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The Effects of Work Schedule Flexibility on Job Satisfaction of Telephone Advice Nurses

Angela D. O'Neal
Kennesaw State University

THE EFFECTS OF WORK SCHEDULE FLEXIBILITY ON JOB SATISFACTION OF TELEPHONE ADVICE NURSES

by

Angela D. O'Neal, RN, BSN, CPN

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Name Angela O'Neal

KSU ID 000411982

Email aoneal8@students.kennesaw.edu

Phone Number 404-789-0188

Program Advanced Care Management and Leadership- Nursing Administration & Health Policy Leadership Track

Title: The Effects of Work Schedule Flexibility on Job Satisfaction of Telephone Advice Nurses

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Thesis/Dissertation Chair/Major Professor — Date 12-5-12

Committee Member — Date 12-5-12

Committee Member — Date

Committee Member — Date

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Program Director — Date 12-5-12

Department Chair — Date 12/5/12

Graduate Dean — Date 12-10-12

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ABSTRACT

Purpose: The purpose of this study was to explore the impact of work environment on job satisfaction of telephone advice nurses and describe any relationships that might exist among specific RN characteristics and overall job satisfaction.

Design: An exploratory, descriptive correlation design was selected to answer the research questions with the conceptual framework based on Herzberg's Motivation-Hygiene Theory.

Methods: A convenience sample from77 telephone nurses at two call centers of a large metropolitan health care system in southeastern United States was utilized. Data collection took place in October 2012 using the McCloskey/Mueller Satisfaction Scale and specific demographic questionnaires.

Data Analysis: Data analysis, using SPSS Version 18 and Minitab 16, occurred in November 2012 and included descriptive and inferential statistics.

Results: Work schedule flexibility had positive correlations with overall job satisfaction and displayed statistical significance. There was no significant relationship among work/life balance and job satisfaction. The only demographic variable that displayed a statistically significant relationship with job satisfaction was intent to leave.

Clinical Relevance: This study lent understanding to how work environments impact job satisfaction and described potential opportunities to effectively establish a healthy workplace.

Keywords: Telephone nursing, workplace environment, work/life balance, telephone triage, advice nursing, job satisfaction, work flexibility.

CHAPTER ONE: INTRODUCTION

Nursing in general is a stressful profession. Although telephone advice nursing is inherently different, there are similarities with traditional nursing. Consequently, Allan, Farquharson, Choudhary, Johnston, Jones and Johnston (2009) have identified that turnover and call-out rates of telephone nurses are also high. They attributed this to aspects of the work environment such as minimal personal control, insignificant rewards, lack of collegial support, and heightened workloads. In addition, they indicated that in telephone centers, nurses often lack control regarding shift selection and are given calls as they come in with no control over the pace of the work. Though some of these factors are similar to direct-care nurses in a hospital setting, there are unique attributes to the role of the telephone nurse that warrant investigation. As Strom, Marklund, and Hildingh (2009) indicated, some of the contributing factors affecting job satisfaction among telephone advice nurses should be analyzed since this type of nursing is becoming more common. Furthermore, if there are retention issues with this group of nurses, analysis of job satisfaction and opportunities to explore ways to impact satisfaction may lead to improvements in patient care during a time of heighten attention to quality and safety for patients. According to Jones and Gates (2007), nurse turnover is a continuous problem for healthcare organizations. Thus, it can be assumed that this is a problem for telephone advice nurses at this particular institution as well.

Purpose of the Study

The purpose of this study was to explore the impact of work environment, specifically work schedule flexibility and work/life balance, on job satisfaction of telephone advice nurses as well as describe any relationships that might exist among specific registered nurses (RN) characteristics and overall job satisfaction. Various studies have proven the connection between a healthy work environment, nurses' satisfaction, and retention (Aiken & Patrician, 2000; Cho, Ketefian, Barkauskas, & Smith, 2003; Cohen, Stuenkel, & Nguyen, 2009; Delobell, P., Rawlinson, J., Ntuli, S., Malatsi, I., Decock, R. et al., 2010). For an organization to achieve a high level of job satisfaction among nurses, a positive work climate must exist (Meeusen, van Dam, Browen-Mahoney, Zundart, & Knape, 2011). Thus, there is a need to begin exploring if the work schedule flexibility and work/life balance for telephone advice nurses impacts job satisfaction and if there are any significant relationships between these areas.

Background and Significance of the Study

Telephone advice nursing is an emerging subspecialty (Wheeler, 2011). However this subspecialty has problems retaining nurses. These nurses report limited contact with patients and coworkers, high workload, and staff shortages as negative aspects of the job (Purc-Stephenson & Thrasher, 2010). In general, nurses leave the profession because of problems within the work environment: understaffing, working long hours, decreased sense of value, and lack of decision-making (Hinno, Partanen, & Vehvilainen-Julkunen, 2011). The purpose of telephone advice is to provide high quality service leading to management of care via routine appointments and decreased urgent care and emergency room visits (Strom, et al., 2009). A study conducted by Strom et al. (2009) demonstrated

that callers perceive telephone advice as a valuable, easily assessable, timesaving, and reliable service, and feel comfort knowing that the service exists even when it is not needed.

The profession of telephone advice nursing has not been widely explored. There is debate about terminology. Some nurses refer to telephone triage as "telephone advice" and some nurses consider themselves advice nurses. However, the roles are the same: interaction among patient and nurse exclusively by telephone. Previous descriptions of telephone advice nursing still provide the best definition of telephone advice nursing. In 2007, the American Academy of Ambulatory Care Nursing (AAACN) indicated that telephone advice nursing addresses medical/health needs related to aging adults, chronic illnesses/disease, pediatrics, pre- and post-operative patients, and rural populations. Factors that affect telephone advice nursing include the content and complexity of the call as well as the nurses' experiences, communication skills, and assessment skills (AAACN, 2007). Telephone triage is a difficult skill in which beginning nurses can excel however they must rely on their listening and communication skills because they do not have the privilege of visualizing their patients (Wickersham, 2010). Nurses cannot use their eyes to conduct assessments so they must obtain as much information as possible from the questions asked (Wickersham, 2010).

Purc-Stephenson and Thrasher (2010) state there is disagreement as to the usefulness of telephone advice. For example, Leibowitz, Day, and Dunt (2003) state that telephone nursing appears to decrease medical workload by substituting telephone consults for in-person consults, but patients have voiced reduced patient satisfaction with telephone consults as compared to in-person consults. However, the researchers do report

consensus that there has been a lack of focus as to how the service impacts nurses working in this area and minimal information exists regarding how telephone advice nurses have adjusted to working in health care call centers (Bunn, Byrne, & Kendall, 2004; Leibowitz, et al., 2003; Purc-Stephenson & Thrasher, 2010).

The satisfaction or dissatisfaction of nurses is very important to hospital administration as well as nurses since improved retention can bring about savings for an organization that can be allocated for training and mentorship programs (Lynn, Morgan, & Moore, 2009). Specific studies have defined a relationship between nurse satisfaction, a healthy work environment, and retention (Cho et al., 2003; Cohen et al., 2009; & Duffield, et al., 2010). Nurses that worked in traditional settings report high levels of occupational stress, but nurses working in call centers possess their own stressors. Allan, et al. (2009) identified in their study that nurses who worked in call centers reported a lower sense of well-being and more mental health problems than other occupational groups. Work environment issues identified by call center nurses related to difficult patients, minimal time between calls, job monotony, minimal personal control, insignificant reward and collegial support, and heightened workloads.

Butler, Grzywacz, Ettner, and Liu (2009) stated that flexible work schedules are related to decreased absences, greater productivity, more commitment, and increased recruiting. They also identified that flexibility reduces work-family conflict. Duffield, Roche, Blay, and Stasa (2010) stated that work environment factors consist of scheduling, staffing, workload, relationships with colleagues and management, physical environment, and autonomy. However, this positive work environment does not occur without effort from nurse leaders who must create and maintain this type of environment.

Flexibility in work schedules helps the employee better balance work and family obligations resulting in decreased absenteeism, improved productivity, and successful recruiting (Butler et al., 2009).

Statement of the Problem

In light of some of the recent studies (Butler et al., 2009; Duffield et al., 2010), it is important to address how the work environment of telephone advice nurses, specifically schedule flexibility and work/life balance, effect job satisfaction. There is a lack of research in the area of understanding and documenting the job satisfaction of telephone nurses and what may help to increase their job satisfaction. With the increase in telephone call centers as an appropriate health service for patients to deal with accessibility issues and changes in the general nursing workforce resulting in a possible decrease in professional nurses, it becomes vital to explore what effects or impacts job satisfaction in this area of nursing. As nurse leaders understand what impacts job satisfaction, they may better understand if the necessary changes that are required to retain staff as well as the overall changes required impact the quality of patient care in this area of nursing.

Theoretical/Conceptual Framework

Frederick Herzberg (Herzberg, 1959) created a theory describing the sources of job satisfaction and job motivation. He states that there are specific factors that produce satisfaction at work (motivation factors) if met and another list of factors that generate dissatisfaction with work (hygiene factors) if factors don't meet staff's expectations. Motivation factors are verbal recognition, responsibility, achievement, challenging work, and advancement. Hygiene factors are physical working conditions, job security, salary,

benefits, supervision, and administrative practices (Miner, 2005). According to Usugami and Park (2005), the hygiene factors do not accomplish motivation alone but are an important aspect of maintaining employees' satisfaction. His theory produced a framework that management can utilize to ensure job satisfaction (Miner, 2005).

Herzberg's theory has been continuously used which has demonstrated its usefulness to organizations and researchers. The job satisfaction of nurse practitioners was analyzed using Herzberg's theory as a framework. Kacel, Miller, and Norris (2005) conducted a quantitative study using the Misener Nurse Practitioner Job satisfaction Scale. The study found that motivation and hygiene factors impact job satisfaction.

