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Nettie Gerstle

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THE RELATIONSHIP OF JOB SATISFACTION
AND SELECTED DEMOGRAPHIC
CHARACTERISTICS OF PUBLIC HEALTH EMPLOYEES

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**THE RELATIONSHIP OF JOB SATISFACTION AND SELECTED
DEMOGRAPHIC CHARACTERISTICS OF PUBLIC HEALTH EMPLOYEES**

**A Thesis Presented for the
Master of Science in Nursing Degree
Southern Adventist University
Collegedale, Tennessee**

**Nettie Gerstle
May 2004**

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Abstract

The purposes of this study were (a) to determine the level of job satisfaction of public health department nurses (PHNs) and employees, and (b) to identify relationships between job satisfaction and demographic characteristics. A descriptive correlational design was used. A sample of 181 was taken from a metropolitan public health department population. Job Descriptive Index and Job in General instruments were used. Employees were satisfied with the overall job, supervision with work, not satisfied with promotional opportunities, and neutral regarding pay and co-workers. PHNs were satisfied with the overall job, supervision, work and pay, not satisfied with promotional opportunities and neutral regarding co-workers. There were several correlations between employee and PHN demographic and levels of job satisfaction.

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CHAPTER ONE

INTRODUCTION

Employees' job satisfaction has been one of the most studied aspects of the workplace in a wide variety of organizations and settings. Nurses account for the largest portion of health professionals in the public health setting, yet little research has been focused on their job satisfaction. Even fewer job satisfaction studies have focused on employees of public health departments in general.

“Research into job satisfaction suggests that as a job attribute it is possibly the most significant, yet elusive factor in understanding worker motivation, performance and effectiveness” (Cowin, 2002, p.283). Job satisfaction has been linked with improved quality of care, increased retention and decreased turnover (Lucas, McCreight, Watkins & Long, 1988), increased productivity (Chiok Foong Loke, 2001), and improved patient satisfaction (Tzeng & Ketefian, 2002). Conversely, job dissatisfaction has been linked to increased absenteeism, decreased organizational commitment, increased physical and mental illnesses, and increased turnover (Irvine & Evans, 1995).

Job satisfaction is a factor in an organization's financial well-being. In addition to the cost of absenteeism and illness, job satisfaction has potential financial implications related to its impact on retention and turnover. The cost of employee turnover is significant. At an estimated 150% of their annual salary, the cost to replace an employee whose annual salary is \$50,000 will be approximately \$75,000 (Izzo & Withers, 2002). This cost does not reflect the lost value of an employee's knowledge, experience and commitment. The impact of job satisfaction on an organization's ability to retain public health nurses, other public health workers and customers, to provide efficient, quality care, and to operate in a fiscally responsible manner is well-supported.

Background and Significance

Job satisfaction is becoming increasingly important in today's healthcare environment as organizations deal with limited financial resources and shortages of nurses and other healthcare workers. Nurses usually comprise the majority of health care workers in most healthcare settings, yet nurses as a group tend to be less satisfied with their job than the general work population. The 2000 National Sample Survey of Registered Nurses reports only 69.5 percent of the nurses surveyed reported that they were at least moderately satisfied with their jobs. By comparison, a survey of workers in general conducted by the National Opinion Research Center during roughly the same period of time found that 86 percent of workers and 88 percent of professional workers were satisfied with their jobs (Sochalski, 2002).

Several reasons were cited for nurses' dissatisfaction. Nurses feel a lack of control over their job and too little support in their job. Nurses' wages have not increased appreciably over the last ten years, and their potential for career advancement, which could lead to higher wages, is limited. The "business" approach to healthcare in the 1990s, spiraling healthcare costs and decreased financial resources have increased the stress on nurses in many healthcare settings where more is demanded of fewer nurses and other healthcare staff (Sochalski, 2002).

Nursing and Healthcare Worker Shortages

Nurses' lack of job satisfaction is a significant cause of the nursing shortage. It is estimated that 120,000 nurses have left the profession of nursing to work in non-nurse occupations. In addition, a surprising number of new entrants to nursing have chosen not to work as nurses. In 2000, 7.5 percent of new male nurses and 4.6 percent of new female nurses were not working in nursing occupations. Reasons cited for nurses' decision to

leave nursing, or to not begin working in nursing, included the attraction of better work hours and pay, and more rewarding work in other occupations (Sochalski, 2002).

Although not as acute as in the nursing profession, other healthcare worker populations are experiencing increasing shortages. As of early 2003, there were approximately 168,000 unfilled healthcare positions in hospitals and long-term care (McGuire, Houser, Jarrar, Moy & Wall, 2003). These shortages are expected to increase over time. While nursing shortages have been cyclic in the past, the current shortage is expected to be deeper and more profound. Two demographic forces, the aging of society and a smaller emerging workforce, have been blamed for these dismal projections and will eventually impact the availability of all healthcare workers.

Aging of Society

The aging of developed nations has been called "one of the most profound trends sweeping the industrialized world" (Baker, 2002, p.138). Baby boomers are retiring at ever increasing numbers, simultaneously increasing the number of people potentially requiring health care and decreasing the number of healthcare workers to provide this care. It has been estimated that over the next three decades, 78 million baby boomers will turn 65 (Buerhaus, Staiger & Auerbach, 2000). "The population group aged 85 and over will double from 3.5 million in 1998 to approximately 7 million in 2020" (Cooper, 2003, p. 76).

This demographic trend is already reflected in the nursing population. In the 1980s the highest percentage of registered nurses was in the mid-twenties age range (U.S. Department of Health and Human Services, 2002). By 2000, the highest percentage age range was the mid-forties (U.S. Department of Health and Human Services, 2002). One third of the nursing workforce is now over 50 years of age and it is estimated by 2010 it

will be 40 percent (Buerhaus, Staiger & Auerbach, 2000). While this trend is most critical in nursing now, it is also beginning to be reflected in other health care worker populations (McGuire et al., 2003). As the healthcare workforce ages a coinciding demographic trend, a small emerging workforce, intensifies the problems of the recruitment of workers by healthcare organizations.

Small Emerging Workforce

Substantial numbers of nurses and other healthcare workers will retire while the pool of potential healthcare workers, including nurses, shrinks. "The emerging workforce, those young people between the ages of 18 and 35, is the smallest entry pool of workers in the U.S. since the 1930s" (Wieck, 2002, p.30). The number of entries to the field of nursing, as well as other healthcare workers, will be insufficient to compensate for those leaving.

Dissatisfaction and subsequent turnover increases as healthcare staff carry heavier work loads to compensate for inadequate staff numbers. As healthcare organizations vigorously compete for the limited number of upcoming healthcare workers, the ability to attract and retain healthcare workers will be critical to their success. Therefore, job satisfaction will become increasingly important as they work to retain the healthcare workers they attract.

Significance to Public Health Departments

Public health departments, like all healthcare organizations, must compete for employees in the same environment of shortages and financial shortfalls. However, as government organizations, public health departments typically pay lower salaries, and usually cannot offer incentives or bonuses, thus, complicating their ability to compete with other healthcare organizations for employees. Government agencies take

significantly longer than other healthcare organizations for recruiting and hiring, which creates another impediment to their ability to compete.

The continuous addition of new programs and initiatives without the deletion of any existing programs, adds to the stress that public health department employees experience. Frequently these programs come with limited or no funding causing a heavier work load for the same staff. Often, each new program requires full attention, thus frustrating public health department employees with the impossible expectation of making every program the number one priority.

The public health department's pivotal roles in infectious disease outbreak and bioterrorism responsiveness increase stress on its employees, making it more difficult to facilitate job satisfaction. Each new program causes additional demands that come with little or no forewarning, consuming more staff time and resources, and increasing stress. New outbreaks, such as West Nile Fever, Monkeypox, Sudden Acute Respiratory Syndrome, and food related disease outbreaks are examples of unforeseen stressors. The threat of bioterrorism, particularly smallpox, has caused health department staff and managers to spend significant time in planning for mass clinics and implementing the smallpox vaccine initiative, in addition to their usual job responsibilities.

Typically, there are no additional financial incentives to compensate for additional job expectations. The source of the public health department's funding is the public's local, state and federal tax dollars. Decisions regarding the use of financial resources must not appear as an "abuse" of the public trust. Activities which might contribute to job satisfaction such as bonuses, perks or monetary rewards are seen as inappropriate uses of public funds. The nature of this bureaucratic governmental organization can contribute to job dissatisfaction. Changes which might contribute to job

satisfaction may come slowly, waiting upon many layers of approval. These unique characteristics of public health departments create greater hurdles to jump in promoting job satisfaction of public health workers.

Problem Statement

Public health department nurses and employees work in a unique setting which is different than private and public acute care settings where most job satisfaction studies have been conducted. Because of these unique circumstances there is a need to identify the level of job satisfaction of nurses and other employees in the public health department. Knowing the level of job satisfaction may provide a first step in improving employee retention, productivity, and client satisfaction.

Purpose of the Study

The purposes of this study were (a) to determine the level of job satisfaction of nurses and other employees in the public health department, and (b) to identify any relationships between job satisfaction and selected demographic characteristics of this sample.

Research Questions

This study will answer the questions:

1. What is the level of overall job satisfaction of all public health department employees?
2. What is the level of overall job satisfaction of public health department nurses?
3. What is the level of the job satisfaction in the subcategories – work, pay, opportunities for promotion, supervision and co-workers – of all public health department employees?
4. What is the level of the job satisfaction in the subcategories – work, pay, opportunities

- for promotion, supervision and co-workers - of public health department nurses?
5. Are there any relationships between the level of job satisfaction and selected demographic characteristics of all public health department employees?
 6. Are there any relationships between the level of job satisfaction and selected demographic characteristics of public health department nurses?
 7. What aspect of the job gives all public health department employees the most and the least satisfaction?

Framework

Imogene King's Interacting Systems Framework guides the selected research design. King's basic assumption is "the focus of nursing is the care of human beings" (King, 1981, p. 10), whether one individual or groups of individuals. An individual, one or more individuals interacting together, or social systems with many individuals are all considered open systems interacting with their environment. King's Interacting Systems Framework consists of three interrelated levels of interaction: personal systems, interpersonal systems and social systems. All three systems are dynamic, continuously changing as they interact with the environment and each other (King, 1981).

The personal system describes the individual. The concepts involved in the personal system are perception, self, body image, growth and development, time and space. As individuals interact with each other they form interpersonal systems which can be dyads, triads, or groups (small or large). The concepts related to interpersonal systems are interaction, communication, transaction, role, stress and coping. Social systems describe the interactions within societies or communities. Concepts related to social systems are authority, power, status, control and decision making (King, 1981). "The

concepts in the framework are not limited to only one of the dynamic interacting systems but cut across all three systems” (King, 1995, p. 19).

Perception is “each person’s representation of reality” (King, 1981, p.145). In other words, how they see the world and their experiences in that world. Perceptions are unique to each person and based on a multitude of influences. Past experiences, socioeconomic backgrounds, self-concepts, personality, physical and mental well-being, personal needs, and values all contribute to individuals’ perception of the world. These factors influence how they perceive their work, their co-workers and their supervisors.

Individuals’ job satisfaction is a reflection of their perceptions of how well the work, pay, interactions with co-workers and supervisors, and availability of promotion opportunities meet their personal intellectual, financial, social, and career needs. By identifying and describing the job satisfaction of public health employees, this research study will essentially be describing their perceptions of the interpersonal and social systems in which they function.

King states, “Accuracy in perception will depend upon verifying one’s inferences with the client” (1981, p.146). This same principle applies to the public health department’s interactions with its employees, both at the organizational level and the management level. Rather than managers making assumptions, they must give public health department employees the opportunity to communicate their perceptions. Conducting employee satisfaction surveys is one way to learn the public health employees’ perceptions regarding their work environment.

This study will focus on: (a) personal systems – public health department employees, (b) interpersonal systems - co-workers and supervisors- and (c) social systems – the public health department organization. Individuals- in this study,

employees- are described as rational, sentient, perceiving, thinking and feeling social beings that are able to judge, choose between alternatives, make decisions and set goals (King, 1981). Their judgments, actions and interactions are dependent on their perceptions of the world, their experience and others around them (King, 1981). This study will increase knowledge regarding public health department employees' perception of their workplace.

Definitions of Terms and Concepts

Conceptual Definitions

Job satisfaction is "the pleasure or sense of contentment resulting from the perception of one's job as fulfilling" (Juhl, Dunkin, Stratton, Geller & Ludtke, 1993, p. 43), "feelings or affective responses to facets of the situation" (Balzer, Kihm, Smith, Irwin, Bachiochi, Robie, Sinar and Parra, 1997, p.44) and "an affective feeling that depends on the interaction of employees, their personal characteristics, values and expectations with the work environment, and the organization" (Cumbey & Alexander, 1998, p. 40). For the purposes of this research study, job satisfaction consists of satisfaction with the job in general and the subcategories of work on present job, pay, opportunities for promotion, supervision, and people at work.

Job in general is overall satisfaction with the job, a "global, long-term evaluation of the job" (Balzar et al., 1997, p.56). Work on present job is defined as one's job, the activity for which one is employed and receives pay, "the work itself" (Balzar et al., 1997, p.47). "Satisfying work appears to be work that can be accomplished and is intrinsically challenging" (Balzar et al., 1997, p.47).

Pay is the monetary reimbursement for work. It includes salary, hourly pay, and benefits such as paid leave time, holiday leave, insurance premiums and retirement pay.

Pay satisfaction reflects the person's "attitude toward pay and is based on the perceived differences between actual pay and expected pay" (Balzar et al., 1997, 47). Opportunities for promotion are the chances that an employee has to move to a higher position of responsibility or authority or a more desirable position based on their merit, capabilities or job performance. "Satisfaction with promotions measures the employee's satisfaction with the company's promotion policy and the administration of that policy" (Balzar et al., 1997, p. 48).

