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A Longitudinal Study Examining the Stability of Occupational Stressors Identified by Nursing Home Administrators

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**A LONGITUDINAL STUDY EXAMINING THE STABILITY OF OCCUPATIONAL
STRESSORS IDENTIFIED BY NURSING HOME ADMINISTRATORS**

by

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ABSTRACT

A LONGITUDINAL STUDY EXAMINING THE STABILITY OF OCCUPATIONAL STRESSORS IDENTIFIED BY NURSING HOME ADMINISTRATORS

Gay Lynne Andrucci-Armstrong
Old Dominion University, 2001
Director: Dr. Paul Stepanovich

As a result of the ever changing and expanding role of the nursing home administrator in conjunction with the stricter legislation governing nursing facilities over the past decade and the graying of America, a study specific to this population was warranted. The purpose of this study is to determine the relative change in the self-reported occupational stressors of nursing home administrators over a five year period (December 1994/January 1995 to June 1999) secondary to the increased regulatory climate of the nursing home industry.

The sample consisted of all practicing nursing home administrators in the state of Virginia. This study was carried out in three phases. Phase I data resulted in a 35 item occupational stressor questionnaire, specific to the nursing home administrator, that was used in Phases II and III to obtain the mean ranks and make comparisons over the five-year period. A 66% response rate was obtained in Phase I. Phase II resulted in a 45% response rate and Phase III a 30% response rate.

The top five stressors in Phase II were: "Federal/State inspections"; "unrealistic expectations/demands of state"; "maintaining high quality care"; "retaining qualified staff"; and "unrealistic family expectations". The top five stressors in Phase III included: "Federal and State inspections"; "retaining qualified/competent staff"; "staff turnover"; "unrealistic expectations/demands of regulators"; and "recruitment and hiring of competent staff". Nine of the top 10 stressors in Phase II remained among the top 10 stressors in Phase III and the

number one stressor continued to be "Federal and State inspections". The results showed, in accordance with Selye's theory, that the occupational stressors remained relatively stable over time. Four significant differences were found over the five-year period. Phase III administrators rated the stressors "retain qualified/competent staff", "recruit qualified/competent staff", "staff turnover and shortages", and "long hours" significantly more stressful. Three of these stressors are specifically related to staffing issues. The results highlight the nursing shortage, an area that has apparently been as significant an influence in the management of nursing facilities as the increased legislation and resulting increased nursing facility oversight.

Secondary to Selye's emphasis on time, space, and intensity as factors impacting an individual's ability to adapt to a stressor, it was proposed that the increased legislation from 1995 to 1999 would result in increased stressor scores for seven of the stressors related to legislative changes. None of the hypothesized differences were confirmed. Thus, further support for Selye's theory was not obtained in terms of his emphasis on time, space, and intensity. However, six of these seven stressors remained among the top 10 stressors, emphasizing their continued magnitude and reiterating their stability.

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In Loving Memory of My Great Grandmother Elizabeth G. Holmes (1896 to 2001)

She was and will continue to be my inspiration, my guardian angel, and the reason I fell in love with "old" people. Thank you for your gentleness, your smile, and your continuous blessings and encouragement. You make the thought of living a century a beautiful thing!

This achievement can only truly be dedicated to those who have made numerous sacrifices to keep this undertaking afloat.

First and foremost, I would like to thank my husband Scott for providing me the opportunity to complete my studies without sacrificing quality time with our two beautiful children. In reality, if it had not been for him I would still be looking at that unsightly stack of books and papers on my desk.

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CHAPTER I

INTRODUCTION

Stress occurs constantly in all aspects of existence. Nursing home administrators are no exception to this phenomenon. They are prone to the occupational stressors encountered by others in managerial positions. With mounting pressures facing the nursing home industry over the past decade as a result of the Nation's focus on nursing home reform and the resulting stricter regulations with harsher penalties, nursing home administrators have been and continue to be faced with significant daily challenges. Furthermore, with the "graying" of America comes an increased demand for nursing facility care services (Strahan, 1997). This heightened demand could have a profound effect on administrators who need efficiency, efficacy, and profit. Nursing home administrators are particularly susceptible to stress secondary to demands such as decreasing reimbursement, the advent of managed care, competition, increasing paperwork, increasing nursing facility oversight by the government with greater penalties, and more complex medical management requirements.