Bare (2004) conducted a study that utilized Herzberg's theory as its theoretical framework to demonstrate the various ways in which people are motivated. The purpose of her study was to determine the level of job satisfaction by examining the relationship between job satisfaction and Herzberg's Motivation and Hygiene factors. The researcher used a non-experimental, quantitative design with a convenience sample. Job satisfaction was measured via the Work Quality Index (Whitley & Putzier, 1994).The results of Bare's study (2004) showed that Herzberg's Motivation and Hygiene factors have positive correlations with job satisfaction.

Reinardy (2007) performed a study regarding job satisfaction among sports editors. The study used the Michigan Organizational Assessment Questionnaire and Perceived Organization Support survey. Quantitative and qualitative data was obtained in this survey. In this study Herzberg's theory provided the framework and showed that hygiene factors such as workload and organizational barriers have a correlation with motivation factors such as accomplishment and enjoyment.

Delobelle et al. (2010) conducted a study to examine the relationship between demographic variables, intent to turnover, and job satisfaction among primary healthcare nurses. They performed a cross-sectional study design that used the conceptual frameworks of Maslow and Herzberg. The study also contained a qualitative component where the participants were asked about which aspects of their work environment needed improvement such as pay, training, communication, and work conditions. The results of this study were that job satisfaction had a negative correlation with turnover intent. Job satisfaction and age were predictive of turnover intent and age, nursing experience, and tenure were positively correlated with education.

The Herzberg Theory served as the foundation framework for this research study as it explored the hygiene factors of work schedule flexibility and work/life balance on job satisfaction and described any relationships among RNs' characteristics and job satisfaction.

Research Questions

The research questions for this study were: 1) What is the effect of work environment, specifically work schedule flexibility and work/life balance, on job satisfaction in a telephone nursing center in a southeastern metropolitan health care system? 2) What are the relationships between specific RNs' characteristics such as age, education level, tenure (experience), miles driven to work, previous work schedule, current work schedule, intent to leave, and job satisfaction in this telephone nursing center? The premise for this study was that telephone advice nurses that are given more flexibility in work schedules and possess work/life balance will have higher job satisfaction.

Definitions

The research variables were work environment, as it relates to work/life balance and work schedule flexibility, job satisfaction, and demographic characteristics of telephone advice nurses. Mueller and McCloskey (1990) originally identified the characteristics of the work environment as relationships with nursing colleagues, social interaction at work, opportunities for committee involvement, praise from upper management, and participation in decision making. For this study, work environment was defined by work/life balance and work schedule flexibility as identified by line items 4 through 12 of the McCloskey Mueller Satisfaction Scale: “Hours that you work”, “flexibility in scheduling your hours”, “opportunity to work straight days”, “opportunity for part-time work”, “weekends off per month”, “flexibility in scheduling your weekends off”, “compensation for working weekends”, “maternity leave”, and “child care facilities”. Work/life balance was how nurses perceive the job correlates with their professional and personal lives. This variable was measured by the two qualitative studies of the demographic questionnaire: “Did you see improvement in your job satisfaction when work schedule flexibility was initiated in your call center? Please Explain” and “Which aspects of your work environment most affect your job satisfaction (which are the most valued)?” Work-life balance is present when professional goal and responsibilities coincide with one’s internal resources (Grawitch & Barber, 2010). Work schedule flexibility related to the flexibility of the nurse schedule at the telephone advice center and included the choices of part-time options (less than 40 hours per week), full-time options (40 hours per week), prn (as needed), 8-hour or 10-hour shifts, and work from home as indicated on the demographic questionnaire.

Job satisfaction of telephone advice nurses is defined as positive feelings about ones jobs which included responsibility, advancement, recognition, achievement, and the work itself (Bare, 2004). Job satisfaction of telephone nurses in this study was defined by work environment which included work schedule flexibility and work/life balance This study explored whether work flexibility and work/life balance improved perception of job satisfaction identified as the score on a particular instrument that measures nursing work satisfaction on a scale (Mueller & McCloskey, 1990).

Additional variables included telephone advice nurses' demographic characteristics as identified in literature to be valuable in understanding job satisfaction as it relates to work flexibility and work/life balance (Butler et al., 2009; Chen et al., 2009; Goldman & Tabak, 2010; Grawitch & Barber, 2010; Meeusen et al., 2011; Tanaka, Maruyama, Ooshima, & Ito, 2010). The demographic characteristics were participant's age, educational level, tenure (experience at the call center), commuting miles to work, previous work schedule, current work schedule, and intent to leave.

Assumptions

An assumption of this study was that the two call centers have a homogeneous population so that a small sample size will be adequate to capture the variability among participants (Polit & Beck, 2012). Other assumptions were that the two call centers operate in a similar fashion to other call centers and that participants gave open and honest responses to the survey utilized.

Limitations

The limitations of this study encompassed the sampling design and the small sample size. A convenience sampling design was used because of the researcher's time

and financial constraints. This form of design and small sample size limited the ability to generalize the results of the study to a larger population. Convenience sampling prevented random selection of participants as the most conveniently available participants were selected to complete the surveys (Polit & Beck, 2012).

Another limitation to this study involved the possibility of job satisfaction being affected by current leadership and hospital policies. Cross-training of telephone advice nurses to other skill sets occurred concurrently during this study, which may also have had an effect on workplace satisfaction. Finally, inessential variables outside of the researchers control were the mood of the participants at the time of the study and fear of retaliation for low job satisfaction ratings.

As a result of the limitations, analysis of variance (ANOVA) and multiple regression was utilized to address confounding variables. ANOVA is used when randomization is not possible, as is the case with convenience sampling, and assists in improving the validity of the study (Polit & Beck, 2012).

CHAPTER TWO: LITERATURE REVIEW

The following is a review of literature concerning telephone advice nurse job satisfaction. The literature is divided according to research variables: work environment, work flexibility, work/life balance, job satisfaction, and demographic characteristics. A brief description of telephone advice nursing begins the literature review.

Telephone Advice Nursing

Greenberg (2009) created a model describing the telephonic process that included three phases: gathering information, cognitive processing, and output. Phase one, gathering information, is where the nurse obtains information about the patient. The nurse must focus on verbal and nonverbal cues to gather information during the call. Cognitive processing, phase two, is where the nurse evaluates the seriousness of the problem (acuity) and the intervention(s) that should be utilized. Protocols are used to help determine the acuity. In phase three, output, the nurse determines the final disposition. Disposition determines the most appropriate level of care that the client should receive such as 911 or outpatient care. When home care is an appropriate disposition the nurse provides teaching and ensures that the patient will be able to perform the tasks independently at home (Greenberg, 2009).

Work Environment

Several studies presented information about the work environment of nurses (Purc-Stephenson & Thrasher, 2010; Wright, 2011; Duffield et al., 2010). According to

Purc-Stephenson and Thrasher (2010), the work environment of telephone advice nurses affects the care delivered. Their study revealed that nurses in the study felt that telephone advice nursing assisted them in developing communication skills and active listening. However most of the nurses stated that their work environment was small and confined them to a chair. The nurses liked the variety of the calls but the limited contact with patients and coworkers, high workload, and staff shortages had a negative effect on their job satisfaction. The high workload, communication barriers, challenge of determining the caller's reliability, legal consequences of making decisions over the phone, and lack of appointment availability created stress for the telephone nurses. The Purc-Stephenson and Thrasher study (2010) was based on data from the United Kingdom, which may not be generalizable to other areas of the world. Future research about the telephone field of nursing is valuable with recommendations from Purc-Stephenson and Thrasher for further exploration of the effect of job demands and design on telephone nursing.

Wright's study (2011) also discussed the effects of a negative workplace environment. He conducted a study that examined how communicating competently in the workplace affects conflict style, job burnout, stress, and job satisfaction. Wright (2011) hypothesized that style of conflict in the workplace will be predictive of job satisfaction and job burnout among those in healthcare. The variables measured were communication competence, workplace conflict style, perceived stress, job satisfaction, and job burnout. The regression analysis showed that incorporating and negotiating conflict style scores were predictive of higher job satisfaction and lower job burnout, thus supporting the hypothesis. A possible limitation of the study is that it focused on healthcare workers (physician assistants, nurses, technicians, and support staff) within the

Veteran's Administration. The generalizability of the findings may be limited to this subset. He suggested future research utilize a more comprehensive theoretical model which would allow specific predictions to be made as well as a thorough understanding of the relationships among job stress, social support, conflict, communication, and competence.

Duffield et al. (2010) conducted a secondary analysis to examine how nursing unit managers' leadership styles affect staff satisfaction and retention. Data was collected regarding patients, nurses, and environment on ninety-four (94) randomly selected medical-surgical units in twenty-one (21) public hospitals in Australia during 2004-2006. The nurses completed a survey using the Nursing Work Index- Revised (Estabrooks, Tourangeau, Humphrey, Hesketh, Giovannetti, et al. 2002). The study analyzed the following subscales: resource adequacy, control over practice, nurse-physician relations, autonomy, and leadership. The items that were most considerably related to job satisfaction were: praise and recognition for a job well done, a clear philosophy of nursing that pervades the patient care environment, a nurse manager or immediate supervisor who is a good manager and leader, flexible or modified work schedules are available, nurses actively participating in efforts to control costs, and a senior nursing administrator who is highly visible and accessible to staff (Duffield et al., 2010). According to this study, the item that had the most influence on job satisfaction was praise and recognition for a job well done.

According to Fairbrother, Jones, and Rivas (2009), a group of Australian nurses sought a job satisfaction tool that did not rely on work environment to measure job satisfaction and viewed the existing tools to be geared toward the Unites States. Among

the tools analyzed were the Nursing Work Index- Revised (NWI-R) (Aiken & Patrician, 2000) and the Mueller-McCloskey Satisfaction Scale (MMSS) (Mueller & McCloskey, 1990). The two measuring tools are based on ratings of work environment driving job satisfaction which provide information about job satisfaction in the organizations in which they are used. Both tools were found to be consistent in measuring job satisfaction but only the MMSS analyzed work/family balance and scheduling.