Supervision is the management oversight and leadership provided to an employee by one who has the authority to make decisions about the employees' continued employment, pay raises and advancement, and the day-to-day operation of the workplace. Satisfaction with supervision "reflects an employee's satisfaction with his or her supervisor(s)," both with their interpersonal relationship with the supervisor and their perception of the supervisor's competence (Balzar et al., 1997, p.48). People at work are coworkers, peers or the people met in connection with work at the workplace.

Demographic characteristics include age, gender, race or ethnicity, education, years of service at the county health department, supervisory status, income ranges and work status - full time, skimp, part time or prn. Full time employees work 40 hours per week with benefits, skimp employees work at least 25 hours per week with benefits, part time employees work a set number of hours less than 40 hours per week without benefits, and prn employees work less than 40 hours per week and only as needed without benefits.

Operational Definitions

Job satisfaction is measured by the Job Descriptive Index instrument which asks for a response to 72 items regarding work at present, pay, opportunities, supervision and

people at work, and the Job in General instrument which consists of 18 items.

Demographic characteristics are measured by indicating the applicable age, gender, race or ethnicity, education, years of service at the health department, supervisory status, income, and work status.

Summary

The nursing shortage, shrinking general workforce and shrinking healthcare dollars make it imperative that healthcare organizations promote the job satisfaction of their employees. Public health departments have an even greater need to accomplish this as they have limited financial incentives for potential employees. Retention of public health department employees is dependent on their job satisfaction, which in turn, improves the effectiveness and efficiency of the organization. This research study will describe the job satisfaction of nurses and other employees within the public health department with the purpose of adding to the body of management and nursing administration knowledge. Gaining insight into the perceptions of public health department nurses' and employees' job satisfaction will enable managers to make evidence-based and effective decisions related to increasing their employees' job satisfaction and retention.

Significance of the Study

The significance of this study is specific to the management of public health departments and its employees. In particular, recruiting and retaining public health nurses, during this protracted nursing shortage is of vital importance. The findings will add to the body of knowledge regarding public health department employees' perceptions of job satisfaction. This will aid managers in these settings in making organizational decisions and changes that promote job satisfaction. This should result in improved

public health department employee retention and productivity, improved quality of care, and more satisfied clients.

Major Assumptions

An assumption of this study is that individuals prefer to work in an environment in which they are satisfied with their jobs. Other assumptions are that individuals satisfied with their job stay on the job longer, are more productive, more pleasant, and interact positively with co-workers, supervisors and clients. It is also assumed that organizations need to improve their employees' job satisfaction, and that organizations expect positive business and organizational outcomes from having satisfied employees.

Major Limitations

A major limitation of this study is that its generalizability is limited. Public health departments differ widely based on whether they are located in rural or metropolitan areas, the type of governance they are under (state vs. city or county), the type of population they serve, and the type of services they provide. Thus, their employees' perceptions of their workplace may also vary widely.

CHAPTER TWO

REVIEW OF LITERATURE

The focus of this review of literature was on theoretical and research literature related to job satisfaction and selected characteristics of job satisfaction in a public health department setting. There have been a limited number of job satisfaction studies in this setting. All but one of these was conducted in 1998 and earlier. Therefore, the scope of this review covers a broad expanse of time from 1988 through 2003, and covers public health nurses and other public health employees.

The majority of the studies specific to public health departments pertain to the job satisfaction of public health nurses. Only two studies focused on the job satisfaction of other public health department employees: environmental health practitioners, social workers, and case managers. A study conducted in a municipal local government agency is included in this review of literature because it shares some of the organizational characteristics found in a local municipal public health department. Business and management literature were used to provide information about job satisfaction in general.

Internet resources used to conduct this literature review were CINAHL, Medline, ABI Inform and Academic Premier online databases accessed through the McKee Library on the campus of Southern Adventist University. The keywords used were "job satisfaction," "employee satisfaction," "work satisfaction," "public health," "health department," and "Job Descriptive Index."

Job Satisfaction

Job satisfaction has been the focus of numerous studies and the topic of a multitude of articles. The business world has recognized employees "as a critical renewable asset" (Wagner III & Hollenbeck, 1998, p. 106). Businesses that successfully

promote the satisfaction of their employees find they are not only retaining loyal employees, but they are also retaining loyal customers. The link between employees' and clients' satisfaction has also been identified in health care. A study in one hospital described a significant positive correlation ($r = 0.87$, $p < .01$, two-tailed) between nurses' job satisfaction and inpatients' satisfaction with the management of their pain and discomfort (Tzeng & Ketefian, 2002). While employee job satisfaction has been linked to customer satisfaction and loyalty, decreased employee turnover, improved productivity and increased profitability (Harter, Hayes & Schmidt, 2002), employee dissatisfaction has been linked to increased health care costs, increased employee turnover and absenteeism, and violence in the workplace (Wagner III & Hollenbeck, 1998).

Job satisfaction is a very complex and multi-faceted phenomena. Since job satisfaction is "based on our perception of the present situation in terms of our values" (Wagner III & Hollenbeck, 1998, p. 107) it does not reflect the objective situation as much as the employee's perception of the situation. The employee's perception of job satisfaction is influenced by past experiences, values, personal life, general temperament, and even personal mental and physical health, as well as current interaction and relationships with others in the workplace (Wagner III & Hollenbeck). As with pain, employees' job satisfaction is what they say it is, and the only way to ascertain the level of their satisfaction is to ask them.

Job satisfaction is a conglomerate of variables. An employee may be satisfied with some aspects of their job and not others. Some instruments only measure job satisfaction in general. Other instruments used to measure job satisfaction include a number of subcategories that deal with the nature of the work itself, relationships with co-workers and supervisors, physical surroundings, safety, intrinsic rewards such as self-

development or advancement, and extrinsic rewards such as pay, benefits, bonuses, and promotion opportunities. The Job Descriptive Index (JDI) instrument is based on the premise that job satisfaction is multidimensional, a response to all the “facets of the situation” (Balzer, Kihm, Smith, Irwin, Bachiochi, Robie, Sinar and Parra, 1997, p.44).

Job satisfaction has been defined in many different ways. Some define it in terms of feelings: “how we feel about our job” (Cowin, 2002, p.283), “the overall feelings an employee has about their job in general” (McNeese-Smith & Servellen, 2000, p.98), or “the extent to which employees like their work” (Ellickson, 2002, p. 343). One nurse, responding in a qualitative study, said job satisfaction is “if you like what you are doing and you get along with your peers” (McNeese-Smith, 1999, p. 1333).

Others’ definitions of job satisfaction include with the “feelings” aspect the idea that the job will fulfill or meet personal needs and expectations. Job satisfaction is “a pleasurable feeling that results from the perception that one’s job fulfills or allows for the fulfillment of one’s important job values” (Wagner III and Hollenbeck, 1998, p. 107) and “the pleasure or sense of contentment resulting from the perception of one’s job as fulfilling” (Juhl, Dunkin, Stratton, Geller & Ludtke, 1993, p.43). Cumbey and Alexander (1998) defined job satisfaction as “an affective feeling that depends on the interaction of employees, their personal characteristics, values and expectations with the work environment, and the organization” (p. 40). This last definition most closely reflects King’s Interacting Systems Framework.

Job Satisfaction Studies in Public Health Settings

In one of the earliest job satisfaction studies which included public health nurses, Geiger and Davit (1988) conducted a comparative descriptive study to identify and compare the job satisfaction and self-image of hospital nurses and public health nurses

(PHNs). Seventy-five registered nurses were randomly selected from a total of 342 hospital nurses and an unspecified number of registered nurses from five health centers of the public health agency in a metropolitan area. Fifty-one PHNs and 43 hospital nurses responded. The Job Satisfaction Scale (JSS) was used to measure job satisfaction by scoring 26 items on the basis of a Likert Scale from one to five. High satisfaction was indicated by high scores and low satisfaction by low scores. The total of all the scores indicated the overall job satisfaction (Geiger & Davit, 1988).

Analysis of the responses showed several significant differences in job satisfaction between hospital and PHNs. Hospital nurses reported a significantly higher overall job satisfaction (mean 82.72, SD 5.23) than PHNs (mean 79.54, SD 5.45; $t = 2.75$, $p = .007$). They also differed significantly on five items of the JSS. The PHNs more strongly agreed than the hospital nurses that their jobs were appealing and desirable ($t = 2.73$, $p = .006$). They were also more satisfied with the planning and foresight of their administration ($t = -2.02$, $p = .047$) and their efforts to provide new development information related to the PHNs' areas ($t = -1.96$, $p = .053$). Hospital nurses indicated they had more opportunities for professional advancement ($t = 3.51$, $p = .001$) and more opportunities for creativity and advancement ($t = 2.45$, $p = .016$) than PHNs (Geiger & Davit, 1988).

Geiger and Davit (1988) reported the Cronbach's alpha reliability coefficients for this study as .87 for the hospital nurses, .87 for the PHNs, and .86 when they are combined. Limitations of this study are the small sample ($n = 94$, PHNs $n = 51$, hospital nurses $n = 43$) and the age of the study.

Lucas, McCreight, Watkins and Long (1988) focused specifically on PHNs, conducting a descriptive correlational design study assessing the job satisfaction of PHNs

and identifying the relationships of job satisfaction to demographic characteristics of those PHNs. Questionnaires were sent to 1089 PHNs employed by the South Carolina state health department through the intra agency distribution system. Confidentiality and voluntary participation were explained in a cover letter that accompanied the questionnaires. Seven hundred and forty nine nurses (a 68% response rate), responded with usable forms. The sample consisted of 717 registered nurses, 19 licensed practical nurses and five non-specified nurses.

Job satisfaction was measured using an instrument that had been developed by Stember, Ferguson, Conway, and Yingling in 1978 to measure the job satisfaction of public health staff. The 76 items on a Likert scale of 1, strongly agree, to 5, strongly disagree, avoided a response set by using both positive and negative statements. Included in the questionnaire were demographic questions, a narrative portion that solicited the aspects of the job the nurses felt provided the most and least job satisfaction and a space for making suggestions that might improve job satisfaction (Lucas, McCreight, Watkins & Long, 1988).

Twelve categories of job satisfaction were measured: (a) job importance, (b) job security, (c) interpersonal relationships, (d) supervision, (e) recognition, (f) achievement, influence, (g) job mechanics, (h) working conditions, (i) organizational policies, (j) salary and benefits, and (k) communication. The mean response of these 12 categories was the overall job satisfaction. A panel of experts, pretesting and cluster analysis were used to establish instrument validity. Cronbach's alpha coefficients supporting reliability for their sample ranged 0.52 to 0.93 for nine categories, and 0.67, 0.60 and 0.52 for job mechanics, job importance and achievement, respectively (Lucas et al., 1988).

An overall job satisfaction level of 3.93 out of a possible 6.00 was reported. The job components ranked highest were job importance (mean 5.39, SD 0.50), interpersonal relations (mean 4.62, SD 0.74), achievement (mean 4.51, SD 0.74) and supervision (mean 4.41, SD 0.96). The job components ranked lowest were salary and benefits (mean 3.33, SD 0.98), recognition (mean 3.25, SD 0.98), and job mechanics (mean 3.06, SD 0.94) (Lucas et al., 1988).

The researchers then determined differences in job satisfaction based on a number of demographic characteristics. The job satisfaction of nurses with a master's degree of public health (mean 4.35) was significantly higher than those with an associate degree (mean 3.84) ($t = 0.97$, $p = 0.33$). The job satisfaction of nurses who completed their work on the job (mean 4.04) was significantly higher than those who took work home (3.82) ($t = 5.35$, $p < 0.01$). Nurse administrators were significantly more satisfied with their job (mean 4.33) than the PHNs (mean 3.87) and nurse practitioners and midwives (mean 3.82; $F = 3.43$, $p < 0.01$; Lucas et al., 1988).

Those nurses assigned primarily to the tuberculosis program were significantly more satisfied (mean 4.41) than nurses assigned to either the family planning program (3.77) or the women, infant and children program (mean 3.71; $F = 3.36$, $p < 0.01$). And finally, nurses assigned to the child health program (mean 4.19) were significantly more satisfied with their job than those assigned to the women, infant and children program (mean 3.71; $F = 3.36$, $p < 0.01$). There were no other significant findings in the relationships of demographic or job characteristics to the job satisfaction of these PHNs (Lucas et al., 1988).

The strength of this study was its sample size ($n = 741$, 68% response rate) which increased the likelihood that this sample was representative of the population of PHNs in

South Carolina. However, its generalizability might be limited to South Carolina's PHNs. The ranking of the nurses' satisfaction of the job components by means does not tell the importance of these components to nurses, making it more difficult to decide what changes would increase job satisfaction. The age of the study (1988) is also a limitation. It might not reflect what PHNs think now, almost fifteen years later.

Ten years later, in a follow-up study conducted by Cumbey and Alexander (1998) PHNs in the same South Carolina public health nurse population used in the 1988 Lucas, McCreight, Watkins and Long study were again found to be moderately satisfied with their job. "The purpose of this study was to examine the relationship of organizational variables (structure, technology and environmental uncertainty) and job satisfaction among PHNs" (Cumbey & Alexander, 1998, p.40). An exploratory correlational research design was used for this study.

The sample was taken from a population of all licensed nurses in the state employed by the state health department that had at least a month of employment with the health department. Of the 1669 distributed questionnaires, 838 usable questionnaires were returned (50.6% response rate). The instrument used to measure job satisfaction was the McCloskey/Mueller Satisfaction Scale (MMSS) which consisted of 31 items representing eight subscales of satisfaction. "The eight subscales are extrinsic rewards (3 items), scheduling (6 items), balance of family and work (3 items), interaction opportunities (4 items), praise and recognition (4 items), and control and responsibility (5 items)" (Cumbey & Alexander, 1998, p. 43). The authors reported a strong (0.91) Cronbach's alpha reliability coefficient.

