factors which contribute to satisfaction are distinct from those that contribute to job dissatisfaction. "Motivation factors" are those which contribute to psychological comfort and growth, and hence contribute to job satisfaction. "Hygiene factors" have the potential to contribute to job dissatisfaction, and include pay, type of supervision, and the physical environment. Herzberg summed up the implications of his findings in an article published in 1968. He pointed out that you can get a dog (or a worker) to do something with a "KITA" (kick in the ass), but when this occurs, the kicker is the one with the motivation, and the dog (or worker) is simply trying to avoid getting kicked. In order to induce job satisfaction, the job itself must be enriched, so that a worker experiences a challenge commensurate with his or her skills. The essence of job satisfaction, according to Herzberg, is the feeling a worker experiences by using highly-developed skills in a challenging situation.

Criticisms of Herzberg's theories are based on the notion that his is a "content" theory of job satisfaction. He attempted, based on Maslow's "hierarchy of human needs", to give an account of what needs, values and/or expectations are important to individuals. In contrast, the so-called "process" theorists, typified by Vroom (1967) focus on how the needs, values and expectations of individuals interact with the job. Process theorists are concerned with matching individual needs with what a job provides, and their view of job satisfaction is that of a dynamic process.

The overwhelming majority of research on job satisfaction has been based on the content theory. This is because the content theory leads to much more parsimonious instrumentation, since it assumes that expectations and satisfactions associated with a job are relatively static phenomena.

Techniques for the Assessment of Job Satisfaction

The literature includes three techniques for the measurement of job satisfaction. The first technique involves indirect measurements. Investigators have looked at productivity, recruitment, and retention statistics, and based their conclusions regarding job satisfaction on the assumption that high levels of job satisfaction are associated with high productivity, and relative ease of recruitment and retention. Unfortunately, this technique is flawed because in many instances, job satisfaction has not proven to be a reliable predictor of productivity, recruitment, and retention (Roznowski & Hulin, 1992). As mentioned previously, job satisfaction is an important factor in recruitment and retention only when unemployment is relatively low (Mobley, 1982).

The second technique is personal interview. This was the principal method used by Herzberg. He asked his subjects to recall exceptionally good and exceptionally bad things about their jobs, and then classified the responses he obtained into categories for statistical analysis. Unfortunately, the results of interviews are often contaminated with bias, and they are notoriously time consuming to perform and analyze (Fowler, 1984).

The third technique for assessment of job satisfaction is the use of survey forms which can be completed by a large group of subjects in a

classroom setting, or which can be individually delivered and returned by mail. This is the technique which is most practical and most commonly used. There are many questionnaires designed for this purpose, but only three appear with great frequency in the literature due to their well-established reliability and validity. These three surveys are discussed below.

The Quality of Employment Survey (QES) was first reported in the literature in 1974, and has been used as the measurement tool for about 100 published studies since that time 1974 (Pezzei & Oratio, 1991). The QES includes 50 statements to which respondents are expected to respond using a 7-point Likert-type scale. Overall job satisfaction is scored on a 0 to 100 point scale. In addition, the developers of the QES suggested that factor analysis techniques be used to reduce the data and to determine the principal factors contributing to job satisfaction or dissatisfaction (Quinn & Shepard, 1974).

The Job Descriptive Index (JDI) was developed by Smith, Kendall and Hulin in 1969. The JDI is similar in form to the QES, but it differs in that it is not designed to measure overall job satisfaction. It is designed to measure five separate aspects of job satisfaction. The five aspects are: pay, promotions, people (co-workers), supervision, and work.

The Minnesota Satisfaction Questionnaire-Long Form (MSQ-LF) was developed over a 10 year period from 1957 to 1967, and features 100 statements which are either read to, or read by the subject (Weiss, Dawis, England, and Lofquist, 1967). The subject is then asked to respond to each statement by use of a 5 point Likert scale. Based on studies which have included tens of thousands of subjects, the MSQ-LF has high reliability and validity (Bolton, 1986). The scores obtained can be used to generate a

percentile rank for level of job satisfaction based on normative data for a wide variety of occupations. In addition, selected items can be combined to yield percentile ranks for 20 separate factors, including "ability utilization", "achievement', "advancement" and extending alphabetically through "variety" and "working conditions."

Additional scoring procedures may be used to yield percentile ranks which are normed for approximately 20 different occupational titles. In addition, satisfaction with "intrinsic factors", and satisfaction with "extrinsic factors" can be computed separately. These intrinsic and extrinsic factors correspond to Herzberg's "motivation" and "hygiene" factors.

For the purposes of this study, the best available tool for assessment of job satisfaction is a variant of the MSQ-LF named the Minnesota Satisfaction Questionnaire-Short Form (Weiss, Dawis, England, and Lofquist, 1967). (This will be referred to as the "MSQ" .) The principal advantage of the short form is its brevity. Most subjects can complete the MSQ in less than 10 minutes. The short form continues to allow for the computation of overall job satisfaction, satisfaction with "intrinsic factors", and satisfaction with "extrinsic factors." It has been shown to have high reliability and validity, and in comparison to the QES and the JDI, it allows for the separate analysis of many more factors which contribute to job satisfaction. (Gillet & Schwab, 1975; Guion, 1978; Lee and Wilbur, 1985; Hauber and Bruininks, 1986).

The MSQ is constructed in the same way as the MSQ-LF, but it includes only 20 statements, as opposed to the 100 contained in the MSQ-LF. These 20 statements were chosen based on statistical analysis and field testing, and the results obtained with the MSQ are highly consistent with

those obtained with the MSQ-LF. Normative data for the MSQ was developed from a sample of 2,101 individuals representing 25 representative occupations, and is reported in the MSQ Manual (Weiss, Dawis, England, and Lofquist, 1967). Whereas the MSQ-LF computes satisfaction of each of the 20 identified factors of a job by combining the responses of five separate items, for the MSQ, satisfaction of each of the 20 identified factors of a job is computed from the response to a single item.

The long form is suggested if the subject's employers have mandated their cooperation, or if the survey is to be administered to a large group in person. If an unexpected appeal for cooperation is received by potential respondents without pressure from their employer(s) to respond, the shorter form is likely to yield a higher response rate (Weiss, Dawis, England, and Lofquist, 1967).

Another problem that is common to both the short and long forms of the MSQ is that they often yield similar overall job satisfaction scores for a wide variety of occupations (Bolton, 1986). At first, this appears counter-intuitive. For example, it is hard to imagine that a street-sweeper and a teacher have similar levels of job satisfaction. However, if one keeps in mind that job satisfaction is in part based on the job meeting an individual's expectations, then both the teacher and the street sweeper may find their expectations met to a similar degree. Instructions for the MSQ specifically ask subjects to respond to statements based upon their expectations, for example; " . . . if you feel that your job gives you much less than you expected, check the parentheses under "VDS" (Very Dissatisfied)" (Weiss, Dawis, England, and Lofquist, 1967). Although the MSQ has this intrinsic disadvantage relative to overall satisfaction scores, it is believed to be an

excellent tool for the identification of specific factors contributing to job satisfaction and/or dissatisfaction (Gillet & Schwab, 1975; Pierce, McTavish, and Knudsen, 1986).

The Relationship Between Job Satisfaction and Recruitment and Retention

As indicated previously, the correlation between job satisfaction and productivity has never been established; further, the linkage between job satisfaction, ease of recruitment, and employee retention has likewise not been strongly established in most circumstances. (Katzell, Thompson, and Guzzo, 1992; Roznowski & Hulin, 1992). However, when persons with a particular type of training or credential are in great demand, the linkage between job satisfaction and retention is very strong (Mobley, 1982). PTs are in great demand, and therefore the level of job satisfaction they experience would appear to be critical to their successful recruitment and retention.

Job Satisfaction Among Therapists

Job satisfaction among teachers has been assessed quite often in the recent literature, and job satisfaction among allied health professionals who work in medical settings has been examined on several occasions. However, very little information is available regarding the satisfaction of allied health workers in public school systems.