Work Flexibility

The following studies demonstrated the importance of work flexibility (Meussen et al., 2011; Butler et al., 2009, Grawitch & Barber, 2010). According to Meeusen et al. (2011) flexible work schedules lead to enhanced productivity, decreased absenteeism, improved commitment, and better recruiting. Similarly, Butler et al. (2009) found a positive relationship between flexible work schedules and job satisfaction. Grawitch and Barber (2010) performed a study to systematically review literature that concentrated its attention on work flexibility programs and nonwork support (family-friendly benefits). The outcome of the literature review demonstrated that there is a relationship between work-life programs and higher job satisfaction, performance, well-being, and commitment, as well as decreased turnover rates and distress. Nonwork supports revealed a relationship between increased career satisfactions, views of fairness, commitment, work-life balance, and decreased rates of turnover, alcohol use, and distress. The research validated that work flexibility provides employees with autonomy. A limitation to the study was the design of the study was not intended to be comprehensive regarding work-life literature. Future research using meta-analysis to focus on specific outcomes of work-life initiatives, processes, and employee outcomes was recommended.

Butler et al. (2009) presented a study that demonstrated how workplace flexibility affects health. They surveyed United States (U.S.) employees of a pharmaceutical company who qualified for health insurance. The study showed that increased flexibility is associated with better self-reported health but not with decreased healthcare utilization. In actuality, those with more flexibility had more healthcare visits. The findings of the study were similar to those that demonstrated that lack of control over work schedules leads to poorer health and they also suggest that more job flexibility decreases long term health utilization and health care costs. One important limitation was that the study findings are not generalizable to organizational settings where flexibility is less valued. Further research is needed to substantiate evidence of a relationship between flexibility and health.

Work-Life Balance

Tanaka, Maruyama, Ooshima, and Ito (2010) conducted a study to examine work-life balance among nurses at a hospital in Japan. They administered a questionnaire to 1236 nurses regarding: demographic characteristics, living background, work environment, work motivation, and health conditions. The demographic characteristics used were age, gender, unit in which one worked, years of nursing practice, and marital status. Living background was defined as personal priorities, leisure time, and satisfaction with life and working environment was described by working styles, ability to take child-care leave, welfare programs, and reasons for working. Work-life balance was defined as coordination among job, family, self-development, and community. The results of the study showed nurses who were not satisfied with their living background and reported poor health had low levels of work-life balance, but nurses who were

satisfied with their job and were highly motivated exhibited higher work-life balance. Married women were shown to value benefits that offered maternity leave, daycare, and flexible work schedules.

Job Satisfaction

Burtson and Stichler (2010) conducted a study that demonstrated the relationship among nurse caring and compassion satisfaction, compassion fatigue, nurse job satisfaction, stress, and burnout. The researchers relied on Maslow's theory of hierarchy and Watson's theory of human caring to serve as their theoretical framework. The theory was that when an environment attends to the unmet needs of the nurse, self- actualization occurs which positively affects nurse caring. The researchers developed several hypotheses: nurse caring is positively correlated to compassion and nurse caring is negatively correlated to stress, compassion fatigue, and burnout. A correlational study was conducted using a convenience sample of 450 nurses working in medical surgical, critical care, and emergency room units. Data was collected over a two week period in 2008. Demographic data was collected and the variables were measured using four research instruments: the Mueller McCloskey Satisfaction Scale (MMSS), the Professional Quality of Life Scale (ProQOL), the Stress in General Scale (SIG), and the Caring Behaviors Inventory (CBI-24). The MMSS described nurse job satisfaction, the ProQOL measured compassion fatigue, burnout and stress, the SIG scale defined stress, and the CBI-24 labeled nurse caring. All of the four measurement tools were proven reliable for psychometric testing and the hypotheses positive and negative correlations where also proven to be statistically significant.

As Burton and Stichler (2010) indicated there were study limitations. First, the study involved a small convenience sample. Only 28 % (*n* = 126) of the nurses responded which limits generalizability. In addition, the low response rate gave rise to the possibility of selection bias.

Demographics

Studies have demonstrated the relationship between demographic characteristics, job stress, and job satisfaction (Shields & Ward, 2011; Hayes et al., 2006; Tai et al., 1998; Hayes et al, 2006; Lavoie-Tremblay et al., 2010; Chen et al, 2009; Goldman & Tabak, 2010). It has been shown that there is a significant relationship between intent to turnover, job satisfaction, age, and education; and, job satisfaction has been negatively correlated with years of nursing experience (Shields & Ward, 2011; Hayes et al., 2006). There is also a negative correlation between age and turnover intent (Tai et al., 1998; Hayes et al., 2006). Some argue that nurses who are a part of generation Y possess different attitudes regarding their work which affects retention (Lavoie- Tremblay et al., 2010).

Chen et al. (2009) conducted a study evaluating this relationship. The questionnaire was given to 121 nurses with more than 6 months of hospital experience. The questionnaire used in this study included four parts: a demographic and work-related data, a stressor scale, a stress coping strategy scale, and a job satisfaction scale. The alpha reliability coefficient of the stress subscales were between .84 and .94 and the alpha reliability coefficient of the job satisfaction subscales were between .61and .89. Demographic data was obtained: marital status, age, nursing experience, number of children, career status, religion, and education. The results of the study were that older

nurses experienced more job stress than younger nurses. Also, nurses with children had lower levels of stress than those without children.

Goldman and Tabak (2010) also studied how demographics affect job satisfaction. The researchers examined whether nurse demographics of operating room (OR) nurses affect the perception of an ethical climate, thus influencing job satisfaction. Nurse perceptions are related to higher job satisfaction, commitment, and reduced turnover. The study demonstrated that gender has no effects on the perception of ethical climate but nurses with more experience had a higher perception of the ethical climate.

Summary

The literature review demonstrated that more explanation is needed regarding the job design of telephone advice nursing. Studies have been conducted showing various factors that influence jobs satisfaction in the hospital setting such as communication competence, workplace environment, work/life balance, schedule flexibility, and demographics but studies are limited in regards to telephone advice nursing. Few studies exist from the perspective of the nurse instead of the patient in regards to telephone advice nursing.

CHAPTER THREE: METHODS

This study focused on exploring job satisfaction among telephone advice nurses by examining how work environment defined by work schedule flexibility and work/life balance impacts job satisfaction. The researcher conducted a quantitative analysis to describe any existing relationship between work environment and job satisfaction. The researcher also included a qualitative component to obtain the personal views of the participants regarding their level of job satisfaction.

Research Design and Setting

An exploratory, descriptive, correlation design was selected to explore job satisfaction and elements of the work environment, specifically work/life flexibility and work/life balance. In addition, the association of demographic characteristics such as age, tenure, and education on the variables of interest (job satisfaction, work schedule flexibility, and work/life balance) was explored. As this study involved a small sample size it may serve as beginning research to formulating a directional hypothesis (Polit & Beck, 2012). This research explored the relationship among work/life balance and work/life flexibility as it relates to job satisfaction. The research questions were: 1) What is the effect of work environment, specifically work schedule flexibility, and work/life balance on job satisfaction in a telephone nursing center in a southeastern metropolitan health care system? 2) What are the relationships between specific RNs characteristics age, educational level, tenure (experience), miles driven to work, previous work

schedule, current work schedule, intent to leave and job satisfaction in this telephone nursing center? The premise for this study was that telephone advice nurses that are given more flexibility in work schedules and possess work/life balance will have higher job satisfaction.

The research took place at telephone call centers of a metropolitan healthcare system in southeastern United States that provides service to over 200,000 members ("Fast Facts," 2012) by utilizing two call centers. Advice nurses that work in the telephone call center of a metropolitan healthcare system were given the opportunity to participate in this study that explored the effect of work environment on job satisfaction. By completing the McCloskey/Mueller instrument and the specific demographic questionnaire, RNs were given the opportunity to describe their job satisfaction and provide specific demographics to the researcher. The McCloskey/Mueller Satisfaction Scale was designed to assess nurse satisfaction and has been frequently used as a reliable tool to measure this variable (McCloskey & Mueller, 1990). The eight subscales of the McCloskey/ Mueller Satisfaction Scale have reliability ranges of .52 to .84. Criterion-related validity ranged from .53 to .75.

McCloskey (1974) created this measuring tool to describe incentives that were important to nurses thus encouraging them to remain in their jobs. The first scale was based on Maslow's Hierarchy of needs (Maslow, 1954). Maslow believes that needs are physiological and psychological and the desire to satisfy these needs promotes achievement of goals. The scale has since been revised and utilizes 31 items to analyze job satisfaction (Mueller & McCloskey, 1990). These 31 items are grouped into eight subscales: extrinsic rewards, family and work balance, professional opportunities, work

control and responsibility, scheduling, coworkers, interaction opportunities, and praise and recognition (Tourangeau, Hall, Doran, et al., 2006).

Population and Sample

The population for this study included all telephone advice nurses working at the metropolitan healthcare system in southeastern U.S. A convenience sample of advice nurses (77 advice nurses) presently working at the call centers were surveyed in a confidential manner regarding their satisfaction of working as advice nurses within the healthcare system. These nurses provide advice for Pediatrics, Adult Medicine, and Obstetrics/Gynecology. Nurses who provide advice for Behavioral Health, Rheumatology, Endocrinology, Dermatology, and Infection Disease/Oncology patients were included even though they had not been given the work flexibility option. The above nurses were given the opportunity to participate in the survey during a monthly staff meeting. Time was allotted during the staff meeting for confidential completion of the survey. Study participants were currently working at either of the two call centers in the role of telephone advice nurse.

Procedures for Data Collection

Data collection took place after receiving Institutional Review Board (IRB) approval at both Kennesaw State University and the healthcare organization. After approval at Kennesaw State University the proposal was sent to the organization's IRB/research committee to obtain approval. Permission to collect data was obtained by the managers of the call centers pending approval from the IRB/ research committees which was obtained. The researcher was introduced and then packets labeled with identification numbers were distributed to participants during a monthly staff meeting.