"Overall scores on the MMSS ranged from 59 to 155 with a mean score of 114.78 (SD 15.55), suggesting a moderate satisfaction level of the nurses in this study... a

summative score of 94 would be the lowest possible score indicative of satisfaction” (Cumbey & Alexander, 1998, p.44). The PHNs were most satisfied with scheduling (mean 24.94, SD 3.80, possible range 6-30), responsibility (mean 17.19, SD 4.34, possible range 5-25), and praise and recognition (mean 16.01, SD 2.86, possible range 4-20), while they were least satisfied with work and family life (mean 9.68, SD 1.73, possible range 2-19) and coworkers (mean 8.48, SD 1.19, possible range 2-10; Cumbey & Alexander, 1998).

“All three dimensions of structure – vertical participation, horizontal participation, and formalization – were correlated significantly ($p < 0.0001$) to job satisfaction” (Cumbey & Alexander, 1998, p. 45) with coefficients of 0.55, 0.48 and -0.40 respectively. Another significant correlation to job satisfaction was the years of experience in the health department with a coefficient of 0.06, $p < 0.001$. One final significant finding was that the job satisfaction of LPNs (mean 120.39) was significantly higher than the RNs (mean 114.42; $F = 4.01$, $p < 0.05$). No standard deviations were reported for these means. There were no other statistically significant differences noted in the demographic findings.

The large sample size and the fact that this study is the most recent study of the public health nurse population are strengths of this study. The authors felt that one limitation was problems with the environmental uncertainty tool used (Cumbey & Alexander, 1998, p. 45).

A descriptive comparative study published in 1993 by Juhl, Dunkin, Stratton, Geller and Ludtke compared the job satisfaction of home health and PHNs (PHN) and the importance of selected job attributes to them. Four hundred and fifty three questionnaires were mailed to all the home health nurses and community health nurses in this rural mid-

western state. The resulting sample size was 258, consisting of 111 PHNs and 146 home health nurses.

The Stamps and Piedmonte job satisfaction scale was used. "The scale consists of 37 items representing 7 dimensions of task requirements, organizational climate (referred to as organizational requirements by Stamps and Piedmonte), professional status, salary, autonomy, interaction (with physician and nurse colleagues), and benefits/rewards" (Juhl et al., 1993, p.43). Study participants were asked to rate their agreement with the items on a scale of 1 to 5, with 1 being strongly disagree and 5 strongly agree, and to rate the importance of each item to their satisfaction on a scale of 1 to 5, with 1 being not important and 5 being very important.

"Analysis of covariance (ANCOVA) was used to control for importance while determining the statistical significance for mean score differences between groups" (Juhl, et al., 1993, p. 45). ANCOVA revealed that there were only four differences that were significant. "Although both groups had low satisfaction with salary, PHN were significantly less satisfied than home health nurses ($F = 32.96$, $df [2,252]$; $p \leq 0.001$). However, home health nurses were significantly less satisfied on the dimensions of benefits/rewards ($F = 11.85$, $df [2,251]$, $p \leq 0.001$), task requirements ($F = 8.374$, $df [1,247]$, $p \leq 0.05$), and professional status ($F = 5.30$, $df [2,249]$, $p \leq 0.05$; Juhl, et al., 1993, p.45).

PHN and hospital nurses were most satisfied with the same three job dimensions, professional status (PHN mean 4.01, SD 0.62; hospital nurses mean 4.00, SD 0.69), autonomy (PHN mean 3.96, SD 0.52; hospital nurses mean 3.85, SD 0.58) and interaction (PHN mean 3.81, SD 0.65; hospital nurses mean 3.87, SD 0.55). Both groups were least satisfied with salary (PHN mean 2.02, SD 0.82; hospital nurses mean 2.64, SD

0.93), and benefits and rewards (PHN mean 3.04, SD 0.61; hospital nurses mean 2.77, SD 0.63).

In ranking the importance of the job dimensions to their job satisfaction, both groups indicated the same three dimensions as most important, but ranked their order of importance slightly differently. PHNs indicated that interaction (mean 4.36, SD 0.62) was most important and professional status (4.31, SD 0.71) was third most important to their job satisfaction, while hospital nurses ranked professional status (mean 4.47, SD 0.50) and interaction (mean 4.43, SD 0.44) as first and third most important. Both agreed that salary (PHN mean 4.37, SD 0.52; hospital nurses mean 4.35, SD 0.77) as second most important (Juhl, et al., 1993).

In addition to identifying differences between the PHNs and home health nurses, the researchers also compared the differences between the staff and administrators of both settings. While the 185 staff nurses' score was lower than the 59 administrators on both total satisfaction (staff mean 3.38, SD 0.44; administrators mean 3.44, SD 0.51) and importance of total satisfaction (staff mean 4.21, SD 0.48; administrators mean 4.30, SD 0.37), ANCOVA showed that only two of the differences were significant.

“Administrators perceived the importance of organizational climate ($F = 4.50$, $df [1,91]$, $P \leq 0.05$) and professional status ($F = 4.39$, $df [1,95]$, $P \leq 0.05$) to be higher than did the staff nurses” (Juhl, et al., 1993, p. 45). ANCOVA showed no significant differences between the public health staff and administrators, or between the home health staff and administrators.

Content validity was established by conducting a pilot study. “Measures for internal consistency yielded an alpha coefficient of 0.88 for the total satisfaction scale and 0.92 for the total importance scale. Reliability for each of the seven dimensions were

not as high, and ranged from 0.40 to 0.86" (Juhl, et al., 1993, p.44). Strengths of this study include the sample size of both the PHNs and home health nurses, and the inclusion of ranking by importance of the job dimensions. Weaknesses are the small (n = 59) size of the administrators' sample and the age of the study (1993).

An exploratory descriptive qualitative study conducted by Reutter and Ford (1996) examined the perceptions of PHNs in the Alberta, Canada Public Health Department. One impetus for this study was to improve support to these nurses during periods of change and uncertainty through a better understanding of the nurses' perceptions of job satisfaction (Reutter & Ford, 1996).

Twenty eight PHNs volunteered for the study after seeing a written announcement about the study in their health units. Data was collected using focus groups and one-on-one interviews that were guided by semi-structured interview guides (Reutter & Ford, 1996). "Seventeen nurses were involved in the individual interview and 11 in the focus groups" (Reutter & Ford, 1996, p.8). Each of the 17 individual interview subjects attended two interviews, and the 11 focus group subjects attended one of three focus group sessions. All interviews and focus group sessions were audio taped and transcribed. Themes from the data were identified using content analysis.

The Ethnograph computer program was used to assist in coding and sorting of the data. Initially, the data were grouped into 10 broad categories that reflected the major domains of the interview questionnaire. These categories were subsequently recoded to further identify their attributes and to detect patterns in the data. Themes were generated from this recoding. This paper describes themes that emerged from one of the categories – PHNs' feelings about their work (Reutter & Ford, 1993, p.8).

Four themes emerged from this content analysis. "Nurses perceived their work as valuable and worthwhile, enjoyable, demanding and not well understood by others" (Reutter & Ford, 1993, p.8). What made the nurses feel their job was valuable and worthwhile, and gave them job satisfaction, is that what they do "makes a difference in the lives of their clients" (Reutter & Ford, 1993, p.9) in ways that nurses in other settings cannot. They felt they were seen as more available and credible than nurses in other settings (Reutter & Ford, 1993).

PHNs enjoyed their work because they felt they were partners with their clients in improving their health and lifestyle. The variety of clients they see and the relative autonomy they experience in their practice also contributed to this feeling of enjoyment and job satisfaction (Reutter & Ford, 1993).

One theme that illustrated a potential source of dissatisfaction for PHNs was the demanding nature of their job. Complex client situations, lack of follow through by many clients, the high risk nature of much of the population they serve, inadequate time, and frustration with the frequent addition of new programs all contributed to a feeling of stress and dissatisfaction. "Uncertainty about their own job security and the future direction of public health" (Reutter & Ford, 1993, p.11) also contributed to their feelings of stress.

Another theme that potentially could contribute to PHNs' dissatisfaction with their jobs was that of "not being well understood by others" (Reutters & Ford, 1993, p.11). Both the public and other healthcare providers' lack of understanding of what the PHNs do led them to feel they were not valuable and credible.

The strength of this study is that it focused on the nurses' own words, allowing them to define what they meant. Generalizability is limited, but the qualitative approach of this study allows for the deeper meanings of job satisfaction to PHNs to be revealed.

Non-Nursing Public Health Job Satisfaction

Only two research studies were found that focused on public health department employees other than nurses. One compared the job dissatisfaction of environmental health practitioners (EHPs) in two states (Oleckno, 1995). The other focused on "organizational and environmental predictors of job satisfaction in community-based HIV/AIDS services organizations" (Gimbel, Lehrman, Strosberg, Ziac, Freedman, Sacvicki & Tackley, 2002, p. 43) of the New York Health Department.

Oleckno (1995) compared the level of dissatisfaction of environmental health practitioners (EHPs) in a southern Californian (SC) and northern Illinois (NI) county health departments. The sample from both consisted of those EHPs who were present on the days the questionnaire was administered. "The SC Cohort (n = 212) consisted of all EHP working... These included sanitarians, environmental health technicians, industrial hygienists, and environmental engineers employed in six different divisions" (Oleckno, 1995, p. 18). "The NI Cohort (n = 75) consisted of EHPs from each of the environmental health divisions of nine county health departments in NI... the NI Cohort included sanitarians, environmental health inspectors, environmental health consultants, and environmental control engineers" (Oleckno, 1995, p. 18). Two hundred and eighty-seven usable surveys were collected.

A comparison of the demographics of the two cohorts revealed only one significant difference, that of the level of professional involvement. "The EHPs from the

NI Cohort were more likely than those from the SC Cohort to be active members of a state or national association related to environmental health" (Oleckno, 1995, p.19).

The instrument used was the Occupational Needs Questionnaire (ON-Q), consisting of 32 items which measured job dissatisfaction by "determining the extent to which important individual work expectations are met by the job" (Oleckno, 1995, p.19). In previous studies with samples sizes of 212 and 655, it was shown to have alpha coefficients of .93 and .95, respectfully. It "also revealed positive evidence of validity based on comparisons with the Job Descriptive Index and the Job in General Scale, both of which are considered valid and reliable measures of job satisfaction" (Oleckno, 1995, p. 19). The ON-Q scores were interpreted as follows: 0-10 was no job dissatisfaction, interpreted as satisfaction, 11-20 was mild to moderate job dissatisfaction, interpreted as somewhat dissatisfied, 21-30 was definite dissatisfaction, interpreted as dissatisfied, and 31-72 was extreme dissatisfaction, interpreted as very dissatisfied (Oleckno, 1995). Although both cohorts reported overall mean job dissatisfaction levels in the mild to moderate range, the northern Illinois EHP mean overall score of 16.4 indicated a significantly higher dissatisfaction level than the southern California EHPs' mean overall score of 13.6 ($t = 2.14, p < 0.05$).

Both cohorts ranked friendship as the least dissatisfying aspect of their job (mean 5.2, SD 0.63; mean 5.9, SD 1.35), and work environment (means 6.4, 10.6 and SD 0.79, 1.52, respectively), helping others (means 9.7, 7.5 and SD 0.86, 1.23, respectively) and job freedom (means 9.5, 9.3 and SD 0.99, 2.09, respectively) in the top five least dissatisfying job aspects (Oleckno, 1995). Adequate time for work (mean 27.1, SD 1.25) and career advancement (24.1, SD 2.80) were most dissatisfying to the NI group, while

earning a comfortable living (mean 24.8, SD 1.45) and organization efficiency (mean 22.9, SD 2.48) were most dissatisfying to the SC group (Oleckno, 1995).

The correlation of demographic and occupational variables and job dissatisfaction revealed only one significant finding. "For the NI CoHort, a significant correlation was found only between years on the job and level of job dissatisfaction, with those having more than 10 years on the job being less dissatisfied than those having 10 or fewer years on the job ($\eta = .40$, $p < .05$; note: η is a correlation coefficient with a minimum value of 0 and a maximum value of 1)" (Oleckno, 1995, p.19).

One limitation of this study is that the instrument measured dissatisfaction which may tend to cause results to be more on the dissatisfied side. There was also a large difference in the two sample sizes (212 and 75). The results of this study could not be generalized to other public health workers as it is specific to EHPs. The overall sample size of 287 is a strength of this study.

The second study on public health employees other than nurses was the Gimbel, et al. (2002) study of community-based HIV/AIDS services organizations in the New York Health Department. Employee satisfaction was measured as part of the process of determining whether "organizational and environmental characteristics positively predict job satisfaction within community-based HIV/AIDS organizations" and if "the strength of these predictors differ based on employee level in community-based HIV/AIDS organizations" (Gimbel, et al., 2002, p.44).

The job satisfaction component of this study was measured by use of a satisfaction survey that was administered anonymously to employees of 47 community-based organizations. Surveys, with a cover letter, were distributed during staff meetings. A total of 528 surveys were returned, an overall response rate of 92 percent.

The community program “employees were classified into four groups: management, case managers, and case manager technicians, community follow-up workers, and billing/administrative staff” (Gimbel, et al., 2002, p.46).

The majority of the employees in the management classification were social workers, many with graduate degrees. Case managers predominately held bachelor degrees and technicians, associate degrees in human services. Community follow-up workers were not required to have college degrees. Billing and administrative staff were support personnel who were not directly involved with clients.

A survey tool was developed for this study to measure employees’ overall perspective of job satisfaction by asking participants to rank their response using a one to five Likert scale to two statements: “I am very satisfied with my job in this organization” and “Time seems to drag while I’m on the job” (Gimbel, et al., 2002, p.49). An alpha coefficient of reliability of .84 was reported for these two questions (Gimbel, et al., 2002).

Job satisfaction among each of the four employee groups studied in this population of HIV/AIDS community-base organizations was relatively high, measuring 3.94 to 4.40 on a five-point scale” (Gimbel, et al., 2002, p. 53). Job satisfaction was highest in the billing and administrative staff (mean 4.40 and 4.31, SD 0.72 and 1.08). Management had the next highest job satisfaction (mean 4.26 and 4.38, SD 1.16 and 0.75) with case managers and technicians following (mean 4.20 and 4.02, SD 0.89 and 1.14), and community follow-up workers with the lowest job satisfaction of the group (mean 4.20 and 3.94, SD 1.03 and 1.44). The aggregate job satisfaction score was mean 4.25 and 4.07, with a SD 0.9 and 1.15 (Gimbel, et al, 2002).