Two recent examples of research examining job satisfaction among allied health workers have concerned occupational therapists. In 1990,

Taylor, Madill and Macnab examined job satisfaction levels of male versus female occupational therapists using the Minnesota Satisfaction Questionnaire-Short-Form (MSQ) (Taylor, Madill, and Macnab, 1990). In addition, they administered the "Life Roles Inventory", which is designed to reveal information about the personal values and importance of work-related, family and friend-related social roles. Although the investigators found that the importance of various social roles differed between men and women, results of the MSQ for men and women were virtually identical. Both groups showed fairly high levels of overall satisfaction, fairly high satisfaction with intrinsic (motivation) factors, and fairly low dissatisfaction with extrinsic (hygiene) factors.

Bordieri (1991) examined the job satisfaction of occupational therapists involved in management and supervision versus those involved in the provision of direct service. He mailed a questionnaire that he developed to 900 occupational therapists selected at random from the membership files of the American Occupational Therapy Association. Bordieri found overall job satisfaction to be similar between the management and direct service group, but found that the factors contributing to this level were different. Supervisors based their satisfaction on sense of achievement, responsibility, and interpersonal relations in the workplace, whereas direct service personnel related their satisfaction to the nature of the work.

Job Satisfaction Among School-based Allied Health Professionals

Three recent publications have appeared which examine job satisfaction among school-based allied health professionals. Kontos and File surveyed a variety of early intervention workers (1992), Levinson studied

school psychologists (1991), and Pezzei and Oratio studied job satisfaction among public school-based speech-language pathologists (1991).

Kontos and File assessed job satisfaction with a 6 item, Likert-style survey they adapted from an unpublished dissertation by Strummel (1989). The six items were designed to assess satisfaction with supervisor, coworker relations, pay, autonomy, value and stimulation of the work, and job security. Their respondents were 73 early intervention workers including physical therapists, occupational therapists, speech therapists, administrators, social or family service providers, and several therapy aides. Kontos and File found no differences in job satisfaction based on job classification, and reported that all respondents reported "relative satisfaction" with their jobs. Respondents were most satisfied with the helpfulness of their coworkers and with the stimulation and value of their work. They were least satisfied with their salary.

Levinson (1991) attempted to discover the predictors of job satisfaction and job advancement of school-based psychologists. His subjects were full-time public school psychologists employed in Pennsylvania who identified themselves as practitioners rather than administrators. Sixty-seven percent (436) of 636 subjects responded. Levinson's survey instrument included a demographic data form which asked about age, sex, description of school systems and assigned duties, salary, and faculty-student ratio as well as a modified version of the Minnesota Satisfaction Questionnaire-Long Form. Levinson eliminated the neutral midpoint of the Likert scale, and changed all references in the survey items from "company" to "school system", and from "boss" to "supervisor". Levinson did not analyze the results via the standardized

scoring system. Instead, he evaluated the responses to the questionnaire using a multiple regression model to establish predictors of satisfaction with school system policies and procedures and opportunities for advancement.

Levinson found six items to be significant predictors of job satisfaction with school systems policies and procedures. Positive predictors included perceived control, certification as school psychologist, amount of actual vs. desired time spend in "role function", and number of co-workers. Negative predictors included time spent in clerical activities, and student absenteeism. Positive predictors of satisfaction with job advancement included certification as a guidance counselor and salary. Negative predictors of satisfaction with advancement included time allowed for research, number of co-workers, and time spent in consultation. Levinson cautioned against giving excessive importance to his results because a relatively small percentage of variance was accounted for by any combination of the variables.

Pezzei and Oratio (1991) performed a multivariate analysis of job satisfaction of public school speech and language pathologists (SLPs). Five hundred public school-based SLPs were randomly selected from the rolls of the American Speech and Hearing Association. Each was sent a questionnaire which included items regarding sex, highest degree, number of credits earned beyond the highest degree, and years of experience in the public schools. This was followed by a 34-item job satisfaction questionnaire based on the Quality of Employment Survey (QES), which was discussed earlier(Quinn and Shepard, 1974). The final part of their questionnaire asked several questions about working conditions, including caseload, salary, and type of supervision.

Fifty-six percent of their subjects completed and returned the questionnaire. Stepwise multiple regression was used to determine the best predictors of strong agreement with the last item of the QES, which is "Overall, I am extremely satisfied with my present position". Based on that analysis, the six factors from the QES contributing the most to job satisfaction were found to be, in order of importance:

1 Friendly co-workers
2 Enough help to get the job done
3 Friendly supervisor
4 Enough time to get the job done
5 Chances to make friends
6 Competent supervision

Two additional regression equations were developed to assess the predictive value of the demographic and working conditions information. Academic status and years of experience were found to contribute significantly to job satisfaction, as did small caseloads, non-itinerant working conditions, high perceived social status, and wide variety of types of students serviced. Pezzi and Oratio concluded their paper by suggesting that clinicians who experience dissatisfaction consider additional course work leading to an advanced degree, and modification of caseloads.

Summary

This chapter has presented an overview of physical therapy from a legal and educational perspective, and has pointed out several important differences between educational and medical models of practice. The

definition and a brief history of the concept of job satisfaction were presented, and the techniques for the assessment of job satisfaction were explained. The final portion of the chapter reviewed the available research regarding job satisfaction of school-based allied health professionals.

CHAPTER 3

Methodology

Subjects and Sample

The American Physical Therapy Association (APTA) was contacted to request their assistance in identifying potential respondents for the survey. The APTA surveys its members regarding a number of demographic variables, including employment setting, with each annual membership renewal. Staff at the APTA reported that the January, 1993 membership survey identified 1,848 PTs throughout the United States who identified their principal place of employment as a primary or secondary school. Potential respondents were chosen systematically from the alphabetized set of 1,848 mailing labels supplied by the APTA. The first label, and every 4th label thereafter were used. Therefore, in this manner 462 individuals were chosen to receive a copy of the survey instrument.

There were three significant problems with this APTA-supplied listing. The first was that since approximately only 60% of licensed PTs are members of the APTA, a great many PTs did not have opportunity to be in the sample. Second, many PTs working in school systems do so on a contractual basis, and they may have chosen the options "Private Practice", or "Contract Agency" rather than "Elementary or Secondary School" on their membership survey. Third, the membership survey on which the list is based does not differentiate between therapists working in public school systems and therapists working in other types of school settings; for example, private schools, special schools for the physically impaired.

The third problem was overcome by asking an introductory question on the cover letter accompanying the survey: "Are you currently employed in a public school setting?" Respondents who responded negatively were asked to send their survey instruments back un-completed and were not included in the study.

The Survey Instrument

The survey instrument included 3 sections, and was accompanied by a cover letter and a self-addressed, stamped envelope for return. A copy of the cover letter and survey instrument as mailed to potential respondents is located in Appendix A.

The cover letter included a brief description of the rationale of the study, an appeal to participate, assurances of anonymity, an offer to share the overall results of the study with respondents, and a number to call if further information was desired.

The first section of the survey included questions regarding age, gender, years of physical therapy experience, years of public school experience, highest degree, type of school district being served (rural vs. urban vs. suburban), source of employment, and salary.

The second section was a modified version of the Minnesota Satisfaction Questionnaire-Short Form (MSQ). The modifications were the replacement of the word "company" with the word "school", and the replacement of the word "boss" with the word "supervisor". With these exceptions, the instructions for completion and the items were used exactly

as they appear in the manual which accompanies the MSQ (Weiss, Dawis, England, and Lofquist, 1967).

The third and final section of the survey instrument consisted of three open-ended questions designed to allow respondents to mention any specific contributors to satisfaction or dissatisfaction which might be relevant to school-based physical therapy, and which might not be revealed by the results of the MSQ.

Procedures for Data Collection

On November 3rd, 1993, the survey instrument and cover letter, along with a self-addressed, stamped envelope, was mailed to the 462 potential respondents. Responses were requested no later than November 24th, 1993. In order to optimize the rate of return, the cover letter assured potential respondents that their responses would be kept confidential. No identifying marks were put on the survey instrument, and no follow-up letters or calls were made.

Treatment of Data

When the completed survey instruments were returned, responses were coded and entered into a computerized database in a format readable by the program "Statistical Programs for the Social Sciences - Personal Computer (SPSS-PC)" (Norusis, 1992). Using SPSS-PC, descriptive statistics were computed for the self-identification items and the MSQ responses. The level of job satisfaction for the respondents as a whole was

computed via standardized MSQ analysis procedures. Responses to the open ended questions in the third section of the instrument were grouped into categories based on the judgment of the author, and a tabular summary was developed.