No names or other identifying information of participants was collected during the study. Identification numbers only allowed for comparison between the two call centers and not identification of individual participants. This procedure was reviewed and agreed upon by the manager of each call center.

At least two weeks before the scheduled staff meetings, a flyer announcing the research study and providing information about the researcher was distributed to all nurses at the advice call centers to allow the time for the registered nurses to consider the opportunity to participate or not participate. The packets included a cover letter (see Appendix A), the demographic questionnaire (Appendix B), and the MMSS (Appendix C). The cover letter described the purpose of the study and provided the researcher's email address and home phone number, and other pertinent Health Insurance Portability and Accountability Act (HIPAA) and IRB requirements. The cover letter also served as a consent form. The participants placed completed surveys in an envelope provided and the researcher collected the surveys at the end of the staff meeting. Anonymity was attempted by not including names of participants but confidentiality was maintained as each participant was assigned an identification number. The researcher followed the research protocol regarding data collection, maintenance, and removal.

Instruments

In May 2012, the organization initiated a variety in work schedules to the telephone advice nurses. This presented an opportunity to explore the effects of changes in work environments for telephone advice nurses. By using a valid and reliable instrument (McCloskey/Mueller Satisfaction Scale (MMSS) that measured the nurses' satisfaction of work environment, specifically work schedule flexibility and work/life

balance, the researcher was able to explore the effects on job satisfaction (see Appendix C). A demographic questionnaire (see Appendix B) provided information about the characteristics of the participants including age, educational level, tenure (experience), commuting miles, previous work schedule, current work schedule, and intent to leave. These factors were important to the research as these variables affect one's preferences and views of work/life balance according to life stages. This questionnaire also included two narrative questions inquiring about job satisfaction prior to the initiation of work schedule flexibility

The MMSS is a 31-item, 5-point Likert scale that measured job satisfaction among nurses. For each subscale, the participant's responses on each line items are scored and summed and divided by the number of items to obtain a mean. Permission was obtained to utilize the MMSS by submitting a request form to the Center for Nursing Classification & Clinical Effectiveness along with a statement from advisor Sharon Sweeny, Coordinator. The eight subscales of the McCloskey/Mueller Satisfaction Scale have reliability ranges of .52 to .84. The smaller alphas are related to the subscales with few items. Test-retest correlations demonstrate similar alpha levels at 6 months and 12 months on the job. Construct validity displayed positive correlations for all hypothesized relationships. Criterion-related validity ranged from .53 to .75 and the McCloskey/Mueller Satisfaction Scale has been shown to be a valid measure of nursing satisfaction in comparison to other scales not designed for nurses (Mueller & McCloskey, 1990).

Threats to Validity

A major threat to validity of nonexperimental studies is the ability to support causal inferences (Polit & Beck, 2012). With self-selection utilized in this study one cannot propose that the sample was similar before the occurrence of the independent variables, work schedule flexibility and work/life balance. Pre-existing differences may be the reason for the differences in job satisfaction since in the real world, behaviors, attitudes, and characteristics are interrelated in complex ways (Polit & Beck, 2012). Although the conceptual framework of Herzberg is applied in this study to focus on understanding the possible relationships among job satisfaction and work environment, the researcher collected data to describe rather than predict correlation using select variables that may be related to job satisfaction in a telephone advice call center.

Although random assignment of participants is preferred, randomization was not possible. Therefore, analysis of variance (ANOVA) procedures were used to improve internal validity. The possibility of selection bias was also monitored between the comparison groups of the two call centers. If differences were detected they were controlled via analysis of variance or regression. When small samples are used, statistical power tends to be low and analysis may not show that independent and dependent variables are related even when they are related. ANOVA controls by statistically removing the effect of confounding variables on the outcome. This statistical control enhanced the ability to detect and describe relationships (Polit & Beck, 2012).

Statistical Analysis for Each Research Question

Data analysis, using SPSS Version 18 and Minitab 16 took place in November 2012 with descriptive and inferential statistics to evaluate the impact of work

environment, specifically work schedule flexibility and work/life balance on nurses' job satisfaction. Statistical analysis was conducted to demonstrate the impact of work schedule flexibility on telephone advice nurses' perception of work-life balance as indicated by job satisfaction in a large metropolitan health care system. Results of the survey were analyzed for differences in job satisfaction ratings based on the employees' particular work schedule, work/life balance, and specific demographic characteristics. The answers to the two qualitative questions on the demographic questionnaire were categorized according to common themes. The answers to the questionnaire were coded using descriptive statistics. Scores were added and divided by the number of items to attain a mean. Cronbach's Alpha was used to determine the internal reliability of the MMSS for this particular sample and analysis of variance was utilized as the small sample size affected the power (p) of the study. Work/life balance was analyzed on a scale level according to the family/work balance subscale of the MMSS. Work schedule flexibility was analyzed on a scale level according to the flexibility subscale of the MMSS. Satisfaction regarding work environment was analyzed on a scale level according to the scores obtained from the subscales of the MMSS. Satisfaction with work schedules was analyzed on a scale level by evaluating data from scoring the scheduling subscale of the MMSS and work schedule flexibility was also addressed in the demographic questionnaire. Specific nurse demographics were analyzed on the appropriate level of information obtained.

Initially, the variables, work schedule flexibility, work/life balance, and job satisfaction, were to be analyzed on an ordinal level via the Mann-Whitney test as the MMSS asks the participants to rank their level of satisfaction. Also, the demographic

variables were to be analyzed on a nominal level via the Fisher's exact test. However, because regression and ANOVA procedures were utilized to control for the confounding variables of convenience sampling, the variables were analyzed on a scale level. Table 1 on the next page provides an outline for each research question concerning the variables, how data was collected and method of analysis.

Procedures for the Protection of Human Subjects

Advice nurses were conveniently selected to participate in the study. Consent forms describing the study were included in the research packet provided to all participants. They received verbal and written communication that participation was voluntary. Kennesaw State University Institutional Review Board and the healthcare system's Institutional Review Board approvals were obtained prior to data collection. Anonymity was attempted by excluding the names of the participants and other identifying information. However, confidentiality was maintained by assigning each research packet an identification number. Identification numbers allowed for comparison between the two call centers. Research protocols were followed in the collection, maintenance, and removal of all research data.

Table 1

Overview of Research Questions and Statistical Analysis

Research Question	Variable	Data Collection Tool	Method of Analysis
1) What is the effect of work environment, specifically work schedule flexibility, and work/life balance on job satisfaction in a telephonic nursing center in a southeastern metropolitan health care system?	1a) Work/life balance subscale 1b) Work schedule flexibility subscale 1c) Job satisfaction score	1a) MMSS and demographic questionnaire 1b) MMSS and demographic questionnaire 1c) MMSS	Descriptive Statistics: Frequency, percentage, mean, and standard deviation Inferential Statistics: Two-Sample T- test for each subscale and ANOVA. Work schedule flexibility will be coded according to categorical themes.
2) What are the relationships between specific RNs characteristics such as age, education level, tenure, miles driven to work, previous work schedule, current work schedule, intent to leave, and job satisfaction in this telephone nursing center?	2a) Demographic characteristics 2b) Job satisfaction subscale	2a) Demographic Questionnaire 2b) MMSS	Descriptive Statistics: Frequency, percentage, mean, and standard deviation Inferential Statistics: Chi-Square for demographic characteristics

CHAPTER FOUR: RESULTS

Overall, 40 questionnaires were collected (response rate = 80%). As participation was voluntary, 47 participants of the 59 RNs who attended the staff meeting chose to participate in the study and seven questionnaires were incomplete leaving a total of 40 usable questionnaires. Originally, the study was designed for 77 participants but only 59 RNs attended the staff meetings where data collection occurred. All of the respondents (n = 40, 100%) were women and ranged in age from 26 to 64 years old (M = 48.15; SD = 11.074). The experience of the nurses ranged from 4 to 43 years of nursing experience (M = 22.8, SD = 11.817). All of the participants were registered nurses and almost half of the respondents (n = 18, 45%) were Bachelors prepared (See Figure 1). One-third of the nurses, (n = 13, 32%) had a commute of more than 30 miles (See Figure 2). In regards to the nurses' previously worked schedule, most RNs (n = 33, 82.5%) worked an 8 hour, 5 days a week schedule and 42.5% (n = 17) presently work a 10 hour, 4 days a week schedule (See Figures 3 and 4). The majority of the nurses either worked specifically in Ambulatory Medicine (n = 13, 32.5%) or worked in the following three specialties: Pediatrics, OB/GYN, and Ambulatory Medicine (n = 15, 37.5%) (See Figure 6). Almost half of the participants had no intent to leave (n = 18, 45%) while (n = 15, 37.5%) intend to leave their current position as a telephone advice nurse (See Figure 5). There were no significant variations among comparison of the two call centers related to demographic characteristics (See Table 2).