Participants were also asked to respond to a number of statements regarding supervision, promotional opportunities, their involvement with their job (organizational commitment) and the environmental influences on their job such as average number of needs of their clients and their geographical location. Their perceptions of these components, considered potential predictors for job satisfaction, were measured by the rate of their agreement or disagreement to each statement as indicated on a one to five Likert scale. The alpha coefficients of reliabilities of these questions ranged from .81 to .86 (Gimbel, et al., 2002).

Significant predictors of job satisfaction for those employees who deal directly with clients, such as management, case managers and technicians, and community follow-up workers, were found to be the organizational commitment of the individual and their perspective of supervision. "Job involvement is a significant predictor of job satisfaction for employees charged with case management responsibility" (Gimbel, et al., 2002, p. 54), but not for the other three groups. Incentives were the most significant predictor of job satisfaction for the billing and administrative staff. Predictors of satisfaction were based on ANOVA analysis for job satisfaction variables, an analysis of OLS multivariate regression equations for each of the four groups, and a comparison of the standardized regression coefficients for each of the independent variables supervision, organizational commitment, incentives, job involvement, number of client needs, location, percentage of sicker clients (Gimbel, et al., 2002).

While the overall response rate (92%) to the survey was impressive, the management (74) and billing staff and administrative staff sample groups (52) were much smaller than the other two groups (case management 286, community follow-up workers 108) thus not as well represented. The results of this study pertain to such a specific

group of public health employees that it would not be generalizable to public health department employees as a whole.

Non-Public Health Job Satisfaction

As public governmental agencies, municipal government departments and public health departments share a number of similarities such as organizational structure and organizational behaviors. An employee job satisfaction survey conducted in a local municipal government provides some insight into public health department employees' job satisfaction because of these similarities. This descriptive correlational study was conducted in an 18 department Midwestern municipal government that served a population of 200,000. Questionnaires were sent to all municipal employees and 1,227 were returned representing a 91 percent return rate (Ellickson, 2002).

The questionnaire measured overall satisfaction and satisfaction in eleven different aspects of the job: "equipment and resources, physical work space, safe work environment, training, workload, departmental esprit de corps, pay, benefits, promotional opportunities, performance appraisal, and supervision" (Ellickson, 2002, p.346). A Likert scale of 1, strongly agree or very satisfied, to 5, strongly disagree or very dissatisfied, was used in the survey tool. Respondents were asked to indicate their gender, age range and whether they were supervisors or non-supervisors. The reported reliability of the performance appraisal satisfaction portion of the scale was a Cronbach's alpha reliability coefficient of .81. The supervision portion of the scale had a reported reliability coefficient of .90 (Ellickson, 2002).

The overall job satisfaction of the employees was: (a) very satisfied, 12%, (b) satisfied, 49%, (c) neither satisfied or dissatisfied, 22%, (d) dissatisfied, 11% and (e) very dissatisfied, 6%. A multi-regression analysis revealed that 10 of the 14 variables

“demonstrated significant effects of job satisfaction”: (a) departmental pride, (b) promotional opportunities, (c) pay, (d) benefits, (e) equipment and resources, (f) training, (g) workload, (h) supervision, (i) performance appraisal and (j) job level (Ellickson, 2002, p. 348).

The four variables that were the most powerful predictors of overall job satisfaction were departmental pride, promotional opportunities, and satisfaction with pay and satisfaction with benefits. Physical space, safe environment, age and gender had no significant relationship with job satisfaction. Strengths of this study are the sample size (1,227) and response rate (91%). They increase the likelihood that the sample represented the population of this study well.

Summary

Studies focusing on public health department health workers show some differences in the level of job satisfaction between different public health worker job classifications. PHNs reported they were moderately satisfied with their jobs overall (Cumbey & Alexander, 1998; Juhl, Dunkin, Stratton, Geller & Ludtke, 1993; Lucas, McCreight, Watkins, & Long, 1988), though their overall job satisfaction was less than hospital nurses (Geiger & Davis, 1988). EHPs were found to have job dissatisfaction in the mild to moderate range (Oleckno, 1995). Only in the HIV/AIDS community services' setting was overall job satisfaction reported to be relatively high, with billing and administrative employees rating it the highest and community follow-up workers the lowest (Gimbel, et al., 2002).

PHNs and home health nurses reported the most satisfaction with professional status, autonomy and interaction, and the least satisfaction with salary. However, they ranked interaction, professional status, and salary as most important to their job

satisfaction (Juhl et al., 1993). Lucas, McCreight, Watkins & Long (1988) reported that PHNs were most satisfied with job importance, interpersonal relations, achievement and supervision, while salary and benefits, recognition and job mechanics were the three components with which they were least satisfied.

Environmentalists reported that friendships at work, work environment, helping others, job freedom and responsible work were the aspects of their job that gave them the most satisfaction, while they were most dissatisfied with their ability to make a comfortable living, adequate time, career advancement and organizational efficiency (Oleckno, 1995). Incentives (advancement, promotion opportunities) were the most significant predictor of job satisfaction for billing and administrative employees in the HIV/AIDS community services setting, while satisfaction with the supervisor most predicted overall job satisfaction for case managers and technicians (Gimbel, et al, 2002).

In comparison, employees in an agency which shares many of the organizational characteristics of a public health department, a municipal government, reported they were very satisfied or satisfied (61%) (Ellickson, 2002). Departmental pride, promotional opportunities and pay were found to have the most powerful influence on job satisfaction in municipal government employees.

Job satisfaction has been shown to impact an organization's ability to retain workers and customers, provide efficient, quality care and operate in a fiscally responsible manner. Yet, the review of literature revealed that there have been limited studies of employee job satisfaction in the public health department setting. Only three studies focusing on PHNs were conducted in the last fifteen years (Cumbey & Alexander, 1998; Juhl, et al., 1993; Reutter & Ford, 1996). Only two studies were found focusing on other public health department employees (Gimbel, et al., 2002; Oleckno, 1995).

Public health departments are competing for nurses and other health department workers in a healthcare environment with a shrinking workforce pool and shrinking healthcare dollars. In addition, they must overcome hurdles of limited financial incentives and bureaucratic organizational characteristics. It is imperative that public health departments gain insight into the job satisfaction of their employees to retain employees, and to provide efficient, effective services. Further studies are needed focusing on the job satisfaction of PHNs and other public health department employees.

CHAPTER THREE

METHODOLOGY

Research Design

A nonexperimental descriptive correlational design was used for this research study. The level of job satisfaction and its subcategories of public health department employees were described and identification made of any relationships between the level of job satisfaction and selected demographic characteristics. Then the level of job satisfaction and its subcategories of PHN were described and identification made of any relationships between the level of job satisfaction and selected demographic characteristics of the PHNs.

Due to the limited number of research studies concerning the job satisfaction of PHN and public health department employees, there is little known about the subject and the relationships between the variables of job satisfaction and the demographic characteristics of the nurses and other employees. A strength of this design is that it is the most appropriate for the research questions and meets the need to establish a baseline of knowledge about this subject. A weakness of the correlational design is its inability to establish causality. It can only identify the presence of relationships between the variables and the strength and direction of those relationships (Burns & Groves, 2001).

Population and Sample

The population for this research study was all the employees of a local county public health department. Sampling criteria included all those individuals ($n = 256$) who were employed by the county public health department. This total included 65 public health nurses (registered nurses). Other public health department employees included social workers, physicians, dentists, dental assistants, dental hygienists,

environmentalists, environmental technicians, nutritionists, nutrition educators, case managers, x-ray technicians, health educators, epidemiologists, data systems personnel, custodial staff, maintenance staff, a pharmacist, an accountant, a health information specialist, a microcomputer specialist, an assortment of different types of clerical staff, a variety of program coordinators and managers, departmental directors, the health officer, and the administrator. All employees were given the opportunity to participate in the study.

To ensure that all employees were aware of the job satisfaction survey, a memo was distributed to all employees notifying them of the upcoming survey sessions and inviting them to participate. Notices of the upcoming employee job satisfaction survey sessions were also posted throughout the health department facilities. Each supervisor in the health department was contacted to arrange for the best time or times to conduct the survey in their specific work area.

The survey was conducted in multiple sites at varying times to be most convenient to employees. Routine staff meetings were utilized for conducting some survey sessions. Special survey sessions were held for other departments and work areas to provide a time for their employees to participate. Separate survey sessions were held for supervisors to avoid employees and their supervisors taking the survey together.

When dates and times were established, a second memo was distributed to all employees notifying them of the dates and times of the survey sessions, inviting them to participate. This memo was mailed to part time employees who only work as needed and might not see the notices or memos within the health department. Special arrangements were made for those employees who are frequently out of the health department as part of

their job and were not be able to attend meeting times. The survey was conducted over a period of three weeks to ensure that all employees had an opportunity to participate.

Using these measures negated sample selection bias and was a strength of this study. Multiple survey session sites and opportunities to participate resulted in the participation of 181 employees. 75 employees chose not to participate.

Setting

The setting for this research study was the facilities of a local county public health department located in the southeast region of the United States. This county public health department is termed a metropolitan public health department because it serves both a mid-size city and the county in which that city is located. It is governed by the county commissioners and is under the direct leadership of the county mayor (known as the county executive, prior to 2003). Employees of the public health department are considered county employees.

There were six locations in which this public health department's employees work. Four of these locations were buildings owned by the health department: a large downtown-area facility with multiple clinics and departments, a clinic within the city that serves the homeless population, a clinic located in a small town in the southeast portion of the county, and a clinic located in a small town in the northwest portion of the county. Two locations were housed in other county facilities: a three person clinic in a county elementary school in the far northern tip of the county and the environmental groundwater department located in a county building where several other non-health department county licensing agencies were located.

A strength of this setting of multiple meeting sites was that it increased the possibility of making the survey convenient to more employees and may have increased

participation. Employees had the option of attending a survey session closer to their home on the way to or from work, or more convenient to their work schedule. A weakness was that having multiple and varied locations decreased the control the researcher had over the conditions of the physical locations in which survey sessions were conducted.

Ethical Considerations

Approval to conduct this research study was obtained from the Southern Adventist University Institutional Review Board and the administration of the county public health department (see Appendixes A and B). At present, the health department does not have a formal institutional review board; all requests of this nature are evaluated by the administrator, health officer, and directors of the health department.

The human rights to self-determination, anonymity and confidentiality, fair treatment, and freedom from harm (Burns & Groves, 2001) were protected in this research study in a variety of ways. All employees were given the opportunity to participate and the employees chose whether or not they wanted to participate. It was explained both verbally by the researcher at the beginning of each survey session, and in a cover letter in the survey packet, that by completing the survey instrument and questionnaire the employee was giving consent to participate in the study and have their data included in the results (see Appendix C). After their rights, the purpose of the study, and how data would be used and disseminated were explained, employees were given the opportunity to decline participation and leave the survey session if they chose.

Anonymity and confidentiality were guaranteed. No employee names or signatures were collected and data were collected in such a manner that an employee's survey forms could not be linked back to them. No individual identifiers were included in the raw data and only group analysis was used so no individual could be identified by

their response. Only aggregate data is reported, and results are not identifiable by individual or department. Job categories were not included in the demographic data as a number of job categories in the health department consist of only one or a few individuals, thus, increasing the risk of identifying individuals by their data.

All raw data and any computer disks used to store data are kept under lock and key; computer data is password protected. Only the principal investigator and thesis chairperson have access to the raw data. Data analysis was performed in a private location where it was not accessible to others. When raw data is no longer needed it will be shredded before disposal and data stored on disks and hard drives will be erased.

It was determined by a benefits versus risk analysis that the benefits of the knowledge gained by the public health department management and the potential for improved job satisfaction of its employees outweighed the risks. The risks were judged to be minimal, temporary and mostly mere inconvenience. The principal risk was the potential harm resulting from a breach of confidentiality. In addition to the measures mentioned regarding protection of anonymity and confidentiality, employees' supervisors, if present during the explanation portion of the session, were asked to leave the room while employees completed their survey packets to decrease the chance that employees felt intimidated. The inconvenience factor was negated by the fact that employees were completing survey packets while at work and were not asked to use their personal time to complete the survey packets.

Instrumentation

The instruments used for this research study were the Job Descriptive Index (JDI) which included the Job in General scale (JIG), and a demographic questionnaire that included two brief ancillary questions (see Appendix D). The demographic questionnaire

included typical demographic items and two ancillary questions: a) What one thing about your job gives you the most satisfaction? and b) What one thing about your job gives you the least satisfaction?

The JDI measured five aspects of job satisfaction: a) work on present job, b) present pay, c) opportunities for promotion, d) supervision, and e) people at work. The JIG scale measured overall job satisfaction. The JDI subscales contained 9 to 18 items with 72 items overall. (Bowling Green University, 2002). Respondents were asked to indicate how well words or phrases described these five aspects by selecting “yes,” “no,” or “cannot decide.” The JIG portion of the instrument had eighteen items and asked respondents to choose which words or phrases described what their job is like most of the time by selecting “yes,” “no,” or “cannot decide.”

The JDI was originally developed in 1969 and has 40 years of research and application in measuring job satisfaction (Bowling Green University, 2002). “A considerable body of research on the instrument since its publication has provided support for its reliability and validity” (Bowling Green University, 2002, ¶ 5). This body of research includes 12,000 datasets from studies conducted by the JDI Research Group and other researchers and organizations which have used the JDI in a variety of settings, with a wide variety of employee types and in a variety of different languages and dialects (Bowling Green University, 2002). The JDI was last revised in 1997 by the JDI Research Group. Internal reliability for each subscale of the 1997 JDI and the 1997 JIG are reflected in the following coefficient alpha estimates of reliability: a) work .90, b) pay .86, c) opportunities for promotion .87, d) supervision .91, e) co-workers .91, and f) job in general .92 (Balzar et al., 1997).