These factors are evident at a time when pressure to perform is at an all time high and continues to rise. Unfortunately, nursing home administrators, who are and will continue to be invaluable with meeting the needs of our ever-growing aging population, have received little attention in stress research. With the increased pressures facing nursing home administrators over the past decade and the negative, and often costly, outcomes of unmanaged stress on the organization as well as the individual, it becomes imperative that health care organizations begin to understand the causes of occupational stress among nursing home administrators. This study will hone in on both the causes of occupational stress and the stability of these stressors over a five-year period in Virginia.

Aging Demographics

The proportion of the U.S. population over 65 years of age is rapidly growing which will result in a heightened demand on the U.S. long-term care system. This demand is expected to increase dramatically between the years 2010 and 2030, when the Baby Boomers (those born between 1946 and 1964) come of age. Presently there are about 33 million persons 65 years or older residing in the United States which accounts for almost 13% of the total population (Satariano, 1997). It has been projected that by the year 2050 this figure will rise to 80.1 million (20%) (U.S. Bureau of the Census, 1996). Although the number of 65+ elderly continues to escalate, more dramatic increases continue to be seen in the 85+ segment of our population.

With the growing number of aging elderly comes the likelihood of increased chronic illnesses and a much larger need for nursing facility care. The 85+ group of older Americans are at a time in their life where they are more susceptible to chronic health conditions and are more likely to require the support services of nursing facilities. The nursing home administrator has the complex responsibility of meeting the health care needs of this medically diverse group of individuals which is no longer strictly the over 65 population but young adults as well.

As the current study was carried out in the state of Virginia, aging demographics specific to this population is warranted. As of 1998, there were 686,000 persons aged 65 to 84 residing in Virginia, representing 10.1% of that population (U. S. Census Bureau, 1999). Virginians 85 years of age or older accounted for another 1.2% (82,000) of the population.

Nursing Facilities

As of March 2000 there were 17,086 certified nursing facilities in the United States according to the Health Care Financing Administration (2000). These facilities had a total of 1,846, 391 nursing facility beds, and 1,494,418 nursing facility residents. Strahan (1997)

estimated that this 1.5 million would increase to 2.6 million by the year 2020. The state of Virginia accounted for 275 licensed/certified nursing facilities, 30,589 total nursing facility beds, and 27,328 total nursing facility residents. These figures included nursing facilities funded by the Medicare and Medicaid programs and hospital-based nursing facility care beds.

Nursing Home Legislative Front

In 1982 the Health Care Financing Administration (HCFA) commissioned the Institute of Medicine (IoM) to conduct research on the quality of life and care of residents in nursing facilities to ensure State and Federal regulations governing such facilities were appropriate (U.S. Congress, Senate Special Committee on Aging, 1988). As a result of the 1986 findings that revealed widespread quality of care issues, the Omnibus Budget Reconciliation Act of 1987 (OBRA-87), which mandated nursing home reform, was developed and signed into law (P.L. 100-203) December 22, 1987. OBRA took effect October 1, 1990 (Levenson, 1990). Since that time it has gone through numerous revisions, making keeping abreast of burdensome regulatory requirements and implementing programs to meet these regulations more challenging.

The changes in federal regulations secondary to OBRA-87 only affected "certified" facilities. In other words, facilities that received Medicare and Medicaid funding (public financing) were affected. All facilities must be "licensed" through their respective state. Federal certification, on the other hand, is needed only if public monies are to be obtained.

In 1995, the federal government stepped up its oversight of nursing homes with significant enforcement regulations. As a result, nursing facilities found to be neglectful or abusive to residents were faced with civil monetary penalties (CMP) as well as the exclusion from federal programs, namely Medicaid (MCD) and Medicare (MCR) (Gundling, 1999). A

policy of Zero tolerance of healthcare fraud and abuse was implemented (Anderson & Sadoff, 1999). Continued noncompliance with regulations noted in recent reports by the Government Accounting Office (GAO) resulted in a push by the Senate Special Committee on Aging to further increase nursing home oversight (Gundling, 1999). Unless improvements are found the Senate Special Committee on Aging is considering introducing even tougher legislation. From a nursing home administrators point of view this translates into increased regulations with further compliance programs to manage and the likelihood of increased facilities being penalized.

In addition to the effect on the facilities and those responsible for compliance, in particular the administrator, public attention has been increased. HCFA in an effort to heighten the oversight implemented an abuse-prevention education program as well as other antifraud initiatives(Gundling, 1999). Although the abuse-prevention program was developed and implemented for the good of nursing facility residents, it brought about further scrutiny, media attention and public awareness to nursing facilities that were already faced with the age old negative stereotypes administrators have fought for years.