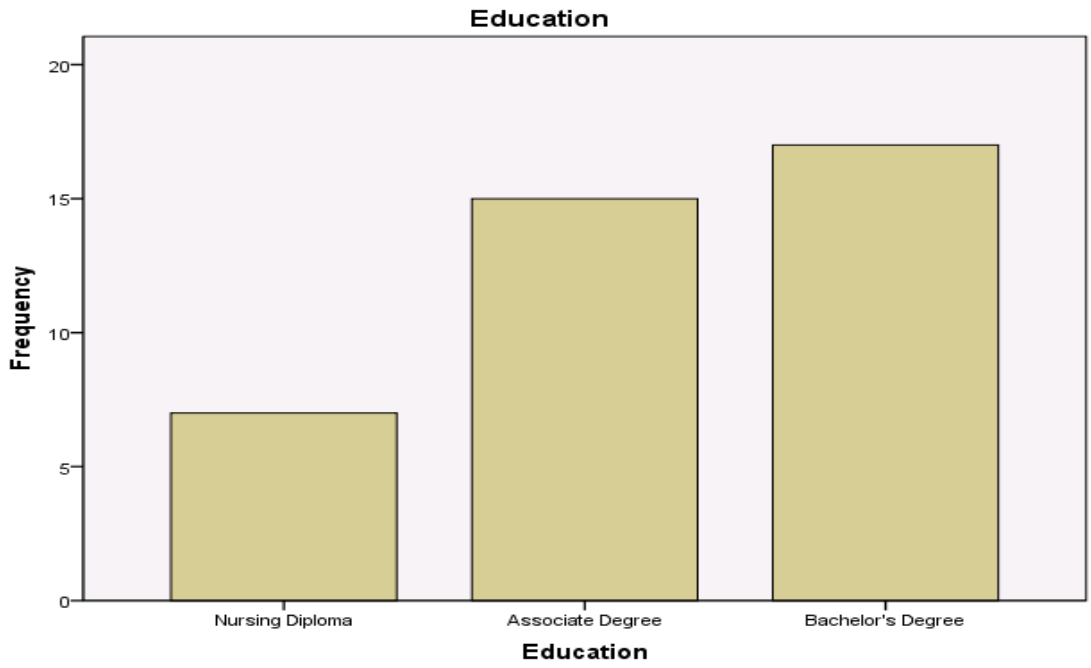

Figure 1. Frequency values representing the participants level of education

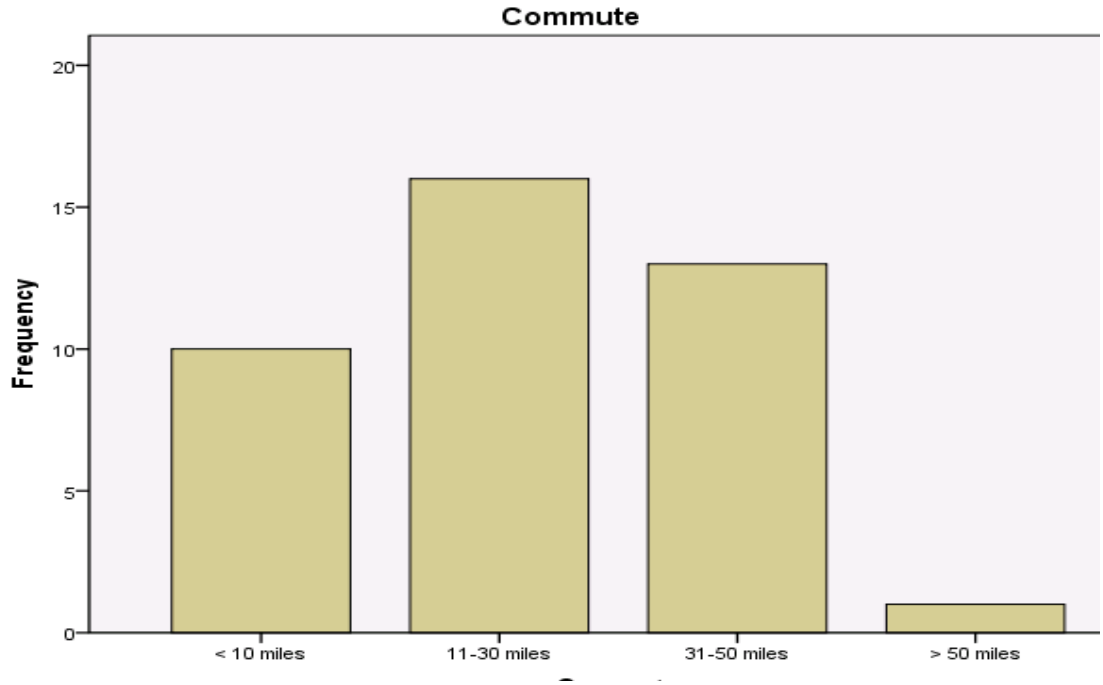

Figure 2. Frequency values representing the miles driven to work by the participants

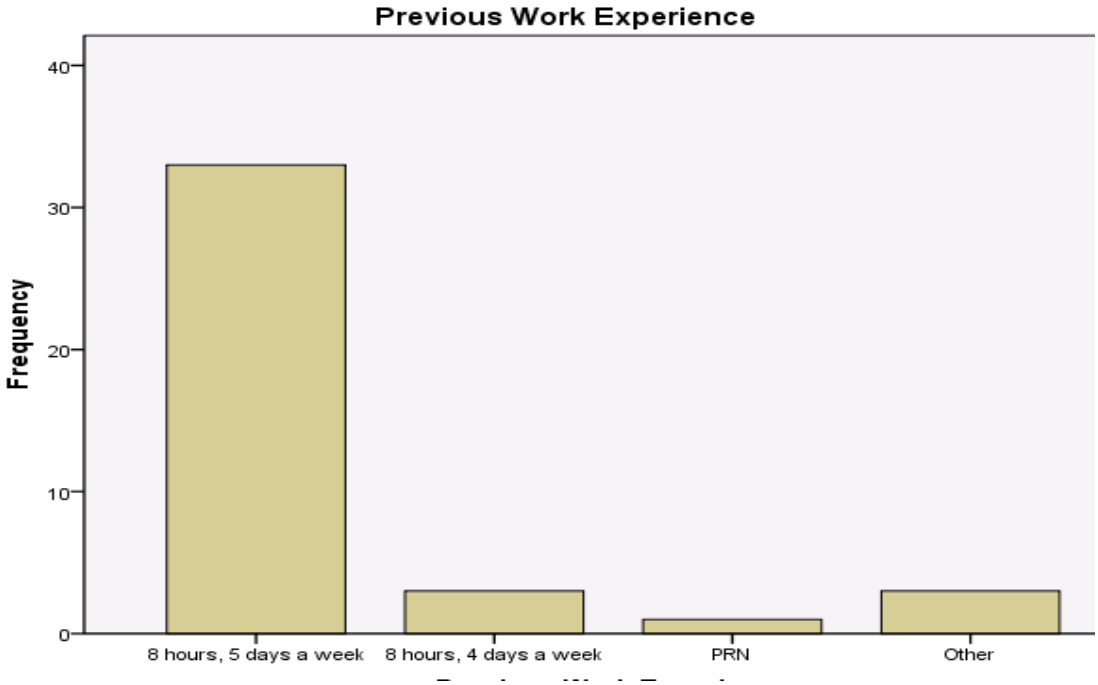

Figure 3. Frequency values of previous work schedule of participants.

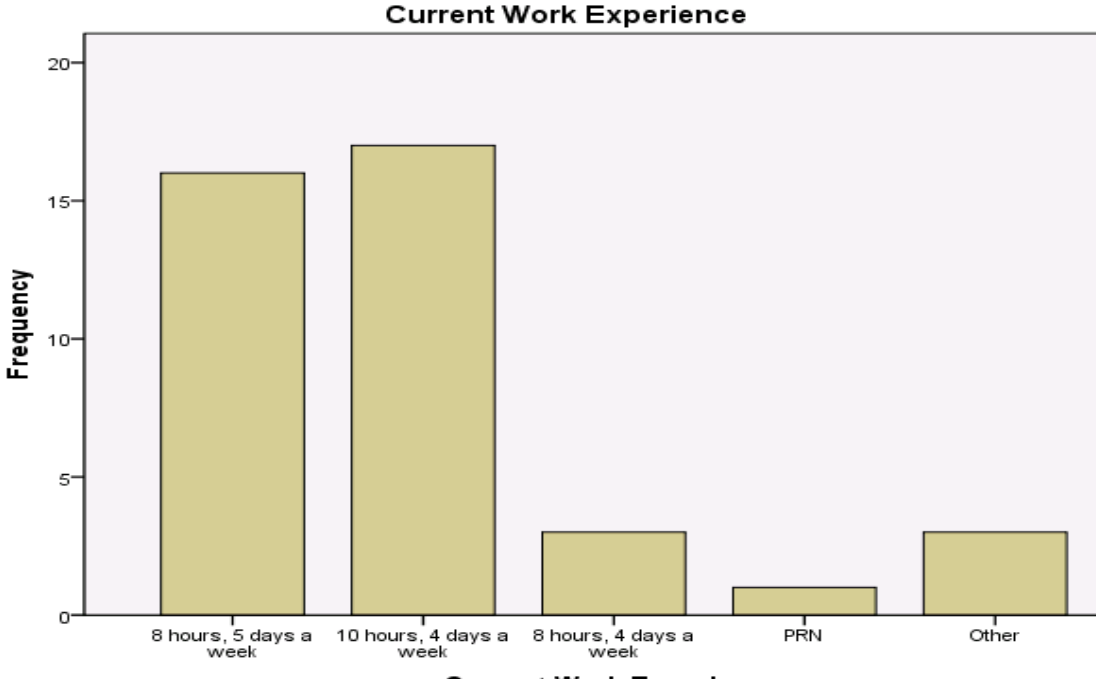

Figure 4. Frequency values of current work schedule of participants.