Several additional statistical procedures were used to assess the relationship between demographic characteristics, various aspects of the work environment, and job satisfaction. Pearson correlation coefficients were computed to identify associations between age, years of experience as a physical therapist, years of experience as a school-based PT, and Overall Satisfaction Score (the overall measure of job satisfaction as derived from the MSQ). Several chi-square statistical procedures were performed to assess the strength of association between overall job satisfaction and demographic and work environment-related variables for which only categorical data was collected.

Chapter 4

Results

Rate of Return

Of the 462 surveys mailed out on November 3, 1993, 313 were returned. This resulted in a return rate of 67.7%. Of the 313 respondents, 62 reported that they were not working in public school settings. Therefore, only the responses of the remaining 251 (313 - 62 = 251) respondents were analyzed. All further reference to "respondents" refers to these 251 individuals.

Demographic characteristics and work environment of school-based PTs

Ninety-two and eight-tenths percent (92.8%) (233) of the respondents were women, and 7.2% (18) of the respondents were men. The respondents had a mean age of 41.0, a mean of 16.7 years of physical therapy experience, and a mean of 8.8 years of school-based PT experience. The age, amount of physical therapy experience and amount of school-based experience of the respondents are summarized in Table 1.

Table 1

Age and Experience of Respondents (in Years)

	Mean	SD	Minimum	Maximum	Range
Age	41.0	7.9	23.0	72.0	49.0
Years of Experience as a Physical Therapist	16.7	7.7	0.3	46.0	45.7
Years of Experience as School-Based PT	8.8	5.1	0.3	35.0	34.7

Responses were obtained from 45 states and districts. New York, Michigan, Illinois and Wisconsin provided the greatest number of respondents, while Idaho, Mississippi, North Dakota, Puerto Rico, Utah, Virgin Islands, and Wyoming were not represented in the sample. The number of respondents from each state is displayed in Table 2.

Table 2

Breakdown of Respondents by States and Districts (Cells with multiple state listings indicate each state had the number of respondents listed.)

State	Percentage of Sample	Frequency
New York	11.6	29
Michigan	6.8	17
Illinois	6.4	16
Wisconsin	5.2	13
New Jersey	4.8	12
Ohio	4.4	11
Alaska, Florida	3.6	9
South Carolina	3.2	8
Massachusetts, Pennsylvania	2.8	7
Virginia, Colorado, Connecticut, Georgia, Kansas, Maryland, North Carolina	2.4	6
California, Washington	2.0	5
Arizona, Kentucky, Minnesota, Nebraska, Oregon, Texas	1.6	4
Alabama, Missouri, South Dakota, Vermont, West Virginia	1.2	3
Delaware, Indiana, Iowa, New Mexico, Rhode Island, Tennessee	0.8	2
Arkansas, Hawaii, Louisiana, Maine, Montana, Nevada, New Hampshire, Oklahoma	0.4	1
Idaho, Mississippi, North Dakota, Puerto Rico, Utah, Virgin Islands	0.0	0

The majority of respondents indicated that their highest degree was the Bachelor's degree. Sixty-nine and three-tenths percent (69.3%) of the respondents, or 174, had only Bachelor's degrees, 29.9% (74) had Master's degrees, and only 0.8% (2) had Doctoral degrees. Sixty-five and seven-tenths percent (65.7%, or 157) of the respondents obtained their highest degree in Physical Therapy. Only 4.6% (11) of the respondents obtained their highest degree in Special Education. The remainder of the respondents obtained their highest degree in one of 33 other disciplines, including zoology, psychology, public health, neurobiology, and health care administration.

Table 3 displays the information regarding the type of school district in which the respondents worked. The majority of respondents, 54% (122), worked in suburban school systems. The majority of respondents worked at 5 or more schools as direct, hands-on service providers (see Tables 4 and 5). Independent contractors or employees of contracting agencies accounted for 47.4% (119) of the respondents, while only 43.8% (110) were directly employed by school-systems. (See Table 6)

Salaries varied widely, from less than $25,000 per year to over $75,000 per year. The most commonly reported salary category, representing 17.5% (44) of the respondents, was between $35,000 and $40,000 per year. Table 7 summarizes the information regarding salaries of the respondents.

Table 3

Type of School District

	Percentage of Sample	Frequency
Urban	22.6	51
Suburban	54.0	122
Rural	23.5	53

Table 4

Number of Schools Served

	Percentage of Sample	Frequency
1	14.9	37
2	10.1	25
3	10.1	25
4	7.7	19
5 or More	57.3	142

Table 5

Type of Job Responsibility

	Percentage of Sample	Frequency
Direct Service (Hands-on) Provider	69.3	174
Supervisor or Administrator	2.0	5
Consultant	12.4	31
Other	2.8	7

Table 6

Source of Employment

	Percentage of Sample	Frequency
Directly Employed by School System	43.8	110
Self-employed Independent Contractor	25.1	63
Employee of Contracting Agency	22.3	56
Other	6.0	15

Table 7

Annual Income (in Thousands of Dollars)

	Percentage of Sample	Frequency
Less than 25	3.2	8
25-30	2.4	6
30-35	10.8	27
35-40	17.5	44
40-45	16.3	41
45-50	14.3	36
50-55	10.0	25
55-60	7.6	19
60-65	6.0	15
65-70	2.4	6
70-75	3.6	9
More than 75	4.0	10

Level of Overall Job Satisfaction

The overall level of job satisfaction of the respondents was obtained with two measures. First, Item 33 of the survey asked respondents to respond yes or no to the question, "Overall, are you satisfied with your job as a school-based physical therapist?". Second, an Overall Satisfaction Score was computed from the responses to the Minnesota Satisfaction Questionnaire (MSQ) embedded within the survey instrument.

Eighty-seven and three tenths percent (87.3%) (219) of the respondents responded with a yes to Item 33, and only 11.2% (28) responded with a no. (One and one-half percent (1.5%) of the respondents (4) did not answer this question.) This result was significantly different than would be expected in a normal binomial distribution ($p < .001$).

An Overall Satisfaction Score for each respondent was computed from the MSQ using standard procedures as described by Weiss et al (1967). Overall Satisfaction Score is a simple sum of the coded responses to all 20 items of the MSQ. The responses to each item were coded 1 though 5, with 1 representing "Very Dissatisfied", and 5 representing "Very Satisfied". Therefore, the range of possible Overall Satisfaction Scores was 20 and 100, with 100 representing the greatest possible level of job satisfaction. The median Overall Satisfaction Score obtained for the respondents was 77.0, the mode was 81.0, and the mean was 75.3 (Standard Deviation = 10.3). All three of these measures of central tendency were very close to a score of 80, which represents the "Satisfied" response on the Likert scale of the MSQ. Only 9.0% (20) of the respondents had Overall Satisfaction Scores of 60 or less, indicating that overall, they were slightly less than neutral, dissatisfied, or very dissatisfied

with their jobs, and 91% of the respondents had Overall Satisfaction Scores of 60 or more , indicating that overall, they were slightly more than neutral, satisfied, or very satisfied with their jobs. This figure of 91% was close to the 87.3% of respondents responding "Yes" to item 33. Taken together, these results indicate that the great majority of the respondents were satisfied with their jobs.

Factors contributing to job satisfaction or dissatisfaction

Factors contributing to job satisfaction or dissatisfaction were assessed with both the MSQ and three open-ended questions. As discussed in Chapter 3, the 20 item MSQ was embedded within the survey instrument as items 13 through 32 (See the appendix for a copy of the survey instrument). Subjects were asked to respond to a series of statements by checking VDS (very dissatisfied), DS (dissatisfied), N (no opinion), S (satisfied) or VS (very satisfied). In accordance with the suggested scoring procedures, the responses were coded with numerical codes of 1 (VDS) through 5 (VS) (Weiss, Dawis, England, and Lofquist, 1967). This coding allowed for the computation of a mean satisfaction score for each item which ranged from 1 to 5, with 5 being the highest possible level of satisfaction.