In 1997, the Balanced Budget Act enacted major changes to Medicare, the largest since its inception over 30 years ago (Mancill, 1999). The goals of this act were to reduce federal spending costs in healthcare, introduce the prospective payment system (PPS) as the means to control future spending growth as well as to promote managed care growth. Much attention was focused on these changes as the reliability of the data Congress used to determine the legislation was questioned by many leaders in the healthcare industry. A number of reports since that time "show that Congress, HCFA, and the Medicare Payment Advisory Commission (Med-PAC) grossly underestimated the negative effect the Balanced Budget Act would have on healthcare providers" (Mancill, 1999). Amendments to the Balanced Budget Act could have

been made, however the Clinton Administration was opposed to this and in President's FY00 budget, which was rejected, requested further spending cuts to healthcare providers as the administration felt providers were overpaid. Thus, there was continued turbulence and increased concerns that arose out of this complex, ever changing and challenging legislative front.

Consequently, in 1998, a number of legislative/regulatory challenges for nursing home administrators were brought to the forefront that impacted the daily operation of nursing facilities. The top two challenges were implementing the Medicare Prospective Payment System (PPS) and dealing with the arbitrary \$1,500 annual cap on Medicare-funded rehabilitation services (which has since been repealed) (Grahl & Peck, 1998). Administrators were also faced with consolidated billing for Medicare Part B, electronic Minimum Data Set (MDS) submission to the state (Medicaid), and concerns about Medicaid reimbursement levels. Lastly, but certainly not least, the Clinton administration's "get tougher" stance which was directed at the quality of care in nursing facilities was at the forefront of nursing home administrator's agenda. All of these issues added up to an environment of uncertainty. Consequently, the skills and responsibilities of nursing home administrators must change and expand in order to successfully handle this new environment.

Nursing Home Administrator's Role

Along with the increased severity of illness and disability there is a heightened demand for management of complex medical, nursing and other support services by nursing home administrators. These demands have the potential to influence the stress levels of nursing home administrators. Today's administrator is confronted with an increasingly complex environment encompassing higher costs, cost shifting from the acute care setting to the nursing facility

setting, more complex regulations, advanced technology, and the uncertainty of health care reform (Gordon & Stryker, 1988; Roderick, 1984). Managed care and capitation are no longer a threat of change but a reality as a result of the Prospective Payment System (PPS). Skilled and subacute care management involves multiple payors and a multitude of managed care contracts, thus increased knowledge of the types of managed care contracts and their associated regulations. The nursing home administrator has been increasingly responsible for ensuring the cost of the care provided does not exceed the costs allotted to meet the residents' needs, keeping in mind quality of care. The days of standard Medicare as the primary payor for needed skilled care services are long gone. Thus, the financial viability of a nursing facility has become increasingly more difficult to manage. As a result, the knowledge and skills required to manage this financially complex environment continue to change and expand.

The survival and success of today's nursing home administrator requires expertise in more specialized areas such as ventilator dependency, Alzheimer's disease, AIDS, brain trauma, wound care, pain management, comprehensive rehabilitation, hospice care, IV therapy, and other complex care areas. Beyond the graying of America is the demand for nursing facility services for survivors of trauma in younger age groups. Thus, many facilities are expanding their scope of services to include specialized units such as head injury, ventilator care (including pediatric vent units), and Alzheimer's units. In the past these highly skilled services were managed within the acute care setting with 24-hour physician coverage. Alzheimer's was not as pronounced and many individuals with the disease were cared for by loved ones or were just another resident in a nursing facility.

The examination of factors contributing to the stress experienced by managerial personnel in the workplace has received much attention over the past two decades. Numerous

health care fields have been researched including Social Work (Mawby, 1979); Nursing (Dewe, 1989; Kahn, 1991; & Wolfgang, 1988); Hospitals (Al-Assaf & Taylor, 1985; Lappa, 1989); Dental (Godwin, Starks, Green, & Koran, 1981; Ingersol, Ingersol, Seime, & McCutcheon, 1978); Nuclear Medicine Technology (Sechrist & Frazer, 1990); Hospice (Peters, 1997) and Long-Term Care (Mullen, 1985). Although the number of health professions researched has expanded, there still remains a lack of information about the nursing home administrator.

The only study looking at this population in relation to stress was conducted in 1985. Since that time the Omnibus Budget Reconciliation Act of 1987 (OBRA-87) was enacted into law marking the beginning of nursing home reform. As a result the nursing home industry has had to make significant changes in their provision of care presenting serious challenges to the administrator. In lieu of the turbulent regulatory environment, the estimated increase in nursing facility utilization secondary to the graying of America, and a lack of research in general in the area of nursing home administration, stress and stressors, a longitudinal investigation into the effect of these changes on perceived stressors among nursing home administrators was seriously warranted.