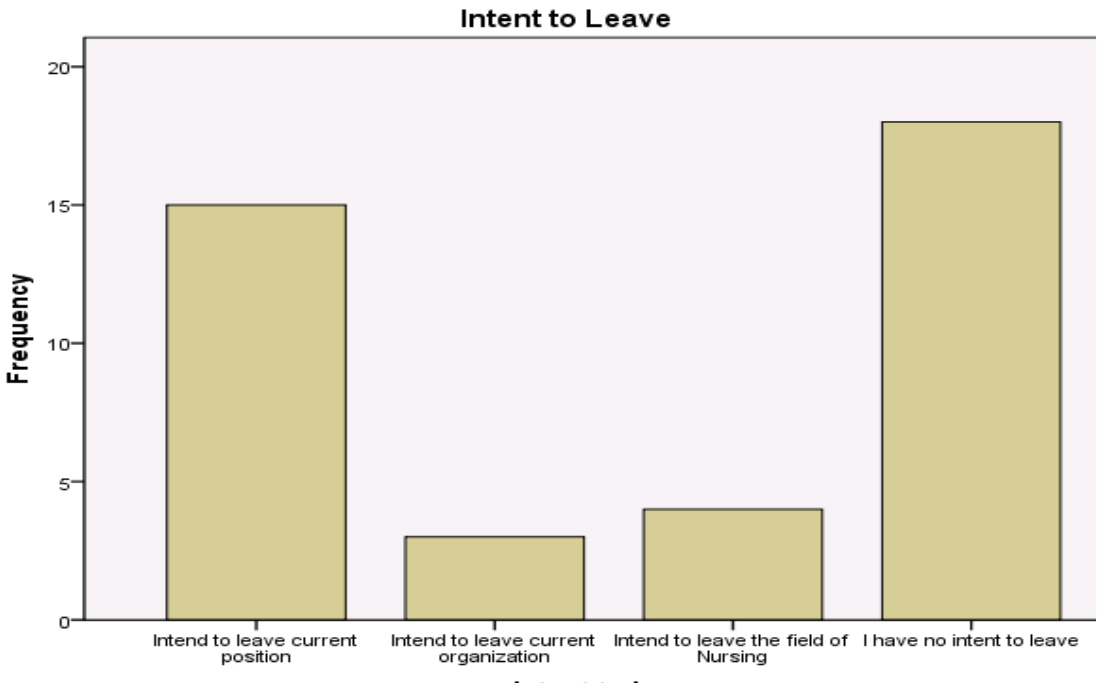

Figure 5. Frequency values of participants' intent to leave.

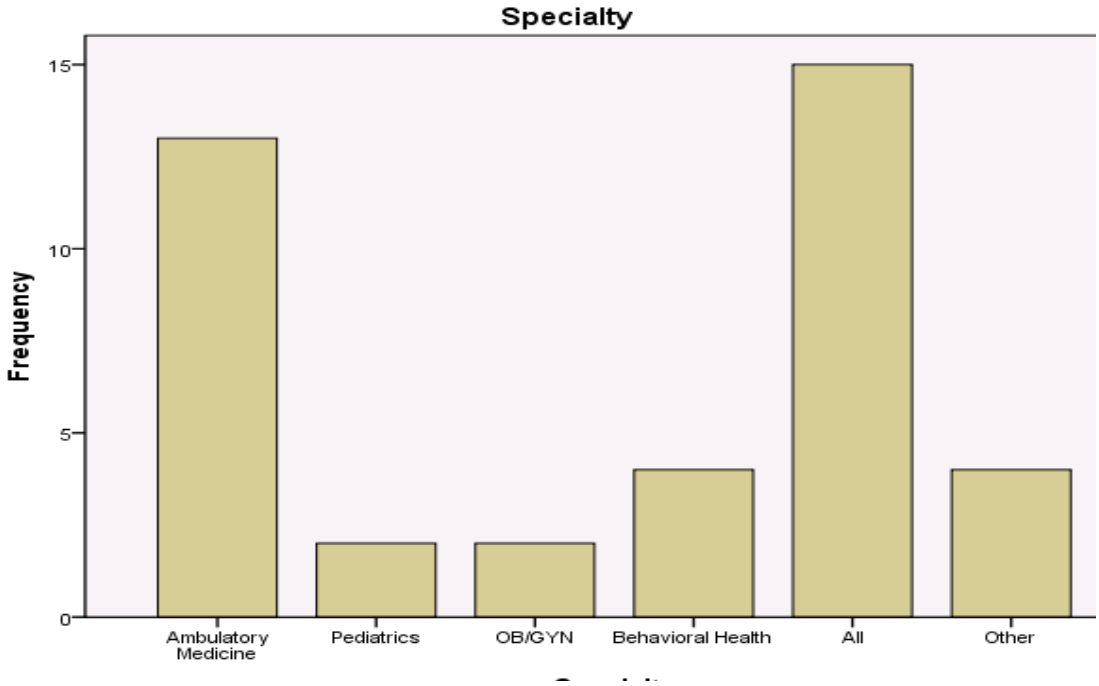

Figure 6. Frequency values of specialty of participants.

Table 2

Descriptive Statistics- Demographic Variables by Call Center

	Call Center 1 (*n* = 15, % = 37.50)		Call Center 2 (n = 25, % = 62.50)	
Variable	*M*	*SD*	*M*	*SD*
Age	52.13	11.01	45.76	10.62
Education	2.200	0.862	2.292	0.690
Experience	27.60	11.50	19.92	11.26
Commute	2.267	0.884	2.040	0.790
Prior Schedule	1.600	1.056	1.600	1.658
Current Schedule	2.000	0.926	2.040	1.567
Intent to Leave	2.800	1.424	2.520	1.388
Specialty	3.333	1.877	3.520	2.002
Flexibility	4.000	0.655	4.080	0.4933
Balance	3.200	0.414	2.960	0.539
Job Satisfaction	3.400	0.828	3.280	0.542

Work Schedule Flexibility

This subscale included questions 4, 5, 6, 8, 9, and 10 of the MMSS (see Appendix C). Work schedule, measured on a Likert-scale from one to five, was moderate (*M* = 4.02, *SD* = .498), with high frequency scores in particular for questions 4, 8, and 9. Over half of the participants (*n* = 22, 55%) were moderately satisfied with the hours they worked (question 4). Almost all of the participants (*n* = 38, 95%) were very satisfied with weekends off from work (question 8). Participants were very satisfied (*n* = 25, 62.5%)

with flexibility in scheduling weekends off (question 9). Moderate significance was found among the correlation between flexibility and job satisfaction (r = .495, $p < 0.01$) (See Table 5). A one-way ANOVA of job satisfaction related to work schedule flexibility showed statistical significance (F = 3.50, p = 0.041) with a small proportion of variance (R^2 =15.9%). A general regression analysis of job satisfaction according to work schedule flexibility was also shown to be statistically significant (t = 2.02989, p = 0.050). The results of a Two-Sample T-test in comparison of the two call centers did not show a statistically significant difference between the means of work schedule flexibility (t = -0.44, df = 38, p = 0.633).

Work/Life Balance

This subscale involved questions 7, 11, and 12 of the MMSS (see Appendix B). Work/Life Balance, also measured on a Likert-scale from one to five, was neutral-neither satisfied nor dissatisfied (*Mean* = 3.06, *SD* = 0.406), with similar frequency scores in particular for questions 7, 11, and 12. Over half of the participants were neutral, neither satisfied nor dissatisfied, (n=24, 60%) with opportunity for part-time work (question 7). The participants were also neutral regarding maternity leave (question 11) and child care facilities (question 12) (n=36, 90%). A weak correlation was found among the correlation between work/life balance and job satisfaction (r = .322, $p < 0.05$). A one-way ANOVA of job satisfaction related to work/life balance was not shown to be statistically significant (F = 0.78, p = 0.384). The results of a Two-Sample T-test in comparison of the two call centers did not show a statistically significant difference between the means of work/life balance (t = 1.48, df = 38, p = 0.147). A general

regression analysis of job satisfaction according to work/life balance was also shown not to be statistically significant (t = 0.88165, p = 0.384).

Job Satisfaction

Job satisfaction, measured on a scale from one to five, was also neutral- neither satisfied nor dissatisfied (*Mean* = 3.34, *SD* = .523). A one-way between subjects ANOVA was conducted to compare the effect of age and education on job satisfaction. The difference among the means for job satisfaction, age, and education was not found to be statistically significant at the .01 level (F = 8.22396, p = 0.00695), (F = 0.00788, p = 0.929774), and (F = 0.00867, p = 0.926365) respectively. There were no significant variations among the call centers in regards to their level of job satisfaction as it relates to work schedule flexibility and work/life balance (See Table 3). A general regression analysis of job satisfaction according to work schedule flexibility and work/life balance also did not show any significant relationships (t = -1.16335, p = 0.252 and t = -1.40300, p = 0.169, respectively).

The results of a Two-Sample T-test in comparison of the two call centers did not show a significant difference between the means of job satisfaction (t = 0.07, df = 38, p = 0.943).

Table 3

Descriptive Statistics for Variables by Call Center

	Call Center 1 (n = 15, % = 37.500)		Call Center 2 (n = 25, % = 62.50)	
Variable	*M*	*SD*	*M*	*SD*
Flexibility	4.000	0.655	4.0800	0.4933
Balance	3.200	0.414	2.960	0.539
Job Satisfaction	3.400	0.828	3.280	0.542

Analysis of answers to the open ended question "Did you see improvement in your job satisfaction when work schedule flexibility was initiated in your call center?" showed that most of the nurses who elected to change their schedules (n = 16, 40%) reported improvement in job satisfaction. They voiced that they liked the hours of their new schedule, were less stressed, and better able to balance work and family life. Analysis of answers to the open ended question "Which aspects of your work environment most affect your job satisfaction (which are the most valued)?" revealed a number of recurrent categories, including an open door policy with management, ability to take time off, teamwork among co-workers, and pay and benefits.

Demographics

Analysis of correlations using Pearson's r among the demographic characteristics was done to evaluate the existence of any significant relationships. Correlation between age and intent to leave was not found to be statistically significant (r = 0.064, p = 0.696) nor the correlation between job satisfaction and years of experience (r = 0.111, p = 0.495). Determination of the independence of demographic variables was analyzed using

the chi-square. The chi-square was used to evaluate nominal data and demonstrated that commute and work experience are not independent of each other as well as previous and current work schedule showing significant relationships between the two variables (p = 0.044 and 0.000, respectively) (See Table 4). A general regression analysis of job satisfaction related to the demographic variables shows that no single variable is significant at an alpha of 0.05 while the full model accounts for 47.7% (see Table 5) of the total variation of job satisfaction. As each variable is eliminated, only intent to leave remains significant (p = 0.003881), accounting for almost 20% variation in job satisfaction which is almost half of the full model variation (See Table 6).