Each item of the MSQ was designed to assess satisfaction with a particular aspect, or factor, of a job. The three factors respondents were most satisfied with included the opportunity for social service, job security, and creativity. The three factors respondents were least satisfied with were school polices and practice, opportunities for advancement, and technical

supervision. Table 8 summarizes the MSQ responses listed in descending order of each factor's mean satisfaction score.

Table 8

Responses to the MSQ listed in order of mean satisfaction score.

Factor	Text of Item as distributed	Percentage of Respondents					
		VDS	DS	N	S	VS	Mean
Social Service	The chance to do things for other people	1.2	1.6	1.2	43.4	52.6	*4.45*
Security	The way my job provides for steady employment	0.8	4.4	5.2	41.0	48.2	*4.32*
Creativity	The chance to try my own methods of doing the job	1.6	3.6	4.8	43.0	47.0	*4.30*
Responsibility	The freedom to use my own judgment	1.2	6.0	4.0	44.6	43.8	*4.24*
Variety	The chance to do different things from time to time	1.6	5.2	4.4	48.2	40.6	*4.21*
Ability utilization	The chance to do something that makes use of my abilities	2.8	5.6	2.8	50.6	38.2	*4.16*
Activity	Being able to keep busy all the time	1.6	5.6	8.8	47.8	34.7	*4.10*
Achievement	The feeling of accomplishment I get from the job	3.6	6.0	7.2	49.0	33.9	*4.04*
Moral values	Being able to do things that don't go against my conscience	1.2	6.8	11.6	50.6	29.5	*4.01*
Co-workers	The way my co-workers get along with each other	0.4	9.6	10.4	50.6	27.9	*3.97*
Independence	The chance to work alone on the job	0.4	10.0	15.5	44.6	28.3	*3.92*

Compensation	My pay and the amount of work I do	4.4	15.1	6.8	50.6	21.9	*3.71*
Social status	The chance to be "somebody" in the community	4.8	2.8	40.6	36.3	14.3	*3.53*
Authority	The chance to tell people what to do	0.8	2.8	53.8	30.7	9.6	*3.47*
Recognition	The praise I get for doing a good job	6.4	15.5	21.1	43.8	13.1	*3.42*
Working conditions	The working conditions	6.4	21.5	10.8	49.4	10.4	*3.36*
Supervision-human relations	The way my supervisor handles his/her employees	8.4	18.3	19.5	33.1	17.5	*3.34*
Supervision-technical	The competence of my supervisor in making decisions.	8.4	17.5	21.9	34.7	14.3	*3.30*
Advancement	The chances for advancement on this job	12.7	21.5	37.5	21.1	4.4	*2.82*
Policies and Practice	The way school policies are put into practice	10.0	32.7	27.9	26.3	2.0	*2.77*

The three open-ended questions which concluded the survey were "Overall, are you satisfied with your job as a school-based physical therapist? (Item 33), respondents were asked "Why or why not?"; "What is the most satisfying thing about being a public school PT" (Item 34), and "What is the most frustrating thing about being a public school PT?" (Item 35). The use of these three items in combination was more likely to yield factors contributing to job satisfaction or dissatisfaction than any single item or pair of items. If only Item 33 (Why or why not?) was used, then respondents who were satisfied with their jobs would have had no reason to offer information regarding factors leading to dissatisfaction, and respondents who were dissatisfied would have had no reason to offer information regarding factors which were satisfying. It was felt that the response to Item 33 would capture the single factor most critical to job satisfaction, and that Items 34 and 35 would capture as inclusive a list as possible of factors contributing to satisfaction and dissatisfaction.

The majority of the respondents offered responses to the three questions; however, as might be expected, no two responses to any of the open-ended questions were identical. The responses were categorized by the author based on similarity of content. For example, "being my own boss", "freedom to work in my own style", and "self-directed pace" were all classified as "Autonomy". The number of times each category of response was offered was tallied. In response to the item "Overall, are you satisfied with your job as a school-based physical therapist?; Why or why not?", the majority of respondents offered positive comments. The three most commonly cited reasons for job satisfaction were autonomy, which was mentioned by 14.7% (38) of the respondents, the opportunity to set their

own hours, mentioned by 14.3% (37) of the respondents, and the opportunity to work with children, mentioned by 11.2% (28) of the respondents. Table 9 lists the categorized responses to Item 33 which were positive, that is, listing reasons why PTs were satisfied, in order of descending frequency. One therapist's comments were typical, "It [the job] gives me the opportunity to work and use my skills while allowing time off to be with my family. The children I work with make progress and for the most part, are a very enjoyable group."

The three most commonly cited reasons for dissatisfaction were a feeling of not fitting into the educational setting, lack of respect from school personnel, and low salaries. Each of these was mentioned by 3.2% (8) of the respondents. Table 11 lists the categorized responses to Item 33 which were negative, that is, listing reasons why PTs were not satisfied, in order of descending frequency. Typical negative responses included "I feel very isolated. I do not get the opportunity to work with other PTs", and " The most frustrating part of the job is all the educational beauracracy, they [school administrators] don't know anything at all about gross motor skills!"

Table 9

Categorized Responses to Item 33; "Overall, are you satisfied with your job as a school-based physical therapist; Why?"

Response	Percentage of Sample	Frequency
Autonomy	14.7%	37
Opportunity to set my own hours	14.3%	36
Work with children	11.2%	28
Having summers off	10.8%	27
Enjoy teacher interaction	8.0%	20
The opportunity to make a difference in a child's life	5.6%	14
Variety	4.0%	10
Work in a "real world" setting	3.6%	9
Challenge	3.6%	9
Opportunity to be creative	3.2%	8
Positive attitude of students and family	2.4%	6
Steady income	2.0%	5
The opportunity to improve the quality of life	2.0%	5
Chance to work with a team	2.0%	5
Feeling needed	1.6%	4
Good benefits	0.4%	1
High Income	0.4%	1
No contact with MD's	0.4%	1
Minimal demands	0.4%	1
Provide service which would be unavailable	0.4%	1
Respect	0.4%	1
Fun	0.4%	1
Good administrative support	0.4%	1

Table 10

Categorized Responses to Item 33: "Overall, are you satisfied with your job as a school-based physical therapist; Why not?"

Response	Percentage of Sample	Frequency
Don't fit into educational setting	3.2%	8
Lack of respect from school personnel	3.2%	8
Low salaries	3.2%	8
Lack of administrative support	2.8%	7
Limited time with each child	2.0%	5
Limited space	1.2%	3
Poor opportunity for advancement	0.8%	2
School personnel "get away with a poor job"	0.4%	1
Confusion of roles between PT and OT	0.4%	1
Poor carryover from families	0.4%	1
Too much paperwork	0.4%	1
Isolated from the classroom	0.4%	1
Poor benefits	0.4%	1

In response to item 34, which was "What is the most satisfying thing about being a public school PT?", the most common responses were the chance to see children succeed (16.7%), the opportunity to work with children (15.9%), and the opportunity to work in an educational setting (13.9%). "Function is the key to good therapy, and there are many ways for that to happen. Therapy in the school system is a wonderful way to make function happen," was the comment of one respondent. Table 11 lists the categorized responses to Item 34 in order of descending frequency.

Table 11

Categorized Responses to Item 34 "What is the most satisfying thing about being a public school PT?

Response	Percentage of Sample	Frequency
Seeing children succeed	16.7%	42
Working with children	15.9%	41
Work in educational setting	13.9%	36
Opportunity to interact with a team	12.7%	35
Contribute to the quality of life of children	11.2%	31
Freedom / flexibility	8.0%	20
Opportunity to work with same child for several years	6.0%	15
Variety	6.0%	15
Flexible hours	5.2%	13
Feeling needed	4.0%	10
Good pay	2.8%	7
Challenge	2.8%	7
Enjoy non-acute care	2.8%	7
Opportunity to educate the community about physical therapy	2.4%	6
Being an "expert"	1.6%	4
No reimbursement hassles	0.8%	2
Supportive administration	0.8%	2
Seeing carryover of physical therapy in classroom	0.4%	1
Not as overwhelming as a medical setting	0.4%	1
Minimal paperwork compared to medical setting	0.4%	1
Unique job	0.4%	1

In response to item 35, which was "What is the most frustrating thing about being a public school PT?", the most common complaints included excessively high caseload (17.5%), limitations of space (16.7%), and limitations in availability of equipment (15.5%). Some typical comments were " . . . there are only 5 of us [PTs] for 140,000 children", and "There is just no decent place to treat children at some schools." Table 12 lists the categorized responses to Item 35 in order of descending frequency.