Data Collection

Data collection in the public health department was preceded by a pilot study to determine the time required to complete survey packets and to refine the process of conducting the survey sessions. Data was then collected at the health department through multiple survey sessions conducted over a period of three weeks in various locations in the county public health department. Survey sessions were conducted and data collected by this researcher who was the principal investigator.

At the beginning of each survey session, this researcher explained the purpose of the study, the rights of the participants, and that completing the survey packet indicated their consent to participate in the study. It was explained that the results of the study will be reported to all health department employees and may be presented at seminars or conferences and published in professional journals. An opportunity was given for questions and then those who chose not to participate were allowed to leave.

Employees who chose to participate were given a pencil, a survey packet which included a cover letter, the instrument and questionnaire stapled together, and a blank manila envelope. Participants were given 45 minutes to complete the survey; most completed it in less than 30 minutes. When the survey instrument and questionnaire were completed, the employee put the forms into the manila envelope provided, sealed the envelope and inserted it into a slotted, sealed box which was available at each survey session. As each box was filled, it was stored in a locked location.

When all the survey sessions had been completed with all survey packets of willing participants returned, the sealed boxes were opened by this researcher. The survey forms were removed from the envelopes, examined for any problems and numbered to assist in data management.

Data Analysis

Data were analyzed using the SPSS Version 11 software package. All raw data was checked for errors as it was entered into the computer. Demographic data were analyzed using frequencies, percentages, means, medians, modes and standard deviations. Job satisfaction levels were analyzed by means and standard deviations. Relationships between levels of job satisfaction and selected demographic characteristics were analyzed using the Pearson product-moment correlation coefficient. The level of significance was set at .05. Results of these analyses are presented in tables.

The responses to the two ancillary questions were analyzed for content and categorized by key words or phrases. The frequency and percentages of these key word or phrase categories are reported.

Limitations

The JDI and JIG instruments are generic and thus applicable to a wide variety of work settings and situations. A limitation of the instrument is that it does not capture characteristics that might be unique to the public health department work place. The two ancillary questions which gave the participants the opportunity to express what aspects of their job give the most and least satisfaction may have captured some of these unique characteristics.

Another limitation of this study is that the results are not be generalizable to all public health department employees. Public health departments may vary in organizational structure, leadership characteristics, services offered to the public, types of employee positions and the population they serve based on their geographical locations, their governance and the political arena in which they operate. All of these factors have a potential impact on the perception of job satisfaction of their employees.

Communication of Findings

The findings from this research study were communicated to the research committee and the county public health department administration and employees. They may also be disseminated by publication in relevant journals and presentations at professional seminars and conferences. In all cases, only aggregate data were reported.

CHAPTER FOUR

DATA ANALYSIS

The purposes of this study were to: (a) determine the level of job satisfaction of nurses and other employees in the public health department and (b) to identify any relationships between job satisfaction and selected demographic characteristics of the sample. The following research questions were answered:

1. What is the level of overall job satisfaction of all public health department employees?
2. What is the level of overall job satisfaction of public health department nurses?
3. What is the level of the job satisfaction in the subcategories – work, pay, opportunities for promotion, supervision, and co-workers - of public health department employees?
4. What is the level of the job satisfaction in the subcategories – work, pay, opportunities for promotion, supervision, and co-workers - of public health department nurses?
5. Are there any relationships between the level of job satisfaction and selected demographic characteristics of all public health department employees?
6. Are there any relationships between the level of job satisfaction and selected demographic characteristics of public health department nurses?
7. What aspect of the job gives all public health department employees the most and the least satisfaction?

This chapter presents descriptive statistics of the (a) sample demographics, (b) descriptive statistics for each research question, and (c) correlational analyses of relationships between levels of job satisfaction and selected demographic characteristics.

Sample Demographics

A convenience sample was attained from a population of 256 public health department employees. Of this group of eligible participants, 181 (71%) employees chose to participate. Seven of the returned surveys could not be utilized because of missing data. The final response rate was 68% and 174 participants.

The demographic questionnaire included questions regarding: (a) age, (b) gender, (c) race, (d) education, (e) marital status, (f) income, (g) years worked at the health department, (h) supervisory status, (i) nursing status, and (j) work status. The descriptive results for these questions are found in Table 1. The income number in this table represents hourly pay.

Description of Findings for Each Research Question

Levels of Satisfaction

The findings for the research questions one (What is the level of overall job satisfaction of all public health department employees?) and three (What is the level of job satisfaction in the subcategories – work, pay, opportunities for promotion, supervision, and co-workers – of all public health department employees?) are displayed in Tables 1 and 2. The sample results fell within the upper and lower limits of a 95% confidence interval. The numbers listed under the “n” column represent the number of participants who responded to each item. It was noted that some participants left identifying demographic items such as race, gender, income level or length of work history blank. It was surmised that this might have been used as a mechanism to protect their identity. No survey forms were rejected on the basis of missing demographic information.

Table 1.

Demographics of Total Sample

Variables	n	P	Minimum- Maximum	M	Mdn	Mode	SD
Total	174						
Age	171		23-75	45.87	48	50	10.36
Gender	173						
Females	147	84.5					
Males	26	14.9					
Race	171						
African Amer.	33	19					
Caucasian	129	74.1					
Hispanic	4	2.3					
Other	5	2.9					
Education	172						
High School	19	10.9					
1-2 College	53	30.5					
3-4 College	73	42					
Graduate	21	12.1					
Doctoral	6	3.4					
Marital Status	172						
Single	19	10.9					
Married	124	71.3					
Divorced	23	13.2					

Table 1.

Demographics of Total Sample, cont.

Variables	n	P	Minimum- Maximum	M	Mdn	Mode	SD
Widowed	6	3.4					
Income (hourly)	155		8.94 - 43.27	16.33	14.90	14.42	6.20
Years Worked	141		1.00 - 41.00	11.05	10.0	2.0	8.89
Supervisors	42						
Registered Nurses	34						
Work Status	172						
PRN part time	1	.6					
Part time	3	1.7					
Skimp	11	6.3					
Full time	157	90.2					

The norms reported by Balzar (1997) showed that neutral scale scores are "... reasonably close to the middle range of possible scores (0-54), or around a score of 27. Scores well above 27 (i.e., 32 or above) indicate satisfaction, while those well below 27 (i.e., 22 or below) indicate dissatisfaction" (p. 26).

Based on these guidelines for interpretation of job satisfaction levels, the public health department employees were satisfied with work, supervision and the job in general. Pay and co-worker satisfaction levels were within the neutral range with the satisfaction with co-workers less than that with pay. The total sample was not satisfied with opportunities for promotion.

Table 2.

Job Satisfaction for Total Sample

Variables	n	Mean Score	Median Score	Mode Score	SD
Satisfied					
Supervision	173	43.61	48.00	54.00	11.85
Job in general	174	43.49	45.00	54.00	8.60
Work	174	40.86	44.50	45.00	10.47
Neutral					
Pay	173	31.91	30.00	30.00	7.06
Co-workers	174	24.72	24.00	24.00	3.96
Not Satisfied					
Opportunities					
for promotion	174	18.47	12.00	6.00	13.50

The finding for research questions two (What is the level of overall job satisfaction of public health department nurses?) and four (What is the level of the job satisfaction in the subcategories – work, pay, opportunities for promotion, supervision and co-workers - of public health department nurses?) are displayed in Table 3. The PHNs were slightly more satisfied with work, supervision and overall job general than the total sample. They were also satisfied with pay compared to the neutral rating of the total sample. While the PHNs were not satisfied with opportunities for promotion, they were more satisfied than the total sample. Co-worker satisfaction for the PHNs was in the neutral range; they were only slightly less satisfied than the total sample.

Table 3.

Job Satisfaction Levels of Public Health Department Nurses

Variables	n	Mean Score	Median Score	Mode score	SD
Satisfied					
Supervision	34	44.12	49.00	54	12.32
Job in general	34	44.00	44.00	54	6.92
Work	34	42.03	45.00	48	9.94
Pay	33	34.24	36.00	36	6.22
Neutral					
Co-workers	34	24.26	24.00	24	4.34
Not satisfied					
Opportunities					
for promotion	34	18.12	18.00	0 ^a	15.84

a. Multiple modes exist. The smallest value is shown.

Correlations

The data was analyzed using Pearson's correlation coefficient with the level of significance set at $p < .05$. Burns and Grove (2001) guidelines for interpreting the strength of the identified were used. "Traditionally, an r value of .1 to .3 is considered a weak linear relationship, .3 to .5 is a moderate linear relationship, and above .5 is a strong linear relationship" (p. 530).

All Public Health Department Employees

The findings for research question five (Are there any relationships between the level of job satisfaction and selected demographic characteristics of all public health department employees?) revealed that there were no significant relationships between levels of satisfaction and gender, race, years-worked, or marital status. There were weak positive linear correlations between education and satisfaction with work ($r = .157, p < .05$), and income and satisfaction with supervision ($r = .232, p < .01$) and work ($r = .177, p < .05$). The level of satisfaction with work for each education group are displayed in Table 4. Weak inverse linear relationships were identified between age and satisfaction with pay ($r = -.231, p < .01$) and promotional opportunities ($r = -.164, p < .05$), and work status and satisfaction with opportunities for promotion ($r = -.153, p < .05$). The level of satisfaction with opportunities for promotion for each work status group is displayed in Table 5.

Public Health Department Nurses

The findings for research question six (Are there any relationships between the level of job satisfaction and selected demographic characteristics of public health department nurses?) revealed that there were no significant relationships between PHNs' levels of job satisfaction and gender, education, marital status, income, or work status. Moderate positive relationships were identified between race and satisfaction with pay ($r = .394, p < .05$). Each race group's level of satisfaction with pay is displayed in Table 6.

Moderate inverse linear relationships were identified between age and satisfaction with supervision ($r = -.356, p < .05$), and years worked and satisfaction with opportunities for promotion ($r = -.399, p < .05$).

Table 4.

Education groups' level of satisfaction with work

Group	n	P	Mean	SD
High School	19	10.9	37.63	10.66
1-2 years college	54	30.5	40.64	9.96
3-4 years	73	42	39.78	10.69
Graduate	21	12.1	46.43	9.44
Post graduate --				
Doctoral	.6	6.4	46.67	10.80

Table 5.

Work Status Groups' Level of Satisfaction With Opportunities for Promotion

Group	n	P	Mean	SD
Prn part time	1	.6	12	0
Part time	3	1.7	20	9.17
Skimp	11	6.3	14.18	14.18
Full time	157	70.2	14.97	13.65

Ancillary Questions

Included in the demographic questionnaire were two ancillary questions requiring a narrative response. Participants' answers ranged from one to two word responses to

Table 6.

Level of Satisfaction with Pay by Race

Race	n	P	Mean	SD
African-American	3	8.9	26.00	24.00
Caucasion	29	29.00	34.83	5.79
Other	2	5.9	42.00	.00

several paragraphs. Two participants attached a full page of comments.

Responses to the ancillary questions were categorized by key words or phrases. As identifying information was not collected, it was not possible to go back to the participant for clarification of responses to ensure they were categorized appropriately. Many participants listed more than one item under one or both of the ancillary questions. In these cases, their responses are included in two or more categories.

What gives the most satisfaction?

One hundred and sixty-seven participants responded to the question "What one thing about your job gives you the most satisfaction?" These responses are listed by categories with frequencies in Table 7. Fourteen participants did not respond. "Helping people" included helping others, clients, patients and children. Some specified helping people in need, or helping "forgotten" or "less fortunate" people. Examples of the nature of the help given such as "solving problems," "being able to comfort" and helping "with health concerns."

"Interacting with people" included interacting with, meeting or contact with clients, customers and patients. It also included working with people and children. The

Table 7.

What One Thing About Your Job Gives You the Most Satisfaction?

<u>Response category</u>	<u>f</u>	<u>P</u>
Total responses (n = 167)		
Co - Workers	10	6
Miscellaneous (1 each)	10	6
Pay		
Hours	8	5
Benefits	3	2
Insurance and health benefits	3	2
Retirement benefits	2	1
Supervision	1	1
Work		
Helping people	46	28
Interacting with people	16	10
Job is stimulating	14	8
Serving the community	12	7
Providing services	9	5
Helping clients improve	8	5
Sense of accomplishment/completion	6	4
Educating clients	5	3
Appreciation from clients/patients	4	2
Making a difference	4	2

Table 7.cont.

What One Thing About Your Job Gives You the Most Satisfaction?

<u>Response category</u>	<u>f</u>	<u>P</u>
Working away from office and home visits	4	2
Teamwork	3	2
Satisfied customers	2	1
Job/work (duties and responsibilities)	2	1
Doing job well	2	1
No response	14	8

"job is stimulating" category includes that the job is interesting, challenging, requires creativity and offers a variety of activities and duties. One participant noted that their job required an unusual use of their license.

"Serving the community" includes helping, protecting and contributions to the community, citizens, public or people, "coworkers" included "people I work with," "my staff" and working with "excellent" and "enthusiastic" people. "Providing services" includes providing service or care to clients, patients and children. Some examples of responses within this category are providing a service to people whom "couldn't otherwise afford them" or that "would not be available to them otherwise."

The "helping clients improve" category includes helping clients, residents and people achieve better health, "improve lifestyles" and succeed. Some examples of the "Sense of accomplishments" category are "seeing the results of my work," and completing "a task" or "a major project." "Educating clients" examples include "giving

information," increasing clients' knowledge and "counseling young adults." Examples of the category "making a difference," are making a difference "with homeless people" and "people I come in contact with," and "making a difference in health outcomes of sick patients."

The "miscellaneous" responses includes those that did not seem to fit well in the categories and that were not cited by more than one participant. Some examples of these items that gave the most satisfaction were "the salary," "the part-time status," "taking care of employees and gaining experience" and "learning about new situations and information." One participant cited "a very understanding boss" and another "I like Public Health." One specified "seeing new babies."

What Gives the Least Satisfaction?