Table 4

Chi Square of Demographic Variables

Comparison	*Chi-Square Value*	*Degrees of Freedom*	*P-Value*	*Independent of Each Other?*
Commute and Work Experience	90.247	69	0.044	No
Current Schedule and Previous Schedule	96.613	12	0.000	No

Table 5

General Regression Analysis: Job Satisfaction According to Demographic Variable

Variable	*Coef*	*SE Coef*	*T*	*P*
Constant	3.17514	0.960593	3.30539	0.003
Age	-0.00346	0.019201	-0.18008	0.859
Education	-0.16873	0.172441	-0.97846	0.338
Experience	0.00263	0.018422	0.14287	0.888
Commute				
1	0.05381	0.304137	0.17694	0.861
2	-0.18543	0.238296	-0.77813	0.445
3	0.09205	0.265067	0.34729	0.732
Current Schedule				
1	0.41856	0.275158	1.52115	0.142
2	0.16248	0.23707	0.69824	0.492
3	-0.18197	0.408434	-0.44554	0.660
4	-0.59299	0.096442	-0.89822	0.379
Intent to Leave	0.13024	0.096442	1.35045	0.191
Specialty				
1	0.44690	0.226064	1.97685	0.061
2	-0.62181	0.478826	-1.29861	0.208
3	0.43698	0.496677	0.87980	0.388
4	-0.17812	0.308510	-0.57734	0.570
5	0.02115	0.253664	0.08336	0.934
Call Center				
1	0.05699	0.158176	0.36030	0.72

Note: *S*=.631471 *R-Sq*= 19.93% *R-Sq(adj)*= 7.29%

Table 6

General Regression Analysis: Job Satisfaction versus Intent to Leave

Variable	*Coef*	*SE Coef*	*T*	*P*
Constant	2.77214	0.202853	13.6658	0.000
Intent to Leave	0.21061	0.068479	3.0756	0.004

Note: *S*=.0.594526 *R-Sq*= 47.70% *R-Sq(adj)*= 17.82%

Regression Equation: Overall Satisfaction = 2.77214 + 0.210614 Intent to Leave

Reliability Data

Reliability of the MMSS was measured using Cronbach's Coefficient Alpha. The Cronbach's Alpha for the MMSS Total Score $\alpha = 0.925$ yield acceptable reliability; and, the Cronbach's Alpha for the work schedule flexibility ($\alpha = .520$) and work/life balance subscales were ($\alpha = - 0.097$), which did not yield acceptable reliability likely due to the small sample size. The negative alpha value of work/life balance violates the reliability assumption which may be caused by the lack of significance to job satisfaction since only 3 of the 31 questions of the MMSS are related to work/life balance.

CHAPTER FIVE: DISCUSSION

According to the first research question, the results revealed that work schedule flexibility had positive correlations with overall job satisfaction which validated the premise that telephone advice nurses that are given more flexibility in work schedules and possess work/life balance will have higher job satisfaction. This corresponds to previous research that also found a positive relationship between flexible work schedules and job satisfaction (Butler et al., 2009). The participants rated work/life balance as neutral and no significant relationships were found in relation to job satisfaction. This aspect of the study also corresponds to current research on work/life balance. Tanaka et al., (2010), demonstrated that nurses who were not satisfied with their job had low levels of work/life balance but those that were satisfied with their job had higher work/life balance. These participants were neither satisfied nor dissatisfied with their job which translates as neutral on the MMSS. This research study showed that nurses in this sample were neutral regarding their satisfaction with their jobs. This aspect of the study validates Herzberg's theory as he proposes that the opposite of job satisfaction is not dissatisfaction but rather no satisfaction (1966). The study results regarding job satisfaction did not validate Herzberg's theory as the results of this study showed no significant relationship between job satisfaction, work schedule flexibility, and work/life balance. Herzberg believes that dissatisfiers or hygiene factors must be present to keep

employees' motivated and satisfied with their jobs (1966). This contradiction of current research is attributed to the small sample size as the number of participants was not large enough to generate significant results.

In regards to the second research question, intent to leave, previous work schedule and current work schedule were found to be statistically significant in relation to job satisfaction. These findings were consistent with current research as previous studies have demonstrated that there is a significant relationship among intent to turnover and job satisfaction (Shields & Ward, 2011; Hayes et al., 2006). The chi-square demonstrated that commute and work experience are not independent of each other as well as previous and current work schedule showing significant relationships between the two variables. Shields and Ward (2011) and Hayes et al., (2006) demonstrated a negative correlation between intent to turnover and job satisfaction but due to the small sample size of this study relationships comparing demographics and job satisfaction was not evident. The small sample size limits the statistical representation of the subject area. Small sample sizes may fail to statistically prove important differences. Lack of statistical significance does not mean that there is no significance but means that it cannot be proven with this study group.

Frederick Herzberg's (1959) theory regarding motivation and hygiene factors was very effective in guiding this study as this study demonstrated that hygiene factors do affect job satisfaction. The hygiene factor for this study (schedule flexibility) was shown to influence job satisfaction while the other hygiene factor (work/life balance) demonstrated a weaker influence due to the fact that the mean age of the nurses in this study was 48.15 which is an age where maternity leave and child care (as indicated in the

MMSS) is not a priority. Herzberg (1966) explained that the opposite of job satisfaction is not dissatisfaction but no job satisfaction. When employees feel that motivation factors are not at an acceptable level they have no job satisfaction. However, when hygiene factors are at an acceptable level the job satisfaction does not improve. The employees stay in the neutral phase- neither satisfied nor dissatisfied (Wren, 1994). This substantiates the results of this study as the majority of those participants' level of job satisfaction fell in the neutral category, thus demonstrating that the hygiene factors were at an acceptable level. The participants from both call centers voiced that schedule flexibility was important to them and improved their job satisfaction. This corresponds to various studies that demonstrated the connection between a healthy work environment, nurses' satisfaction, and retention (Aiken & Patrician, 2000; Cho, et al., 2003; Cohen, et al., 2009). However, there is still some indication that the issues of the job itself such as being confined to a chair, limited contact with patients and coworkers, and high workloads (Purc- Stephenson & Thrasher, 2010) has some effect on retention as 37% of the nurses in this study intend to leave the field of telephone advice nursing.

Limitations

The limitations of this study are related to the sample. The small sample size limited the ability to utilize random sampling and to obtain significant findings that could be generalized to the population of telephone advice nurses. There was also a lack of generalizability due to the fact that this study only sampled nurses from two call centers of one healthcare organization. The small sample size of 59 occurred because many of the nurses were off the day of the staff meeting or chose not to attend. Also only 80% of those in attendance chose to participate and 7 of those participants did not fill out the

survey completely which further decreased the sample size. Due to the time constraints and limited resources of the researcher (access to only 2 call centers), the best approach to reach the largest number of participants was undertaken. This study would've been stronger if the sample size had been expanded to other healthcare institutions that use telephone advice nursing. This would enlarge the sample size allowing for the discovery of significant relationships among job satisfaction and work environment. Another limitation was the low reliability of the work/life balance subscale. Possibly using another instrument that contained more questions regarding work/life balance would provide statistically significant results.

Future Implications

Many nurses reported that co-worker relationships and teamwork among co-workers were a determining factor regarding job satisfaction. With this information, staff nurses could improve their own satisfaction by cultivating their peer relationships into supportive and encouraging ones. There is a major indication that more research can be done regarding job satisfaction in the area of telephone advice nursing. One recommendation is to repeat this study using a much larger, randomized sample to improve the likelihood of achieving statistically significant results that could be generalized to a larger, more diverse population. Another recommendation is to repeat Herzberg's original study using a large, randomized sample of nurses which would lend more evidence to the efficiency of his theory. Conducting a qualitative study to examine which factors affect job satisfaction among nurses would also be beneficial to examine additional factors that may impact job satisfaction.

Conclusion

This study analyzed telephone advice nurses' job satisfaction through utilizing Herzberg's hygiene factors and job satisfaction. The results of the study revealed that these nurses had neutral levels of job satisfaction. The satisfaction of telephone advice nurses is important as this subspecialty is emerging (Strom, Marklund, & Hildingh, 2009) and the results of this study should be used to further analyze job satisfaction among these nurses in order to promote increased satisfaction in this area of nursing.

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APPENDIX A

CONSENT COVER LETTER

CONSENT COVER LETTER

Title of Research Study: ***The Effects of Work Schedule Flexibility on Job Satisfaction of Telephone Advice Nurses***

Researcher's Contact information: Angela D. O'Neal, RN, BSN, CPN;
aoneal8@students.ksu.edu
Phone: 404-691-8317)
Faculty Advisor: Kathie Aduddell, EdD, MSN, RN; kaduddel@kennesaw.edu (Phone: 770-423-6939)

Dear Participant:

My name is Angela D. O'Neal, RN, BSN, CPN. I am a student at Kennesaw State University, WellStar College of Health and Human Services, WellStar School of Nursing in the Master of Science, Advanced Care Management and Leadership program under the supervision of faculty advisor, Kathie Aduddell, EdD, MSN, RN. You are being invited to participate in a research project entitled: ***The Effects of Work Schedule Flexibility for Telephone Advice Nurses on Job Satisfaction.*** Before you decide to participate in this study, you should read this form and ask questions about anything that you do not understand.

Description of Project: The purpose of this research is to explore the impact of work environment, specifically work schedule flexibility and work/life balance, on job satisfaction among telephone advice nurses as well as describe any relationships that might exist among specific RNs characteristics and overall job satisfaction. This study has been approved by the Kennesaw State University and Kaiser Permanente Institutional Review Boards. A convenience sample of telephone advice nurses presently working at the call centers will be surveyed confidentially regarding their satisfaction of working as advice nurses within the healthcare system. A demographic questionnaire will provide information about the characteristics of the participants such as education, nursing experience, and age. These factors will be important to the research as these variables affect one's preferences and views of work/life balance according to life stages. The questionnaire will also include two narrative questions asking about job satisfaction prior to the initiation of work schedule flexibility at the call centers. The McCloskey/Mueller Satisfaction Scale (MMSS) is a 31-item, 5-point Likert scale that measures overall job satisfaction among nurses.