Table 12

Categorized Responses to Item 34 "What is the most frustrating thing about being a public school PT?

Response	Percentage of Sample	Frequency
High caseload	17.5%	44
Limited space	16.7%	42
Lack of needed equipment	15.5%	39
Isolation from other medical professionals	13.1%	33
Lack of administrative support	12.0%	30
Only being allowed to work towards "educational" goals	10.4%	26
Excessive paperwork	9.6%	24
Poor parental carryover / follow-up of physical therapy program	5.6%	14
"Politics"	5.2%	13
Conflict with parents expectations re: type of service	4.4%	11
Conflicting philosophies between PTs and educators	4.4%	11
Lack of respect from co-workers and community	4.0%	10
Too much traveling	3.2%	8
Educators don't understand what physical therapy is	3.2%	8
Low salaries	3.2%	8
Lack of consensus within school systems re: practice guidelines	2.8%	7

Lack of good continuing education programs	2.4%	6
Supervised by educators, not by PTs	2.4%	6
Frustration working with a team	2.4%	6
No opportunity for advancement	1.6%	4
Frustration with lack of physical therapy after graduation	1.2%	3
Lack of consensus within physical therapy profession re: practice guidelines	1.2%	3
Have to fight for student's rights	1.2%	3
Severely involved children should not be in school setting	1.2%	3
Poor prognosis of children	0.8%	2
Need to be OTs as well as PTs	0.8%	2
Long time to become "known" in the school setting	0.8%	2
"The Union"	0.8%	2
Teacher resistance to mainstreaming	0.8%	2
Too many meetings	0.4%	1
Not dynamic enough	0.4%	1
No input into educational policies	0.4%	1

The relationships between demographic characteristics, the work environment, and job satisfaction

Several statistical procedures were used to assess the relationship between demographic characteristics and job satisfaction. Pearson correlation coefficients were computed to check for correlations between either age, years of experience as a physical therapist, and years of experience as a school-based PT with the Overall Satisfaction Score. The Pearson statistic was chosen because all these variables are continuous, rather than categorical variables. Statistically non-significant correlation coefficients of 0.068, -0.013, and -0.065 were obtained for the correlation between Overall Satisfaction Score, and age, years of experience as a PT, and years of experience as a school based PT respectively. Therefore, level of job satisfaction was not related to these demographic factors.

Chi-square statistical analyses were performed to assess the level of association between Item 33, which read "Overall, are you satisfied with your job as a school-based physical therapist?" and two additional demographic variables: highest degree held and gender. These analyses yielded a statistically significant relationship between highest degree held and job satisfaction, (Chi-square = 7.52, df = 2, p = 0.02), and a statistically non-significant relationship between gender and job satisfaction (Chi-square = 0.17, df = 1, p = 0.67). Of those holding only Bachelor's degrees, 91.8% expressed overall job satisfaction, while only 82.4% of those with Master's degrees expressed overall job satisfaction. Tabular presentation of the chi-square analysis of job satisfaction and highest degree held appears in Table

13, and the chi-square analysis of job satisfaction and gender appears in Table 14.

Table 13

Results of a chi-square analysis of the association between overall job satisfaction (Response to Item 33) and highest degree held.

Highest Degree Held	Satisfied	Dissatisfied
Bachelor's	157	14
	(151.6)*	(19.4)
	91.8%**	8.2%
Master's	61	13
	(65.6)	(8.4)
	82.4%	17.6%
Doctoral	1	1
	(1.8)	(0.2)
	50%	50%

Chi-square = 7.52, df = 2, p = 0.02

* Expected frequencies

** Percentage of row variable responses in this category

Table 14

Results of a chi-square analysis of the association between overall job satisfaction (Response to Item 33) and gender.

Gender	Satisfied	Dissatisfied
Male	17	1
	(16)*	(2)
	94.4%**	5.6%
Female	202	27
	(203)	(26)
	88.2%	11.8%

Chi-square = 0.17, df = 1, p = 0.67

* Expected frequencies

** Percentage of row variable responses in this category

Chi-square analyses were also used to assess the level of association between Item 33, and selected aspects of the work environment. These aspects included type of school district, number of schools served, type of school based responsibilities, source of employment, and salary. The results of these analyses are displayed in Tables 15 through 19. Although none of these analyses yielded a statistically significant relationship, there were two trends noticed. First, there was a trend toward an association between job satisfaction and type of school district (Chi-square = 5.02, df=2, p=0.08). Of those working in urban school districts, 98.0% expressed overall job satisfaction, compared to only 86.8% and 86.5% of respondents from suburban and rural districts respectively. Second, there was a trend toward an association between job satisfaction and number of schools served (Chi-square = 2.28, df=4, p=0.068). Of PTs serving in only one school, 94.4% expressed overall satisfaction with the job, while 87.2% of those working in 5 or more schools expressed overall satisfaction.

Table 15

Results of a chi-square analysis of the association between overall job satisfaction (Response to Item 33) and type of school district.

Type of School District	Satisfied	Dissatisfied
Urban	48	1
	(43.7)*	(5.3)
	98.0%**	2.0%
Suburban	105	16
	(107.9)	(13.1)
	86.8%	13.2%
Rural	45	7
	(46.4)	(5.6)
	86.5%	13.5%

Chi-square = 5.02, df = 2, p = 0.08

* Expected frequencies

** Percentage of row variable responses in this category

Table 16

Results of a chi-square analysis of the association between overall job satisfaction (Response to Item 33) and number of schools served.

Number of Schools Served	Satisfied	Dissatisfied
1	34	2
	(31.9)*	(4.1)
	94.4%**	5.6%
2	23	2
	(22.1)	(2.9)
	92.0%	8.0%
3	21	4
	(22.1)	(2.9)
	84.0%	16.0%
4	16	2
	(15.9)	(2.1)
	88.9%	11.1%
5 or More	123	18
	(124.9)	(16.1)
	87.2%	12.8%

Chi-square = 2.28, df = 4, p = 0.068

* Expected frequencies

** Percentage of row variable responses in this category

Table 17

Results of a chi-square analysis of the association between overall job satisfaction (Response to Item 33) and type of school-based duties.

Type of Job Responsibility	Satisfied	Dissatisfied
Direct Service (Hands-on) Provider	153	18
	(151.7)*	(19.3)
	89.5%**	10.5%
Supervisor or Administrator	4	1
	(4.4)	(0.6)
	80.0%	20.0%
Consultant	27	4
	(27.5)	(3.5)
	87.1%	12.9%
Other	5	1
	(5.3)	(0.7)
	83.3%	16.7%

Chi-square = 0.73, df = 3, p = 0.86

* Expected frequencies

** Percentage of row variable responses in this category

Table 18

Results of a chi-square analysis of the association between overall job satisfaction (Response to Item 33) and source of employment.

Source of Employment	Satisfied	Dissatisfied
Directly Employed by	95	14
School System	(97.2)*	(11.8)
	87.2%**	12.8%
Self-employed Independent	55	7
Contractor	(55.3)	(6.7)
	88.7%	11.3%
Employee of Contracting	51	4
Agency	(55.3)	(6.0)
	88.7%	11.3%
Other	13	1
	(12.5)	(1.5)
	92.9%	7.1%

Chi-square = 1.39, df = 3, p = 0.71

* Expected frequencies

** Percentage of row variable responses in this category

Table 19

Results of a chi-square analysis of the association between overall job satisfaction (Response to Item 33) and salary.