One hundred and sixty-three participants responded to the question "What one thing about your job brings you the least satisfaction?" These responses are listed by categories with frequencies in Table 8. Eighteen participants did not respond. The most frequently cited items were pay and supervisors (n = 22). Responses related to supervisors varied. A number of participants specified that supervisors micromanaged or were authoritative. Several stated that supervisors and/or administration do not problem solve and were "limited," "unqualified," and micromanaging "from 20 year old standards." They reported that their supervisor(s) "never see my performance, and," "doesn't fully understand the job," and don't have "formal training to further skills and improve." Some participants cited a lack of support from supervisors and stated that they do not listen to employees. One participant stated that "people who make major decisions about clinics don't work in clinics, therefore do not know what works well and does not

Table 8.

What One Thing About Your Job Gives You the Least Satisfaction?

<u>Response Category</u>	<u>f</u>	<u>P</u>
Total responses (n = 163)		
Pay/salary	17	10
Insufficient vacation accrual	3	2
Unable to take leave	2	1
Unfair, unexcused absence policy	2	1
Supervision	22	13
Feeling unappreciated	6	4
Double standards and inconsistency	5	3
Unresponsive to employee suggestions and complaints	5	3
Co-workers	11	6
Work		
Workload	11	6
Paperwork/reports	10	6
Having to turn clients away	5	3
Monotonous, routine, repetitious work	4	2
Hours	4	2
Dissatisfied and complaining clients	4	2
Uncomfortable client situations	4	2
Confining work environment	3	2
Lack of sense of completion	3	2
Employee problems	3	2

Table 8.cont.

What one thing about your job gives you the least satisfaction?

<u>Response category</u>	<u>f</u>	<u>P</u>
Clients who abuse the system	2	1
Job too complicated, too much variety	2	1
Meetings	2	1
No complaints	9	5
Lack promotional and growth opportunities	8	5
Evaluation system	7	4
Slow to change or get things done	7	4
Lack of communication and information	4	2
Politics	2	1
Insufficient funding	2	1
Miscellaneous	19	12
No response	18	11

work well." The category "Co-workers" includes co-workers who are "gossipy," "clickish," "negative," and "narrow-minded." Several cited co-workers who do not "pull their load" or whose work must frequently be corrected. Several stated co-workers were "unmotivated," "careless," or "irresponsible" with a "don't care attitude". One participant had concerns regarding co-workers who do not understand the job and don't get training. A couple of participants stated problems related to co-workers who abuse power or order fellow staff members around inappropriately (e.g. "LPNs tell RNs what to do!").

The category "workload" includes insufficient time to do the work or to spend with clients, excessive workload, insufficient staffing for workload and the "amount of work expected under challenging circumstances (lack of supplies, supervision, heat)." One participant cited work that was either too rushed or too slow, another cited "down time when it is slow."

Examples of the category "no complaints" are responses such as "not anything," "none," "can't think of any," or "I am happy whatever my task calls for." Some examples of the "lack of promotional and growth opportunities" category are there is no "room for advancement" and "promotions by the buddy system." The category "slow to change, or get things done" includes inefficient or lengthy processes and bureaucracy which hamper needed accomplishments. One participant cites the health department is "too rigid to change." The "evaluation system" is described as "too subjective," "not administered equitably," and employees feel "like we are never good enough." "Double standards and inconsistency" includes behavior that is tolerated by the supervisor in some and not others (longer breaks, lunch breaks, extra breaks). Some participants stated that administrators lack consistency and fairness when dealing with staff, and some of them have an attitude of "do as I say, not as I do." Examples of the "have to turn clients away" category includes "restrictions on providing services due to regulations" and "limited resources to provide all services needed, e.g., mental, health, dental."

"Uncomfortable client situations" includes having to give bad news, asking embarrassing questions, and "knowing people personally who come in for confidential reasons." The "confining work environment" includes being confined to deskwork, confined to one location and the "confined area I have to work in." Examples of the "lack of sense of completion" category are "never having a completed day," "not seeing results

of efforts," and the lack of completion due to the "enormity of the work." Examples from the category "Hours" include "hours sometimes long," working until 5:00, preferring four 10 hour days and wishing for a 10 - 6 shift. A number of participants cited issues related to vacation time and unexcused absences as sources of least satisfaction. Some felt vacation time accrual needed to be increased; others could not use the vacation time they had accrued. Some participants thought the unexcused absence policy is too extreme and does not make allowances for situations out of the employee's control, e.g. family death, medical emergencies, illnesses, etc.

The "miscellaneous" category contains all the responses which were not duplicated and did not seem to fall clearly in one of the categories. Some examples of these include "EPSDT's (early periodic screening, diagnosis and treatment)," "using a computer," "having to use my own vehicle," "a sense of being in a safe environment," "high stress," "the commute," "no set guidelines on rules, a day to day call - very frustrating," and "being caught in the middle." Several related to client situations include "seeing so many young simple girls pregnant," "some people do not want to be helped," and reoccurring "quick fix" client situations with "no long term means available."

Some responses were very specific to the individual's work, e.g. "being required to do things that are not in my field of expertise," frustrations with physician offices not responding to requests for paperwork and frustration with being told they are doing something wrong only to have the same person, who told them it was wrong, do the same thing. Some responses were nonspecific, "listening to complaints," and "having to deal with attitudes."

Other miscellaneous responses had a general health department application. Examples of these were lack of cooperation and unity between departments, "negative

aspects by department," and that the health department is "not progressive enough, more forward thinking needed."

Summary of Findings

The public health department employees in this study were satisfied with the job in general, supervision and work, and were not satisfied with their opportunities for promotion. They were neutral regarding pay and co-workers. The PHNs were satisfied with the job in general, supervision, work and pay, and not satisfied with opportunities for promotion. They were neutral regarding their co-workers.

On the total sample of public health department employees the only significant relationships between the demographic characteristics and job satisfaction were weak positive linear correlations between education and satisfaction with work, and income and satisfaction with supervision and work.

There was a moderate positive linear correlation in the PHNs between race and satisfaction with pay. Moderate inverse relationships were identified between age and satisfaction with supervision, and years worked with promotional opportunities.

The most frequently cited responses to the question "what one thing about your job gives you the most job satisfaction?" were: (a) helping people, (b) interacting with people, (c) job is stimulating, (d) serving the community, (e) co-workers, and (f) providing services. The most frequent responses to the question "what one thing about your job gives you the least satisfaction?" were: (a) supervision, (b) pay/salary, (c) co-workers, (d) workload, (e) paperwork, (f) no complaints, and (g) lack of promotional and growth opportunities.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Job satisfaction is recognized as critical to the success of healthcare organizations. Yet, the body of knowledge regarding the job satisfaction of PHNs is limited and is minimal for other health department employees. This research study seeks to add to this body of knowledge.

This chapter will discuss the findings of the study by the concepts defined in Chapter One, which also represent the six job satisfaction scales used: (a) overall job satisfaction, (b) work, (c) pay, (d) opportunities for promotion, (e) supervision, and (f) co-workers. The significance of the findings to nursing administration and management in the public health department setting will be discussed. Recommendations will be made for further research studies and practice changes indicated by these findings.

Observations About the Data

This was the first employee satisfaction survey for this organization. Some employees voiced concerns during the survey sessions regarding the potential for them to be identified by their demographic information. Despite assurances that no one individual would be identified by their responses, and that responses would not be linked to individuals demographic information, it was noted that some employees chose not to share all their demographic information. This was especially evident in the income and years worked data. It was also possibly true for the supervisor and registered nurse status data.

Overall Job Satisfaction

Both the total public health department employees and PHNs were satisfied overall, reflected in a mean score that was the second highest of the job satisfaction

scales. The total employees' level of overall satisfaction was similar to that of a health department community HIV/AIDS service (Gimbel et al., 2002). It was higher than that found in health department environmental employees, (Oleckno, 1995) and municipal government employees (Ellickson, 2002). There were no significant relationships between the total samples' overall job satisfaction and demographic characteristics. IN comparison, Oleckno found that employees with 10 years or more on the job were less dissatisfied than those on the job less than 10 years (1995).

The PHNs in this study were slightly more satisfied with the overall job than the total sample's satisfaction. Their level of overall job satisfaction was similar to PHNs in other studies (Cumbey & Alexander, 1998; Geiger & Davit, 1988; Juhl et al., 1993; Lucas et al., 1988). There were no significant relationships between the PHNs' overall job satisfaction and demographic characteristics, contrasted with Cumbey and Alexander's study of PHNs which found a significant positive relationship between years of experience in the health department and job satisfaction (1998).

Work

Both the total employees and PHNs were satisfied with work, reflected in a mean score that was third highest of the satisfaction scales. The narrative responses regarding aspects of the job that bring the most satisfaction are revealing about the source of this satisfaction. The majority of these responses pertain to service, the very nature of the work of the health department. Many other's responses encompass interaction with clients, another main characteristic of health department work. The fact that participants saw these aspects as most satisfying suggests that there is a good fit between the job and these employees, a necessary component of job satisfaction. The weak positive correlations between education and satisfaction with work may indicate that higher

education levels make it possible for these employees to hold positions doing the type of work they enjoy.

All together, the most satisfying aspect responses describe work that is meaningful, fulfilling, interesting, and challenging; characteristics that are generally equated with satisfaction with work. These findings agree with those of Oleckno's (1995) study in which health department environmentalists reported that the least dissatisfying aspects of their job were work environment, helping others and job freedom (1995).

The PHNs satisfaction with work was slightly higher than that of the total sample. PHNs in Juhl et al.'s (1993) study were also satisfied with their work (task requirements). The response categories regarding most satisfying aspects of the job are similar to those of the PHNs in other studies (Geiger & Davit, 1988; Reuter & For, 1996).

Responses regarding aspects of work which give the least satisfaction also focused on client interactions, albeit negative. The least satisfying aspects did not relate to the service nature of the work, but other characteristics such as volume, monotony, inconsistency and the work environment. Organizational type problems are also evident in these responses. These findings support other studies that cited similar sources of dissatisfaction for PHNs and health department environmentalists (Oleckno, 1995; Reuter & Ford, 1996). Municipal government employees' job satisfaction were significantly impacted by their satisfaction with the performance appraisal process, another aspect cited as least satisfying in this study (Ellickson, 2002).

Pay

The total sample of employees was neither satisfied nor dissatisfied with satisfaction with pay. While insufficient pay or salary was mentioned in the least satisfying responses more frequently than any other single item except supervision, it

comprised only 10% of these responses. Only one participant listed pay as the job aspect that gave most satisfaction. This combination of findings indicates that the number of participants discontented with pay was not large enough to produce a mean score in the not satisfied range. Oleckno (1995) identified pay as the aspect that was most dissatisfying to county health department environmentalists. Elickson (2002) found that municipal government employees were somewhat satisfied with pay, and that pay and benefits were two of the four most powerful predictors of job satisfaction.

The weak positive correlations between income level and satisfaction with work does not indicate causality, but does indicate there is a relationship. It may be that the types of jobs in the higher pay levels consist of work that is perceived as more enjoyable. Age had a weak inverse correlation with satisfaction with pay. Those who are older may have an expectation that their experience should result in a higher pay. Younger employees may be more content with their pay due to inexperience and the expectation that it will increase with age. Perhaps the older ones have found that this is not the case.

PHNs were satisfied with pay though with a much lower mean score than that of satisfaction with work. This finding is comparable to the level of satisfaction with salary or extensive rewards of PHNs in other studies (Cumbey & Alexander, 1998; Lucas et al., 1998). In one study PHNs were considerably less satisfied with their benefits/rewards (Juhl et al. 1993). The moderate positive relationship between satisfaction with pay and race in PHNs of this sample was not found in other studies. None of the previous studies regarding PHNs or other health department employees included race in their demographic information.

Opportunities for Promotion

Opportunities for promotion was the single job subcategory with which both the total employees and PHNs were not satisfied. The frequency of responses related to opportunities for promotion was not as high as other least satisfying aspects and represented only 5% of these responses. Oleckno (1995) found career advancement one of the major sources of job dissatisfaction for health department environmentalists. Promotional opportunities were found to be “the second most powerful determinant of employee job satisfaction in municipal government employees (Ellickson, 2002, p.356). In Ellickson’s study employees were satisfied with promotional opportunities.

Only one study of PHNs addressed professional opportunities and it found that PHNs felt they had fewer opportunities for advancement than hospital nurses. In the PHNs, the significant moderate inverse relationship found between the number of years worked and promotional opportunities may indicate that the longer a PHN works in this setting, the less likely they feel there is a chance of promotion.

Supervision

The findings regarding the subcategory of satisfaction with supervision reflect conflicting employee perceptions. It had the highest mean satisfaction score of all the subcategories and exceeded overall job satisfaction. This was true for both the total sample and PHNs. The mode score was 54 for both groups, which is the highest score possible. Yet, employees cited supervision or some facet of supervision as the thing that brings the least satisfaction more often than any other item. Maybe people who are dissatisfied with supervisors are more verbal than those who are satisfied.

For this sample, it appears that supervision is a job aspect that when done well is not at the forefront of the employee’s perception of what is most satisfying about their

job. However, supervisors have such an impact on employee's work life that when there is dissatisfaction with the supervisor, it can become the least satisfying aspect.

This study's findings were similar to the findings of Lucas et al. (1998) in which high PHN satisfaction with supervision exceeded that of overall job satisfaction. Gimbel et al. (2002) found that satisfaction with supervision was a significant predictor of overall job satisfaction in groups providing direct client services.

Two demographic characteristics were related to satisfaction with supervision. Income had a weak positive relationship in the total sample, and age had a moderate inverse relationship for PHNs. Neither of these relationships has been identified in other studies of PHNs or public health department employees.

Co-workers

The findings for the subcategory satisfaction with co-workers were very consistent. The mean satisfaction score was within the neutral range and there were an almost equal number of responses related to co-workers in the least and most satisfying aspects lists. While a number of participants found their co-workers supportive, enthusiastic and satisfying, slightly more found their co-workers negative, unmotivated, ineffective and incompetent. Many of those least satisfying responses included references to supervisors not dealing effectively with these co-workers.