Explanation of Procedures: The survey is confidential. Each participant will be assigned an identification number so that no personal names and information are identified. Participation in this research is completely voluntary and you may refuse to participate without consequence.

Time Required: The surveys will take about 15-20 minutes to complete.

Risks or Discomforts: There are no known risks anticipated because of taking part in this study.

Benefits: This study may provide you with overall information concerning aspects of job satisfaction with work/life balance and work schedule flexibility as well as general information about job satisfaction that may be more clearly understood and assist you in clearly identifying what you need to create a healthy work environment.

Compensation: You will receive no compensation for participating in the research study.

Confidentiality: The results of this participation will be anonymous. Responses to the survey will only be reported in aggregated form to protect the identity of respondents. Neither the researcher nor the University has a conflict of interest with the results. Anonymity will be attempted by not including names of participants on the research packets and confidentiality will be maintained as each participant will be assigned an identification number. The data collected from this study will be shredded upon completion of research study in December 2012.

Inclusion Criteria: You must be at least 18 years of age and be employed as a telephone advice nurse in this organization.

Statement of Understanding: The purpose of this research has been explained and my participation is voluntary. I have the right to stop participation at any time without penalty. I understand that the research has no known risks, and I will not be identified. By completing the questionnaire and instrument, I am agreeing to participate in this research project.

THIS PAGE MAY BE REMOVED AND KEPT BY EACH PARTICIPANT.

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 1000 Chastain Road, #0112, Kennesaw, GA 30144-5591, (678) 797-2268

APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

For questions 1-8, select by circling or state your answer in the space provided.

1. Your current age: _____

2. Level of Education
   A) Nursing Diploma
   B) Associate Degree in Nursing
   C) Bachelor Degree in Nursing
   D) Master Degree in Nursing

3. Years of experience in the field of nursing: _____

4. Miles you commute to work:
   A) < 10 miles
   B) 11-30 miles
   C) 31-50 miles
   D) > 50 miles

5. Your previous work schedule at the telephone call center (***before May 2012***)
   A) 8 hours, 5 days a week
   B) 10 hours, 4 days a week
   C) 8 hours, 4 days a week
   D) PRN, varied hours and days
   E) Worked from home with the following hours/days: _____

6. Your current work schedule at the telephone call centers (***after May 2012***)
   A) 8 hours, 5 days a week
   B) 10 hours, 4 days a week
   C) 8 hours, 4 days a week
   D) PRN, varied hours and days
   E) Work from home with the following hours/days: _____
   F) Other, please explain: _____

7. Your intent to leave within the next five (5) years
   A) I intend to leave my current nursing position
   B) I intend to leave my current organization and/or facility
   C) I intend to leave the field of nursing
   D) I have no intent to leave

8. Which specialty do you work in at the call center?
   A) Ambulatory Medicine
   B) Pediatrics
   C) OB/GYN
   D) Behavioral Health
   E) Other, please specify: _____

9. Did you see improvement in your job satisfaction when work schedule flexibility was initiated in your call center? Please Explain.

10. Which aspects of your work environment most affect your job satisfaction (which are the most valued)?

APPENDIX C

MCCLOSKEY MUELLER SATISFACTION SCALE

McCloskey/Mueller Satisfaction Scale (MMSS) Copyright 1989

How satisfied are you with the following aspects of your current job?

Please circle the number that applies.

	Very Satisfied	Moderately Satisfied	Neither Satisfied nor Dissatisfied	Moderately Dissatisfied	Very Dissatisfied
1. Salary	5	4	3	2	1
2. Vacation	5	4	3	2	1
3. Benefits package (insurance, Retirement)	5	4	3	2	1
4. Hours that you work	5	4	3	2	1
5. Flexibility in scheduling your hours	5	4	3	2	1
6. Opportunity to work straight days	5	4	3	2	1
7. Opportunity for part-time work	5	4	3	2	1
8. Weekends off per month	5	4	3	2	1
9. Flexibility in scheduling your weekends off	5	4	3	2	1
10. Compensation for working weekends	5	4	3	2	1
11. Maternity leave time	5	4	3	2	1
12. Child care facilities	5	4	3	2	1
13. Your immediate supervisor	5	4	3	2	1
14. Your nursing peers	5	4	3	2	1
15. The physicians you work with	5	4	3	2	1
16. The delivery of care method used on your unit (e.g. functional, team, primary)	5	4	3	2	1

	Very Satisfied	Moderately Satisfied	Neither Satisfied nor Dissatisfied	Moderately Dissatisfied	Very Dissatisfied
17. Opportunities for social contact at work	5	4	3	2	1
18. Opportunities for social contact with your colleagues after work	5	4	3	2	1
19. Opportunities for interact professionally with other disciplines	5	4	3	2	1
20. Opportunities to interact with faculty of the College of Nursing	5	4	3	2	1
21. Opportunities to belong to department and institutional committees	5	4	3	2	1
22. Control over what goes on in your work setting	5	4	3	2	1
23. Opportunities for career advancement	5	4	3	2	1
24. Recognition for your work from superiors	5	4	3	2	1
25. Recognition of your work from peers	5	4	3	2	1
26. Amount of encouragement and positive feedback	5	4	3	2	1
27. Opportunities to participate in nursing research	5	4	3	2	1
28. Opportunities to write and publish	5	4	3	2	1
29. Your amount of responsibility	5	4	3	2	1

	Very Satisfied	Moderately Satisfied	Neither Satisfied nor Dissatisfied	Moderately Dissatisfied	Very Dissatisfied
30. Your control over work conditions	5	4	3	2	1
31. Your participation in organizational decision making	5	4	3	2	1

APPENDIX D

PERMISSION TO USE MCCLOSKEY MUELLER SATISFACTION SCALE

THE UNIVERSITY OF IOWA
COLLEGE OF NURSING

Permission to use form:

This gives permission to use the McCloskey/Mueller Satisfaction Scale (MMSS) to Angela D. O'Neal for the purpose as stated in the request dated June 22, 2012.
The instrument may be reproduced in a quantity appropriate for this project.
Signed:

Sue Moorhead, Associate
Professor, College of Nursing Date:
June 28, 2012

The University of Iowa
The Center for Nursing
Classification & Clinical
Effectiveness College of Nursing
407 CNB
Iowa City Iowa 52242 USA

APPENDIX E

KENNESAW STATE UNIVERSITY IRB APPROVAL

Study 13-017: The Effects of Work Schedule Flexibility on Job Satisfaction of Telephone Advice Nurses

From **zieglerirb@kennesaw.edu**

Sent: Tue 8/14/12 3:30 PM

To:aoneal8@students.kennesaw.edu

Cc: zieglerirb@kennesaw.edu; kaduddel@kennesaw.edu 8/14/2012

Angela O' Neal, RN

KSU Well Star School of Nursing

RE: Your application dated 8/13/2012, Study #13 -017: The Effects of Work Schedule Flexibility on Job Satisfaction of Telephone Advice Nurses

Dear Ms. O'Neal:

I have reviewed your application for the new study listed above. This study qualifies as exempt from continuing review under DHHS (OHRP) Title 45 CFR Part 46.101(b)(2) - educational tests, surveys, interviews, public observations .You are free to conduct your study without further reporting to the IRB.

Please note that all proposed revisions to an exempt study require IRB review prior to implementation to ensure that the study continues to fall within an exempted category of research. A copy of revised documents with a description of planned changes should be submitted to irb@kennesaw.edu for review and approval by the IRB.

Thank you for keeping the board informed of your activities. Contact the IRB at irb@kennesaw.edu or at (678) 797-2268 if you have any questions or require further information.

Sincerely,

Christine Ziegler, Ph.D.

Institutional Review Board Chair cc: kaduddel@kennesaw.edu

APPENDIX F

KAISER PERMANENTE IRB APPROVAL

KAISER PERMANENTE®

NOTIFICATION OF INITIAL APPROVAL

September 25, 2012

To: Angela O'Neal

CC: Angela O'Neal

Study ID: Pro00003471

Study Title: The Effects of Work Schedule Flexibility On Job Satisfaction of Telephone Advice Nurses

The study referenced above was reviewed and approved by the Kaiser Permanente Georgia Institutional Review Board (KPGA IRB) expedited review procedures on 09/21/2012. The approval expires on 9/20/2013.

Study materials reviewed included:

- Principal Investigator Credentials
- Research Proposal (8-25-12)
- Demographic Questionnaire
- McCloskey/Mueller Satisfaction Scale (MMSS) (Copyright 1989)
- Recruitment Flyer
- Consent Cover Letter (Consent Form)

A final consent form is now available in the eIRB system for your use with participants.

NOTE: Only KPGA IRB approved consent forms are to be used with study participants. If you have any revisions or edits to the consent form, it must be sent to the IRB via a study modification through the eIRB for processing. Use of an unapproved consent form or use of a previous version of a consent form constitutes a protocol violation and must be reported to the IRB as a reportable event through the eIRB system.

The proposed research does not access protected health information; therefore, a waiver or Privacy Rule authorization is not required.

If your study or study-related documents require modification, you must seek IRB approval for these changes before they are implemented. If, during the course of your study, you need to make a modification in order to protect the rights, safety, or welfare of a participant prior to obtaining IRB approval, you are required to notify the IRB within five business (5) days of this action. In addition, you must promptly notify the IRB of any unanticipated problems associated with this study.

Federal regulations require that all studies be reviewed at least annually. It is your responsibility to ensure that you reapply for approval at least one month prior to the study approval expiration date.

Please use this notification of approval should the funding agency require documentation of IRB approval. Our Federalwide Assurance number is FWA 00002344 – IRB 00000406.

Kaiser Permanente Georgia IRB
3495 Piedmont Rd. NE, Bldg. 11 - Suite 402
Atlanta, GA 30305
(404) 504-5543