Salary (Thousands of dollars per year)	Satisfied	Dissatisfied
Less than 25	7 (7.1)* 87.5%**	1 (0.9) 12.5%
25-30	5 (5.3) 83.3%	1 (0.7) 16.7%
30-35	24 (22.1) 96.0%	1 (2.9) 4.0%
35-40	42 (38.9) 95.5%	2 (5.1) 4.5%
40-45	35 (34,5) 89.7%	4 (4.5) 10.3%
45-50	29 (31.8) 80.6%	7 (4.2) 19.4%
50-55	21 (22.1) 84.0%	4 (2.9) 16.0%
55-60	19 (16.8) 100.0%	0 (2.2) 0.0%
60-65	10 (13.3) 66.7%	5 (1.7) 33.3%
65-70	5 (5.3) 83.3%	1 (0.7) 16.7%
70-75	7 (8.0) 77.8%	2 (2.0) 22.2%
More than 75	10 (8.8) 100.0%	0 (1.2) 0.0

Chi-square = 18.29, df = 11, p = 0.07

* Expected frequencies

** Percentage of row variable responses in this category

Summary

The results of the survey showed that the vast majority of PTs working in public schools who responded to the survey were, overall, satisfied with their jobs. The principal sources of job satisfaction included the opportunity for social service, job security, creativity, flexibility, autonomy, and the opportunity to work with children and to see them succeed. Factors contributing to dissatisfaction included school policies and procedures, opportunities for advancement, quality of supervision, high caseloads, and limited space and equipment.

The majority of the respondents were women whose highest degree was the baccalaureate. More respondents worked as private contractors, or for contracting agencies, than worked directly for school systems. About half of the respondents worked in suburban school districts. Finally, for the group as a whole, there was little association between job satisfaction and either demographic characteristics or selected aspects of the work environment.

Chapter V

Discussion

Introduction

This study was designed to answer four research questions. These questions were:

1. What is the overall level of job satisfaction among physical therapists working in public school systems in the United States?

2. What are the most important factors which contribute to job satisfaction and/or dissatisfaction within this group?

3. What are the demographic and work environment characteristics of school-based PTs for the following variables: age, gender, years of experience, type and level of training, location, salary, source of employment (independent contractor vs. direct hire) and type of setting (i.e. urban vs. rural)?

4. What are the relationships between level of job satisfaction, demographic characteristics, and the work environment?

This chapter will discuss the answers to these questions, and implications for those charged with educating, recruiting and retaining school-based PTs. In addition, the limitations and weaknesses of the study and suggestions for future research will be presented.

Overall level of job satisfaction of school-based PTs

The results of the study showed that the majority of respondents were satisfied with their jobs as school-based PTs, but that the level of satisfaction of the respondents as a whole as measured by the Minnesota Satisfaction Questionnaire (MSQ) was not extremely high. As discussed previously, the MSQ is based on the concept that job satisfaction is a function of the how well a job meets expectations Therefore, it would appear that school-based therapy does not fully meet the expectations of physical therapists (PTs), and that it might indeed be useful to carefully examine the factors which contribute to job satisfaction and/or dissatisfaction among school-based PTs.

Factors which contribute to job satisfaction and/or dissatisfaction

The factors which contributed to the job satisfaction and dissatisfaction of the respondents were consistent with the theoretical basis for job satisfaction and the conflicts between the medical and educational models of service discussed earlier. As discussed in Chapter 2, the "two-factor" theory of job satisfaction proposed by Herzberg stated that job satisfaction is not a continuum, and that the factors which contribute to job satisfaction are distinct from those that contribute to job dissatisfaction.

"Motivation factors" are those which contribute to psychological comfort and growth, and hence contribute to job satisfaction. "Hygiene factors" have the potential to contribute to job dissatisfaction, and include pay, type of supervision, and the physical environment.

The nine Minnesota Satisfaction Questionnaire (MSQ) factors which were rated highest in satisfaction were, in descending order: social service, security, creativity, responsibility, variety, ability utilization, activity, achievement, and moral values. With the exception of "security', these factors can be considered intrinsic, "motivation factors." Similarly, when asked in open-ended questions about the most satisfying aspects of school-based physical therapy, the most frequent responses were: autonomy, seeing children succeed, working with children, working in an educational setting, interacting with a team, and contributing to the quality of life of disabled children. Again, all these responses could be considered motivation, rather than, hygiene, factors.

Conversely, the five factors with which the respondents were least satisfied as measured by the MSQ were school policies and practice, opportunity for advancement, supervision, working conditions, and compensation. The most frequent responses to an open-ended question about sources of frustration were: high caseloads, limited space, limited equipment, and a sense of "not fitting in" to the educational environment. Although high caseloads might be considered an intrinsic factor, in the sense that a high caseload limits the ability of the therapist to provide the type of service he or she desires, the five factors and reasons for dissatisfaction appear to be hygiene factors.

Factors contributing to dissatisfaction may also be interpreted relative to the inherent conflict between educational and medical models of service delivery. A quote from Blossom and Ford (1991) was used in the review of the literature because it clearly summarized the major differences between these two models of service delivery. The quote is repeated below:

> "There are major differences between physical therapy practice in traditional settings and practice in schools. First, the PT is traditionally surrounded by numerous health care providers who support her efforts. In public schools, PT is a related service, and the valuable resources of a medical environment cannot quickly be accessed. Second, in a clinical environment, the physical well-being of the child is the primary objective of treatment. But in schools, the child's educational achievement is the primary focus of physical therapy intervention" (p. xi).

Isolation from other health professionals was cited by 13% of respondents as "the most frustrating thing" about school-based therapy. Approximately 15% cited lack of equipment, one of the "valuable resources of a medical environment" alluded to above. The MSQ revealed that "school policies and procedures" was the factor with which the respondents were least satisfied. This may be a result of the inherent conflict between prioritizing the motor skills of the child, which is the traditional medically-based role of physical therapists, versus prioritizing the functioning of the child in the school environment.

One important aspect of educational models of therapy is the importance of consultation, as opposed to hands-on care. However, only 12.4% of respondents identified Consultant as their major role, while 69.3%

identified themselves as Direct Service (Hands-on) Providers. Respondents acting primarily as consultants would have less difficulty than hands-on providers of service operating in a setting with a high caseload, limited space and limited equipment.

Demographic and work environment characteristics of school-based PTs

The review of the literature disclosed no previous examinations of the demographic and work environment of school-based PTs; however the American Physical Therapy Association (APTA) periodically surveys its membership and includes items regarding demographic and work environment characteristics of the membership. Several comparisons can be made between the results obtained in this study and the results published in the 1990 Active Membership Profile Report, the most recent report available (APTA, 1991). The respondents of this study were older, more experienced, more predominantly female, and earned slightly less than PTs as a whole. Mean age and years of experience of respondents were 41.0 and 16.7 respectively, as opposed to 36.5 and 12.6 for PTs as a whole. Women constitute only 73.6% of the profession according to the APTA, but the school-based respondents were 92.8% female (APTA, 1991). This study did not ask for specific salaries, so the mean salary of the respondents was not computed; however, mean salary of PTs as a whole was $41,616, and the most commonly reported salary category of the respondents in this study was $35,000 to $40,000 per year.

One striking characteristic of the sample was the preponderance of therapists working in suburban school districts. According to the U.S. Department of Education, only 28% of elementary and secondary students

in the United States attend suburban schools (U.S. Department of Education, 1992). However, 54% of the respondents reported working in suburban school districts. Urban and rural districts have 36.5% and 35.1% of students, respectively, but only 22.6% and 23.5% of the respondents worked in such school districts. (There are no figures available regarding distribution of students with physical disabilities, so the assumption is that they are distributed similarly to students as a whole.) Because none of the survey items offer direct evidence upon which to base an opinion, the underlying reason for this finding can only be the subject of speculation. One possible speculation is based on the fact that many of the respondents reported that they like working in schools because of the flexibility the job afforded them. Several mentioned that working in schools allowed them to be home with their families after school hours and during school vacations. Therefore, it may be that the disproportionate numbers of therapists working in suburban schools are a reflection of the locations of the residences of the respondents. For convenience, they work near their homes.