These findings are in contrast to those of Oleckno (1995) who reported that health department environmentalists listed friendships at work as the least dissatisfying aspect of their job. They were comparable to the satisfaction with the work group of municipal government employees (Ellickson, 2002).

The PHNs mean satisfaction score was slightly lower than that of the total employees. In other studies, PHNs ranked their satisfaction with interpersonal relations higher (Juhl et al., 1993; Lucas et al., 1998).

“Supervisors and co-workers serve as the two primary sources of satisfaction and frustration for the employee,” (Wagner & Hollenbeck, 1998, p.114). The findings in the two subcategories supervision and co-workers support this comment. The interrelationships between them and the impact they have on employees’ and PHNs’ satisfaction is evident.

Significance of Findings

The significance of the findings of this study is that it adds to the body of knowledge regarding public health department employees’ and PHNs’ perceptions of job satisfaction. It will aid managers in this organization, and those in similar organizations, in making decisions and changes that promote job satisfaction. This should result in improved public health department employee and PHN retention and productivity, improved quality of care, and more satisfied clients. These outcomes could be critical to the overall success of public health departments.

Conclusions

In King’s Interacting Systems Framework public health department employees and PHNs are personal systems who have perceptions based on their own personal circumstances, perspectives, experiences, well-being, personal needs, and values. Interpersonal systems consist of these individuals interacting with and influencing each other. Interactions between these individuals and the health department organization make up a social system.

The findings of this study illustrate the role of individuals' perceptions in job satisfaction. The level of satisfaction with overall job satisfaction and the subcategories of job satisfaction an individual reported were based on their perception of the workplace. This is evident in the least and most satisfying responses, where at times different employees express totally opposite opinions of satisfaction regarding the same fact. This was particularly true in the responses regarding co-workers.

The importance of the interactions between individuals is reflected in the satisfaction scores and responses regarding interaction with supervisors and co-workers. It is also evident in the employee responses that cite interactions with clients as the most satisfying aspect of their job. The interactions between individuals and the organization are illustrated in the employees' responses regarding positive and negative aspects of the health department organization.

Recommendations

In addition to adding to knowledge, evidence-based-practice demands that research results will influence practice. It is expected that the results of this study will be used by managers and nursing administration to make organizational decisions and changes that will promote job satisfaction in public health department settings. It is also expected that the findings of this study will be the basis or impetus for further studies in public health department employees' and PHNs' job satisfaction.

Recommendations for Practice Changes

This organization should address the issues related to those job satisfaction categories which were scored in the neutral range (pay and co-workers) and the not satisfied range (opportunities for promotion). Based on the least satisfying aspects responses regarding co-workers, managers need to put forth effort to change negative

employees' behavior. This can be accomplished through clarifying, reinforcing and rewarding expected behaviors and disciplining unacceptable behaviors. It is recognized that this can be difficult in a bureaucratic government organization, but the negative impact of not addressing these behaviors on employee moral and jobs satisfaction should not be underestimated.

Promotional opportunities and pay are challenging. They are both usually controlled outside of health departments by their governing city, county or state agency. While health department management makes the decisions about which promotions are made, the opportunities for promotion are a function of the organizational structure. Both promotional opportunities and pay are also controlled by available funding. Because of these difficulties health departments may effectively improve satisfaction by directing their energies and resources to issues over which they have more control.

While these public health employees and PHNs were satisfied with the overall job, supervision and work, it still behooves management to address the least satisfying responses related to these categories to maintain and improve these levels of satisfaction. In addition to addressing employee behavior issues supervisors should evaluate their own interactions with employees and institute or improve practices that strengthen interrelationships. Among these interactions are providing positive feedback, giving negative feedback in a non-judgmental manner, encouraging and seeking employee input, and insuring that their own behavior is in line with what is expected of employees and organizational policies. Mechanisms can be put into place to encourage and address employee suggestions and concerns.

Work load issues can be addressed by evaluating changes in volume and updating staff resources as much as possible within budgetary restraints. Work flow and processes

should be evaluated for changes that might make work requirements more manageable. Paperwork seems to be a perennial problem in healthcare, but measures should be taken to streamline it as much as possible and incorporate more efficient methods (e.g. electronic records) whenever possible.

Recommendations to Improve this Study

This study could be improved by using a larger sample. It could be extended to other health departments in the surrounding counties, or to other metropolitan health departments in the state. Just repeating this study in the same population would be important as this is the first job satisfaction survey this health department has conducted. Repetition would validate this study's results. Follow-up studies would also be necessary to evaluate the effectiveness of changes made in response to these findings.

Recommendations for Further Research

The body of knowledge regarding job satisfaction of public health department employees and PHNs is minimal. There is a need to expand this knowledge with further research. More studies are needed in a variety of public health department settings and populations. Qualitative studies in addition to quantitative studies may yield richer data and a clearer understanding of their job satisfaction.

Several significant relationships were identified in this study. A regression analysis to identify causality would deepen the understanding of these relationships. Further correlational analysis of this sample's data could be run to identify relationships between the levels of overall job satisfaction and other subcategories of satisfaction – work, pay, opportunities for promotion, supervision and co-workers.

Summary

The findings of this study described the perception of job satisfaction and what aspects of the job gives the most and least satisfaction of public health department employees and PHNs. Job satisfaction is critical to the success of public health departments' ability to attract and retain public health department employees and PHNs, and to function effectively and efficiently. The findings of this study provide managers and nursing administrators with the information needed to improve their employees' and PHNs' job satisfaction. Further studies are needed to increase the small body of knowledge regarding the job satisfaction of public health department employees and PHNs.

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APPENDIX A: IRB FORM/FACILITY LETTERS

1. Southern Adventist University Institutional Review Board

2. Letter to Chattanooga-Hamilton County Health Department

Southern Adventist University
RESEARCH APPROVAL FORM
Form A

Directions: Please complete this form and submit with the following documents if used: (1) *Informed Consent Form*, (2) *Data Collection Instrument* (e.g., questionnaire) or *Protocol*.

Level I review: Obtain approval and signature from the course professor/student club or association sponsor. Submit **Form A** with signature to course professor and keep copy for self.

Level II review: Obtain approval and signature(s) from Chair/Dean. Submit copies of **Form A** with signatures to course professor, Chair/Dean(s), and self.

I. Identification of Project

Principal Investigator **Nettie Gerstle**
Address **5500 Misty Valley Drive Ooltewah, TN 37363**
Tel. & E-mail **423-396-9114 ngerstle@southern.edu**
Co-Investigator(s)
Address
Tel. & E-mail

Title of Project **The Relationship of Job Satisfaction and Selected Demographic Characteristics of Public Health Department Employees**
Department **School of Nursing**
Faculty Supervisor (for student investigator) **Mary Ann Roberts DSN, RN**
Starting Date **12-1-03** Estimated Completion Date **4-1-04**
External Funding Agency and Identification Number **NA**
Grant Submission Deadline **NA**

II. Purpose of Study

1. To determine the level of job satisfaction and its subcategories (work, pay, opportunities for promotion, supervision and co-workers) of nurses and other public health department employees, 2. To identify relationships between the job satisfaction of nurses and other public health department employees and selected employee demographic characteristics.

III. Description and Source of Research Subjects (e.g., humans, animals, plants, documents)

Employees of a county public health department.

If human subjects are involved, please check any of the following that apply:

- Minors
- Prison inmates
- Mentally impaired
- Physically disabled
- Institutionalized residents
- Vulnerable or at-risk groups, e.g., minority, poverty, pregnant women (or fetal tissue), substance abuse populations

_____ Anyone unable to make informed decisions about participation
If any of the above is checked, proposal requires Level III review. Form B must be completed in addition to Form A.

IV. Materials, Equipment, or Instruments

A packet including (a) a cover letter, (b) Job Descriptive Index, (c) Job in General Instruments, and (d) a demographic questionnaire, (e) instructions for completing the forms, (f) a pencil and (g) a blank manila envelope in which to return the forms will be given to each participant

V. Methods and Procedure

A pilot study will be conducted to determine the time required to complete a survey packet and to refine the process of conducting the survey sessions.

The Job Descriptive Index and Job in General instruments and demographic questionnaires will be administered to groups of employees in a neutral location in one of the several health department facilities. All employees will be given the opportunity to participate in the survey. Supervisory staff will not be present during these survey sessions. Supervisory staff will have their surveys administered during supervisor's meetings in which their program manager or director will be asked to step out. All surveys will be administered by the principal investigator.

At the beginning of each survey session, the principal investigator will explain the purpose of the study, the rights of the participants and that completing the packet indicates their consent to participate. Anonymity of the participants will be protected by not collecting names or signatures and by reporting the results of the study in aggregate form. This aggregate data will be reported by demographic characteristics groups, but not by department so that a connection cannot be made between individuals and the survey results. Note: Some of the departments have very small numbers of employees, thus reporting by department could compromise the anonymity of these employees. It will be explained that the results of the study will be reported to all health department employees, and may be presented at seminars or conferences and published in professional journals.

The employees will be given an opportunity to ask questions and those who do not choose to participate will be allowed to leave. Those who choose to participate will then be given survey packets to complete. Each employee will place their completed packets in the manila envelope and place it into a slotted box which will be provided each time a survey session is held.

VI. Sensitivity: *Psychological discomfort or harm experienced by human participants because of topic under investigation, data collection, or data dissemination.*

On a scale of 0 (not sensitive) to 5 (extremely sensitive), rate the degree of sensitivity of the behavior being observed or information sought:

1 Sensitivity of behavior to be observed or information sought.
If greater than "1" proposal requires Level III review. Form B must be completed in addition to Form A.

VII. Invasiveness: *Extent to which data collected is in public domain or intrusive of privacy of human participants within context of the study and the culture.*

On a scale of 0 (not sensitive) to 5 (extremely sensitive), rate the degree of invasiveness of the behavior being observed or information sought.

1 Sensitivity of behavior to be observed or information sought.
If greater than "1" proposal requires Level III review. Form B must be completed in addition to Form A.

VIII. Risk: *Any potential damage or adverse consequences to researcher, participants, or environment. Includes physical, psychological, mental, social, or spiritual. May be part of protocol or may be a remote possibility.*

On scale of 0 (no risk) to 5 (extreme risk), rate the following by filling each blank.

<u>Extent of Risk</u>	<u>To Self</u>	<u>To Subjects</u>	<u>To Environment</u>
Physical harm	<u>0</u>	<u>0</u>	<u>0</u>
Psychological harm	<u>0</u>	<u>1</u>	
Mental harm	<u>0</u>	<u>0</u>	
Social harm	<u>0</u>	<u>0</u>	
Spiritual harm	<u>0</u>	<u>0</u>	

If any blank is greater than "1," proposal requires Level III review. Form B must be completed in addition to Form A.

IX. Benefit-Risk Ratio (Benefits vs. Risks of this Study)

The risk to participants is minimal, temporary and mostly mere inconvenience. The principal risk would be the potential harm resulting from breach of confidentiality. This risk will be minimized by observing the measures outlined in the methods section. The inconvenience factor is negated by the fact that employees will completing the survey packets while at work and will not be asked to use their personal time.

The benefit of this study is gaining knowledge and insight regarding public health department employees' job satisfaction that can result in improved job satisfaction in county public health departments. The benefit of the study outweighs the minimal, temporary risks.

X. Confidentiality/Security Measures

Only the principal investigator and supervising professor will have access to raw data.

Collection – Participants names and signatures will not be collected to preserve anonymity.

Coding - Each packet will be numbered after all survey packets are collected to assist in data management.

Storing – All raw data (and any disks used to store data) will be kept under lock and key; computer data will be password protected.

Analyzing – Analysis will be performed in a private location where it will not be accessible to others. There will be no individual identifiers included in the raw data and group analysis will be used so no individual can be identified by their response.

Disposing – When raw data is no longer needed, it will be shredded before disposal. Data on computer disks and hard drives will be erased.

Reporting – Only aggregate data will be reported. Results will be reported to the research committee, and health department administration and employees. Aggregate data will not be identifiable by department. Results may also be disseminated by publishing in relevant journals and presentations at professional seminars and conferences.

XI. Informed Consent Process

A cover letter will accompany each packet explaining: (a) their rights as participants, (b) that anonymity will be assured and confidentiality of all collected data will be guaranteed, (c) that participation in this study is voluntary, and (d) that completion of the packet indicates consent to participate in this research study.

_____ Potential for coercion, which is considered any pressure placed upon another to comply with demand, especially when the individual is in a superior position. Pressure may take the form of either positive or negative sanctions as perceived by the participants within the context and culture of the study.

_____ Coercion or Deception involved. If so, explain.
If either checked, proposal requires Level IV Full Review.

XII. Debriefing Process

Results of the study will be presented to health department staff and opportunities for questions will be provided.

XIII. Dissemination of Findings

 X Potential for presentation or publication outside of University.
If so, proposal requires Level II Review.

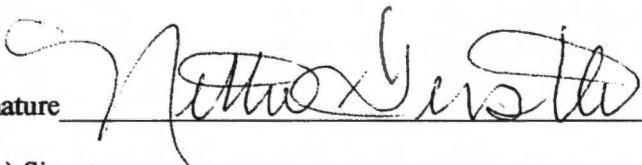
XIV. Compensation to Participants

No compensation to participants is planned.

**Southern Adventist University
Signature Page
Form A**

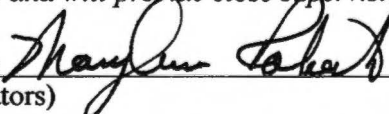
By compliance with the policies established by the Institutional Review Board of Southern Adventist University, the principal investigator(s) subscribe to the principles and standards of professional ethics in all research and related activities. The principal investigator(s) agree to the following provisions:

- *Prior to instituting any changes in this research project, a written description of the changes will be submitted to the appropriate Level of Review for approval.*
- *Development of any unexpected risks will be immediately reported to the Institutional Review Board.*
- *Copies of approval for off-campus sites of data collection will be obtained from the site and submitted in triplicate to the appropriate Level of Review prior to data collection.*
- *Close collaboration with and supervision by faculty will be maintained by SAU student investigator.*

Principal Investigator Signature  Date 12/4/03
Co-Principal Investigator(s) Signature _____ Date _____

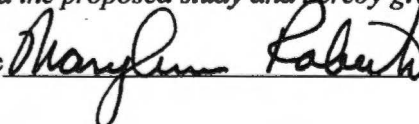
* * * * *

As the supervising faculty, I have personally discussed the proposed study with the investigator(s), and I approve the study and will provide close supervision of the project.