The relationships between level of job satisfaction, demographic characteristics, and various aspects of the work environment

It was anticipated that the level of job satisfaction of the respondents as a whole would be related to at least some of the demographic characteristics, and to various aspects of the work environment. This did not occur. Job satisfaction was not significantly associated with age, gender, years of experience, type and level of training, location, salary, source of employment (independent contractor vs. direct hire) or type of

setting (i.e. urban vs. rural). While any of these factors might be critical for a given individual, for the respondents as a whole they were not significant. Apparently, the level of job satisfaction among school-based PTs is a highly individualized phenomenon, dependent upon the expectations of individual therapists and working conditions at particular schools and school systems.

Improving recruitment and retention of school-based PTs: suggestions for providers of pre-service and inservice training

Job satisfaction results when experiences meet or exceed expectations. Therefore, those charged with training PTs should transmit to their students realistic expectations relative to school-based therapy. Educators should teach their students about the history and philosophy of the mandates which provide for therapy in the public schools. It is important to present school-based therapy as an adjunct to other school programs, rather than as a substitute for medically-oriented therapy available in other settings. Unfortunately, the reality is that physically impaired children are often unable to obtain comprehensive, medically-oriented therapeutic services at low cost, and hence, the school systems provide the only therapy available. This leads to a well-justified sense of frustration on the part of therapists, not to mention the frustrations of physically impaired children and their families. Therefore, it would be helpful for educators to train and encourage their students to be advocates for expanded community-based therapy programs and services.

Educators should emphasize the positive aspects of a consultative role for therapists. In many ways it is the ultimate in professionalism, because it focuses on dissemination of knowledge, rather than the often

routine application of technical skills. Educators should emphasize the positive aspects of school-based therapy as noted in the results of this study. It is an opportunity to be of service to children in a challenging, varied, "real-world" environment. Clients can be followed for several years without the "hassles" of billing and collection, and it affords an extraordinary degree of autonomy, flexibility, and creativity.

Finally, educators should attempt to increase the cultural, ethnic, racial, and socioeconomic diversity of students in pre-service training programs. At the risk of stereotyping, it can be said that the "typical" respondent is a 40-ish woman, working in, and likely to be living in, a suburban area. According to the APTA, PTs in the US are 93.8% Caucasian; less than 3% are African-American or Hispanic (APTA, 1991). Although racial and ethnic characteristics were not assessed in the current study, there is no reason to believe that the racial and ethnic characteristics of school-based PTs vary dramatically from these figures. If more PTs were drawn from racial and ethnic groups traditionally clustered in urban or rural areas, then it might be assumed that recruiting PTs to work in urban or rural areas would be facilitated.

In summary, based on this study, providers of pre-service and in-service educaton who wish to enhance the ability of school systems to recruit and retain PTs should consider inclusion of the following topics in their educational programs:

1. The legislative history of school-based physical therapy
2. How to be an advocate for children with disabilities
3. Consultation techniques and guidelines

Physical therapy educators might consider the incorporation of these topics into courses specifically designed to prepare PTs for service in the public schools. Such courses could be part of the pre-service curriculum, or could be delivered as part of continuing education programs designed for pediatric or general practice PTs who are considering school-based employment, but feel uncomfortable with the unique demands of school-based practice.

Pre-service educators should also attempt to diversify their student body relative to culture, race, ethnicity, and geography. Efforts to attract students with ambitions to settle in urban and/or rural areas should be particularly emphasized.

Improving recruitment and retention of school-based PTs: Suggestions for school administrators

Several suggestions to school administrators charged with recruitment and retention can be generated based on the results of this study. The first suggestion is to prioritize recruitment and retention of PTs. High caseloads are often a direct result of unfilled positions, and high caseloads were a commonly cited source of frustration among the respondents.

School administrators should consider providing dedicated space and equipment for the provision of hands-on services. Many may not be aware that, even when consultation is the principal mode of service, evaluation of a student's needs usually requires a quiet location with sufficient room to observe a student's functional movements (i.e., walking, climbing a stair, manipulation of objects), a place for the student to disrobe and undergo a careful physical examination, and a setting conducive to discussion with

parents and teachers. Likewise, certain pieces of equipment (i.e., strength and flexibility testing devices) are essential for documenting the level of physical functioning, and should be available even to PTs who are not involved in the provision of regular hands-on care.

Supervision was clearly a source of dissatisfaction among the respondents, and a lack of opportunity for advancement was also mentioned frequently. It is probably not coincidental that only 2% of respondents reported that Supervisor was the best description of their school-based duties. Job satisfaction might be enhanced by placing more therapists in supervisory positions. If this is not feasible, then educational programs for supervisors regarding the nature of physical therapy might facilitate communication between supervisor and therapist, and that would in turn enhance the satisfaction of PTs with their supervision.

Respondents cited flexibility of scheduling, autonomy, creativity, and variety in the work environment as factors contributing to job satisfaction. Administrators charged with recruitment and retention should be careful to preserve these characteristics of the working environment, and to emphasize these in their recruitment efforts.

In summary, based on this study, school administrators charged with recruiting and retaining PTs should consider the following measures:

1. Prioritization of recruitment and retention
2. Appointment of PTs to supervisory positions
3. Inservice programs for administrators about the roles of PTs
4. Provision of dedicated space and equipment for physical therapy service delivery

5. Maintenance and/or development of policies and procedures which maximize flexibility and autonomy for PTs

Limitations and weakness of the study

There were several limitations and weaknesses of the study. They included limitations of the MSQ, problems with the sample, the limited scope of the self-identification items, and the technique for categorizing and reporting responses to the open-ended questions.

The Minnesota Satisfaction Questionnaire-Short Form (MSQ) was chosen primarily for its reported validity and utility. However, the determination of satisfaction with a particular "factor" of job satisfaction from a single Likert response item seems, in retrospect, oversimplified.

The Overall Satisfaction Scores derived from the MSQ were difficult to interpret from two perspectives. First, the Overall Satisfaction Score is a number between 20 and 100, with a score of 100 meaning that a respondent checked "Very Satisfied" for every item, and 20 meaning that a respondent checked "Very Dissatisfied" for every item. However, a score of 80 does not mean that a respondent checked "Satisfied" for every item. It means simply that the average of the coded Likert-scale responses was "4", representing "Satisfied". The mean score obtained in this study, 77.0, is difficult to interpret clearly and succinctly; it does not mean that respondents were not satisfied with their jobs, but it does mean that their average response was slightly less than satisfied, but much more than "neutral" (which would be indicated by an Overall Satisfaction Score of 60. In short, there is an inherent problem in treating the numerical codes of categorical responses as if they were truly continuous, numerical responses.

Another weakness of the study was the sample. As discussed in Chapter 3, the population from which the sample was drawn included only members of the American Physical Therapy Association, which, in turn, includes only approximately 60% of licensed PTs. It may be that the responses of individuals who are not members of the dominant professional association would be different in some ways from those of the respondents.

The data regarding demographic and work-environment characteristics of school-based PTs were a useful part of the study, especially the skewed distribution favoring suburban schools. This phenomenon could have been better understood and explained if additional items had been added to the survey instrument regarding racial and ethnic background, and location of residences of the respondents. It may be that the difficulty in recruiting and retaining PTs in urban and rural schools is better viewed as a social, or socio-economic problem, than as a problem of job satisfaction.

The technique used for sorting and categorizing the responses to the open-ended questions could have been improved. This task was performed solely by the author. The validity of the categorizing process could have been improved if it had been a collective effort on the part of several individuals, because collective efforts tend to minimize systematic bias and clerical error (Biklen, 1992).

Suggestions for Future Research

This study was the first to assess the level of job satisfaction among physical therapists working in public schools. As such, it was primarily descriptive in nature, and was based on the analysis of a relatively small

amount of information from a relatively large group of individuals. Because levels of job satisfaction did not vary dramatically based on demographic or work-environment related variables, it would seem feasible to pursue the topic further using more intensive, qualitative research techniques with a much smaller sample; for example a single school system. Interviews with PTs who have left school-based practice could provide additional insights into job dissatisfaction with the school setting. Interviews with individuals and focus groups could yield a rich amount of information relative to job satisfaction of school-based PTs, and how satisfaction might be increased. The inclusion of the perspectives of school administrators, parents, and students with physical impairments in such studies would also be useful. These additional perspectives might help to identify factors other than job satisfaction which contribute to successful recruitment and retention.

Additional suggestions for research would be to compare the job satisfaction of school-based therapists to therapists working in clinical general practice settings, as well as to therapists who work exclusively with children in settings other than public schools. This study did not reveal whether or not many of the factors contributing to either satisfaction and dissatisfaction identified were unique to the public school settings. Those charged with recruiting and retaining PTs in the public schools are in competition with recruiters representing other settings, therefore comparative knowledge of factors contributing to satisfaction and dissatisfaction would be helpful in preparing competitive employment opportunities for PTs.

Conclusion

Physical therapists working in public schools are, overall, satisfied with their jobs. However, their level of satisfaction is not high. Sources of satisfaction and dissatisfaction were consistent with two-factor theories of job satisfaction, and were consistent with the impressions of many authors who have examined the inherent conflict between the medical model of physical therapy and the educational model of physical therapy service delivery mandated for school-based therapy.

It appears that increased job satisfaction would result if school administrators can provide PTs with opportunities for autonomy, flexibility and creativity. Furthermore, school administrators should take steps to decrease caseloads, provide dedicated space and equipment, and improve the quality of therapy supervision. Pre-service and inservice educators of physical therapists could be instrumental in improving job satisfaction by fostering an appreciation for the role of physical therapists in the public school setting, and by encouraging potential school-based therapists to develop realistic expectations of the advantages and disadvantages of working in the public school environment. Attempts to culturally, ethnically, and socioeconomically diversify the physical therapy profession might also result in enhanced recruitment and retention, because it might result in greater numbers of PTs who would feel comfortable living and working in urban or rural, as opposed to suburban settings.

Not only are school-based physical therapy services mandated by federal law, they are also an excellent, free resource for physically impaired children and their families. Implementation of the suggestions for school

administrators based on the results of this study can help to make these important services more widely available to children in our nation's schools.

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Appendix A: Copy of Cover Letter and Survey Instrument

11/3/93

From: Leonard Elbaum, PT
Associate Professor
Department of Physical Therapy
Direct Line: 305/348-3113

Dear Colleague,

I am writing you this letter to ask you to complete a survey I am conducting for my doctoral dissertation. My topic is "Job Satisfaction of Physical Therapists Working in Public Schools."

I am sending you this survey because you have been identified by the American Physical Therapy Association as a Physical Therapist currently working in a public school. If you <u>are not</u> working in a public school, please do not fill out the survey; just check the box at the bottom of this page and return this letter in the enclosed self-addressed, stamped, envelope.

If you <u>are</u> currently working in a public school, please complete the attached questionnaire. It should take less than 10 minutes. Please use the enclosed, self-addressed, stamped envelope and return it to me no later than November 18th.

Your responses will be completely anonymous. You will find no identifying codes on this letter, the survey, or the return envelope. If you would like a copy of the results of the survey, or if you have any questions, please feel free to call me at 305/348-3113, or write to me at the address at the bottom of this page.

This survey is being sent to a relatively small group of physical therapists, so every response is important to the success of my project. I thank you in advance for your time and consideration.

Leonard Elbaum, PT

___ *I do not currently work in a public school.*

SURVEY FOR SCHOOL-BASED PHYSICAL THERAPISTS

1. How old are you? ____ years

2. How many years have you been practicing Physical Therapy? ____ years

3. How many years have you working in public schools? ____ years

4. Which state do you work in? _____

5. How would you describe your school system?
___Rural ___Suburban ___Urban

6. How may different schools do you work in?
___1 ___2 ___3 ___4 ___More than 4

7. What is your highest degree?
___Bachelors ___Masters ___Doctoral

8. What was the major area of your highest degree? _____

9. What is your gender?
___Male ___Female

10. Which adjective best describes your school-based duties?
___Direct service (hands-on)provider ___Consultant
___Supervisor ___Other

11. Which statement best describes your mode of employment?
___Directly employed by the school system.
___Self-employed, acting as an independent contractor with the school.
___Employed by an agency acting as a contractor with the school.
___Other (please describe)_____

12. What is your yearly income? (If you work part-time, or on a 9 or 10 month contract, please estimate what your income would be if it was on a full-time, year round basis)

___Less than 25,000	___40,000-45,000	___60,000-65,000
___25,000-30,000	___45,000-50,000	___65,000-70,000
___30,000-35,000	___50,000-55,000	___70,000-75,000
___35,000-40,000	___55,000-60,000	___ More than 75,000

The next part of the survey is a 20-item questionnaire designed 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.

For each of the statements numbered 13 through 32, please do the following:

--Read each statement carefully.

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

Then, keeping the statement in mind:

--if you feel that your job gives you much less than you expected, check the parentheses under **"VDS"** (Very Dissatisfied);

--if you feel that your job gives you less than you expected, check the parentheses under **"DS"** (Dissatisfied);

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

--if you feel that you job gives you what you expected, check the parentheses **"S"** (Satisfied);

--if you feel that your job gives you more than you expected, check the parentheses under **"VS"** (Very Satisfied);

Remember: Keep the statement in mind when deciding how satisfied you feel about that aspect of your job. Do this for all statements, and please answer every item. Be frank and honest. Give a true picture of your feelings about your present job.

Please continue at the top of the next page.

On my present job, this is how I feel about:

	VDS	DS	N	S	VS
13. Being able to keep busy all the time	( )	( )	( )	( )	( )
14. The chance to work alone on the job	( )	( )	( )	( )	( )
15. The chance to do different things from time to time	( )	( )	( )	( )	( )
16. The chance to be "somebody" in the community	( )	( )	( )	( )	( )
17. The way my supervisor handles his/her employees	( )	( )	( )	( )	( )
18. The competence of my supervisor in making decisions	( )	( )	( )	( )	( )
19. Being able to do things that don't go against my conscience	( )	( )	( )	( )	( )
20. The way my job provides for steady employment	( )	( )	( )	( )	( )
21. The chance to do things for other people ( )	( )	( )	( )	( )	
22. The chance to tell people what to do	( )	( )	( )	( )	( )
23. The chance to do something that makes use of my abilities	( )	( )	( )	( )	( )
24. The way school policies are put into practice	( )	( )	( )	( )	( )
25 My pay and the amount of work I do	( )	( )	( )	( )	( )
26. The chances for advancement on this job ( )	( )	( )	( )	( )	
27. The freedom to use my own judgment	( )	( )	( )	( )	( )
28. The chance to try my own methods of doing the job	( )	( )	( )	( )	( )

On my present job, this is how I feel about:

	VS	VDS	DS	N	S
29. The working conditions	( )	( )	( )	( )	( )
30. The way my co-workers get along with each other	( )	( )	( )	( )	( )
31. The praise I get for doing a good job	( )	( )	( )	( )	( )
32. The feeling of accomplishment I get from the job	( )	( )	( )	( )	( )

You're almost finished . . . only three more questions!

33. Overall, are you satisfied with your job as a school-based physical therapist?
___Yes ___No

Why or why not?

_____

_____

_____

34. What is the most satisfying thing about being a public school PT?

_____

_____

_____

_____

35. What is the most frustrating thing about being a public school PT?

_____

_____

_____

_____

Please fold this questionnaire and place it in the attached self-addressed, stamped envelope, and mail it at your earliest convenience.

Thank you very much for your assistance.

VITA

June 16, 1952	Born, Milwaukee, Wisconsin
1975	B.S., Physical Therapy Marquette University Milwaukee, Wisconsin
1982	M.M., Classical Guitar Performance University of Miami Coral Gables, Florida
1984	M.M., Music Therapy University of Miami Coral Gables, Florida
1988-89	Visiting Scientist Newman Laboratory for Biomechanics Massachusetts Institute of Technology Cambridge, Massachusetts
1994	Ed.D., Exceptional Education Research Florida International University Miami, Florida

RECENT PUBLICATIONS AND PRESENTATIONS

Krebs DE, Elbaum L, Hodge WA, Riley PO, and Mann RW (1991) The effects of gait, ADL, and exercise on contact pressures within the human hip joint. Physical Therapy Vol 71 (4), pp 301-309, April, 1991

Elbaum L (1994) Understanding computer-assisted movement analysis (90-minute Instructional Presentation). Paper presented at the American Physical Therapy Association / Canadian Physiotherapy Association Joint Congress, Toronto, Canada