Supervising Faculty/Sponsor Signature  Date 12/4/03
(Required by all SAU student investigators)

* * * * *

As Dean/Chair, I have read the proposed study and hereby give my approval.

Chair(s)/Dean(s) Signature  Date 12/4/03
Date _____

(If Level II approval required)



December 19, 2003

Ms. Nettie Gerstle
5500 Misty Valley Drive
Ooltewah, TN 37363

P.O. Box 370
Collegedale
Tennessee 37315
423.238.2111
Fax 423.238.3001
E-mail: postmaster@southern.edu

Dear Nettie:

The Human Participants in Research Subcommittee has approved your research application entitled "*The Relationship of Job Satisfaction and Selected Demographic Characteristics of Public Health Department Employees*". This letter is formal permission to conduct collaborative research for your thesis utilizing employees of the public health department beginning December 22, 2003 through May 1, 2004.

It is our understanding that your dissertation research is being conducted through the School of Nursing, Southern Adventist University and the focus is a survey distributed to public health employees. During the study, surveys and data related to this study will be kept in a secure location and destroyed at the end of the study, and you will ensure the confidentiality of the individuals involved in your study.

I wish you the best with you study and hope that the results will help define and improve job satisfaction of Public Health Department Employees.

Sincerely yours,

Linda Ann Foster, Ph.D., Chair, Human Participants in Research Subcommittee
Professor, Biology Department
Southern Adventist University

January 6, 2003

Becky Barnes, Administrator
Chattanooga-Hamilton County Health Department
921 East Third Street
Chattanooga, TN 37403

Dear Ms. Barnes,

I respectfully request permission to conduct an employee satisfaction survey for the employees of the Chattanooga-Hamilton County Health Department. This survey will be conducted in partial fulfillment of the requirements for a master in nursing from Southern Adventist University. This survey study has been reviewed and approved by my thesis committee at Southern Adventist University and the Southern Adventist University Review Board Human Participants Subcommittee.

Purpose of Study

1. To determine the level of job satisfaction and its subcategories (work, pay, opportunities for promotion, supervision and co-workers) of nurses and other public health department employees, 2. To identify relationships between the job satisfaction of nurses and other public health department employees and selected employee demographic characteristics.

Description and Source of Research Subjects

Employees of the Chattanooga-Hamilton County Health Department.

Materials, Equipment, or Instruments

A packet including (a) a cover letter, (b) Job Descriptive Index, (c) Job in General Instruments, and (d) a demographic questionnaire, (e) a pencil and (g) a blank manila envelope in which to return the forms will be given to each participant

Methods and Procedure

A pilot study will be conducted to determine the time required to complete a survey packet and to refine the process of conducting the survey sessions.

The instruments and questionnaires will be administered to groups of employees in a neutral location in one of the several health department facilities. All employees will be given the opportunity to participate in the survey. Supervisory staff will not be present during these survey sessions. Supervisory staff will have their surveys administered during supervisor's meetings in which their program manager or director will be asked to step out. All surveys will be administered by the principal investigator.

At the beginning of each survey session, the principal investigator will explain the purpose of the study, the rights of the participants and that completing the packet indicates their consent to participate. Anonymity of the participants will be

protected by not collecting names or signatures and by reporting the results of the study in aggregate form. This aggregate data will be reported by demographic characteristics groups, but not by department so that a connection cannot be made between individuals and the survey results. It will be explained that the results of the study will be reported to all health department employees, and may be presented at seminars or conferences and published in professional journals.

The employees will be given an opportunity to ask questions and those who do not choose to participate will be allowed to leave. Those who choose to participate will then be given survey packets to complete. Each employee will place their completed packets in the manila envelope and place it into a slotted box which will be provided each time a survey session is held.

Benefit-Risk Ratio (Benefits vs. Risks of this Study)

The risk to participants is minimal, temporary and mostly mere inconvenience. The principal risk would be the potential harm resulting from a breach of confidentiality. This risk will be minimized by observing the measures outlined in the methods section. The inconvenience factor is negated by the fact that employees will be completing the survey packets while at work and will not be asked to use their personal time.

The benefit of this study is gaining knowledge and insight regarding public health department employees' job satisfaction that can result in improved job satisfaction in county public health departments. The benefit of the study outweighs the minimal, temporary risks.

Confidentiality/Security Measures

Only the principal investigator and supervising professor will have access to raw data.

Collection – Participant's names and signatures will not be collected to preserve anonymity.

Coding - Each packet will be numbered after all survey packets are collected to assist in data management.

Storing – All raw data (and any disks used to store data) will be kept under lock and key; computer data will be password protected.

Analyzing – Analysis will be performed in a private location where it will not be accessible to others. There will be no individual identifiers included in the raw data and group analysis will be used so no individual can be identified by their response.

Disposing – When raw data is no longer needed, it will be shredded before disposal. Data on computer disks and hard drives will be erased.

Reporting – Only aggregate data will be reported. Results will be reported to the research

committee, and health department administration and employees.

Aggregate data will not be identifiable by department. Results may also be

disseminated by publishing in relevant journals and presentations at professional seminars and conferences.

Informed Consent Process

A cover letter will accompany each packet explaining: (a) their rights as participants, (b) that anonymity will be assured and confidentiality of all collected data will be guaranteed, (c) that participation in this study is voluntary, and (d) that completion of the packet indicates consent to participate in this research study.

Debriefing Process

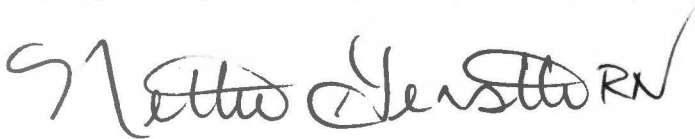
Results of the study will be presented to health department staff and opportunities for questions will be provided.

Compensation to Participants

No compensation to participants is planned.

If you have any questions, please do not hesitate to contact me at my office number 209-8306, my home number 396-9114 or by email NettieG@mail.hamiltontn.gov. You may also contact my thesis chairperson, Dr. Mary Ann Roberts, SAU School of Nursing at 238-2950 or MRoberts@southern.edu.

Thank you for your consideration of this request,

A handwritten signature in black ink that reads "Nettie Gerstle RN". The signature is written in a cursive, flowing style.

Nettie Gerstle, RN, BSN

APPENDIX B: LETTERS OF PERMISSION

1. Letter of Permission from Chattanooga-Hamilton County Health Department

Health Department

Chattanooga, Tennessee

Faded text of the letter body, likely containing the permission details.

Faded signature and name of the official.



Becky T. Barnes
Administrator

Valerie A. Boaz, M.D.
Health Officer

Chattanooga-Hamilton County
Health Department

921 East Third Street
Chattanooga, TN 37403-2165
Phone (423) 209-8230 - Fax (423) 209-8241

January 8, 2003

Nettie Gerstle
5500 Misty Valley Drive
Ooltewah, TN 37363

Dear Ms. Gerstle,

In response to your request, the Chattanooga-Hamilton County Health Department gives you permission to conduct an employee satisfaction survey study of its employees. We have reviewed your explanation of the study including its purpose, the instruments to be used, the methods and procedures that will be employed, the benefits-risks ratio, confidentiality and security measures, informed consent process and debriefing process, and find that the study is acceptable. We understand that participation in the employee satisfaction survey is voluntary and that efforts will be made to assure that all employees have the opportunity to participate. We also understand that the results of the employee satisfaction survey will be presented to the Chattanooga-Hamilton County Health Department administration and subsequently, its employees.

A handwritten signature in cursive script, appearing to read "Becky Barnes".

Becky Barnes, Administrator

APPENDIX C: LETTER TO THE PARTICIPANTS

1. Cover letter to participants

As a result of participating in the *Chattanooga-Hamilton County Health Department Employee Satisfaction Survey*, study in partial fulfillment of a master's program in nursing over Southern Adventist University. This survey was developed and approved by the Chattanooga-Hamilton County Health Department's administration, by the Institutional Review Board of Southern Adventist University, and by the Southern Adventist University Institutional Review Board. **Letter to Participants**

The purpose of this study is to describe the job satisfaction of employees of Hamilton County's public health department. Employees of this department are invited to participate in this study. All employees have the opportunity to participate in this study.

Anonymity and confidentiality: The data from this survey will be kept confidential. No individual can be identified by his or her responses. The data will be kept confidential and only aggregate data will be reported. The data will be used for research purposes only.

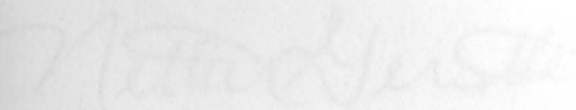
The results of this survey will be reported to the administration of the Chattanooga-Hamilton County Health Department and to its employees. The data from this survey will be reported to my research committee and may be published in relevant journals and presented at national and international conferences.


You will be given the opportunity to ask any questions you may have about this study and about this study prior to making the decision to participate or not participate in this study.

By completing and returning the survey packet, you will be acknowledging that you understand your rights as they pertain to this study, the purpose of this study, and that this study has been reviewed and approved by the administration of the Chattanooga-Hamilton County Health Department, the Institutional Review Board of Southern Adventist University and the School of Nursing ethics committee of North Greenville. By completing and returning the survey packet, you are giving your consent to participate in this study.

If, after you have completed and returned this survey packet, you have any questions, please do not hesitate to contact me at my office number 204-510-1100, mobile number 864-411-1100, or by email Nettie@nettie.net. You may also contact my supervisor, Dr. Dr. Mary Ann Roberts, SAU School of Nursing at 204-510-1100.

Thank you!


Nettie Gerstle, RN, BSN


Mary Ann Roberts, DSN, RN

LETTER TO PARTICIPANTS

You are invited to participate in the first Chattanooga-Hamilton County Health Department Employee Job Satisfaction Survey. I am also conducting this survey study in partial fulfillment of the requirements for a master in nursing from Southern Adventist University. This survey study has been reviewed and approved by the Chattanooga-Hamilton County Health Department's administration, by my thesis committee at Southern Adventist University, and by the Southern Adventist University Institutional Review Board Human Participants Subcommittee.

The purpose of this study is to describe the job satisfaction of Chattanooga-Hamilton County's public health department employees. Participation in this survey is voluntary; all employees have the opportunity to participate or not participate in this survey.

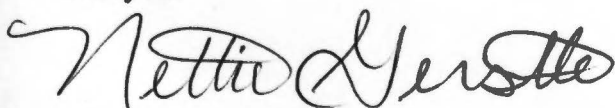
Anonymity and confidentiality are guaranteed. No employee name or signature will be collected. No individual can be identified by his or her responses. Only group analysis will be performed and only aggregate data will be reported. Only I or my thesis committee chairperson will see the raw data.

The results of this survey will be reported to the administration of the Chattanooga-Hamilton County Health Department and to its employees. The information gathered during this survey study will be reported to my research committee and in my research thesis. In addition, this information may be published in relevant journals and presented at professional seminars and conferences.

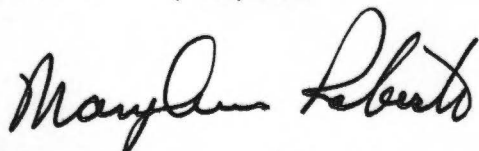
You will be given the opportunity to ask any questions you may have about your rights and about this study prior to making the decision to participate or not participate in this survey.

By completing and returning the survey packet, you will be acknowledging that you understand your rights as they pertain to this study, the purpose of this study, and that this study has been reviewed and approved by the administration of the Chattanooga-Hamilton County Health Department, the Institutional Review Board of Southern Adventist University and the SAU School of Nursing thesis committee of Nettie Gerstle. **By completing and returning this survey packet, you are giving your consent to participate in this study.**

If, after you have completed and returned this survey packet, you have any further questions, please do not hesitate to contact me at my office number 209-8306, my home number 396-9114, or by email NettieG@mail.hamiltontn.gov. You may also contact my thesis chairperson, Dr. Mary Ann Roberts, SAU School of Nursing at 238-2950 or MRoberts@southern.edu.
Thank you!



Nettie Gerstle, RN, BSN



Mary Ann Roberts, DSN, RN

APPENDIX D: DEMOGRAPHIC QUESTIONNAIRE

1. Demographic questionnaire

1. Age _____

2. Sex Male Female

3. Race African American Caucasian Hispanic Native American/Indian Other

4. Education 11th grade 12th grade 4-year college Graduate degree Postgraduate certificate

5. Marital status Single Married Divorced Widowed Separated

6. Year Income: _____

7. How long have you lived for the Month? _____

8. How long have you lived for the Year? _____

9. How long have you lived for the Year? _____

11. What are the 3-4 things you like most about the city?

12. What are the 3-4 things you like least about the city?

Demographic Questionnaire

1. Age: _____ yrs
2. Gender Male
 Female
3. Race: African American
 Caucasian
 Hispanic
 Native American Indian
 Other
4. Education:
 High School
 1-2 yrs college
 4 years college
 Graduate degree
 Post graduate – doctoral
5. Marital Status: Single
 Married
 Divorced
 Widowed
 Separated
6. Your Income: _____ Hourly
or
_____ Annually
7. Have you worked for the Health Dept. more than 1 year?
 Yes
 No
8. If yes, how many years? _____ Yrs
9. Do you supervise others?
 Yes
 No
10. Are you a Registered Nurse?
 Yes
 No
11. Status: Full time
 Skimp
 Part time, set hours
 Part time, prn

11. What one thing about your job gives you the most satisfaction?

12. What one thing about your job gives you the least satisfaction?

(Use back if additional space is needed)