Purpose of the Study

This study has three purposes. First, to identify the occupational stressors as perceived by nursing home administrators. Second, to determine the magnitude estimations for each of the occupational stressors in 1994/1995 and 1999. The final purpose of this research is to quantitatively test whether the occupational stressors identified by nursing home administrators would endure the significant regulatory changes that have taken place over the past five years in the nursing home industry. Selye's Physiological Theory of Stress (1956, 1976) will be used to examine this theory that relates occupational stressors to consistency over time. Two different

time periods, 1994/95 and 1999 defined the independent variable. The dependent variables are those stressors identified via the nursing home administrators in the initial phase of the research (Phase I). Factors thought to potentially intervene with the administrator's perception of stressors such as the number of beds in the facility, whether the facility is in an urban or rural location, and the length of time employed as a nursing home administrator are also investigated.

Statement of the Problem

The effects of occupational stress can be devastating to organizations. "Workplace stress leads to increased health care costs, higher rates of absenteeism and turnover, more accidents, and lower levels of performance" (Jex, 1998, p. ix). As indicated in the preceding discussion, although research into occupational stressors and the practice of management is diversifying into various health care arenas, research into the causes of occupational stress as well as the stressors among nursing home administrators is limited. With stricter regulations, harsher penalties and an increased focus on quality over the past 10 years a study specific to this population is warranted.

Furthermore a longitudinal look at occupational stressors is necessary as a result of this turbulent regulatory environment and the resulting challenges presented to nursing home administrators. It is unclear as to whether a shift in the occupational stressors occurred as a result of the increased nursing facility oversight. Currently there are no studies looking at the stability of occupational stressors over time. Consequently, there is a need to determine whether the stressors identified in 1994/95 by practicing nursing home administrators continue to be representative of nursing home administrators in 1999.

The ability to assess the relative change in the occupational stressors identified by nursing home administrators, as well as understand the contributing factors themselves, could

enhance the efficiency and effectiveness administrators must possess in order to address the ever changing and eventful daily challenges unique to their profession. As the administrator is ultimately responsible for the quality of care the resident receives, it becomes crucial that their working environment is conducive to optimal performance.

Significance of the Problem

This study is significant as it contributes to the knowledge of occupational stressors as perceived by nursing home administrators. In particular, this study takes a longitudinal examination of these stressors focusing on their consistency as causes of stress among nursing home administrators. Currently there is a paucity of literature dealing with any facet of occupational stress and the nursing home administrator.

The results of this study have broad implications for managing and facilitating the leadership process of the nursing home administrator. Planning and the delivery of health care services to our aging population will continue to be at the forefront of our nations agenda (Singh, 1997, p. 64). An increased awareness into the occupational stressors experienced by nursing home administrators may lead to interventions to reduce, modify, or eliminate occupational stressors specific to nursing home administrators. Researchers, educators, and nursing home administrators will be better equipped to design intervention programs as a result of the identification, ranking, and of particular importance, knowledge of stressors stability over a five year period.

In addition, policy makers may become more aware of the effects they have on occupational stressors among nursing home administrators. As the nursing home administrator is most familiar with the demands encountered within nursing facilities, the identification of stressors as well as the knowledge of occupational stressors stability over the past five years

provides a more educated scenario for policy makers to draw information. As a result, an environment more conducive (less stressful) to the efficiency and effectiveness of the nursing home administrator may be obtained, ultimately improving the quality of life and quality of care for the residents administrators are responsible for overseeing.

Urban Significance

This study has great urban significance for two specific reasons. First, the majority of the elderly population resides in urban areas. As the population continues to age there will be an increased chance for nursing home utilization. This will be of particular importance to the 85+ group of elderly who are part of the fastest growing segment of the American population. This group are at a time in their life where chronic health conditions become more prominent and prolonged dependency becomes much more common.

Secondly, there are increased stressors in urban life secondary to the high rate of crime, poor housing conditions, lack of transportation, and poverty found in urban metropolitan areas. The fact that there are more urban stressors may result in different occupational stressors for urban nursing home administrators than rural nursing home administrators. Consequently, if there are different stressors, this may have implications for how intervention programs are developed for rural and urban administrators.

It should be noted that migration to urban areas continues to occur with the elderly, in particular with immigrants from South America, Africa, and Southeast Asia (Gelfand, 1994, p.114). There continues to be a large number of African-Americans residing in urban areas as a result of the great migration during World War I and II from the rural South to northern cities for greater employment opportunities. Native Americans have also migrated to urban cities from reservations. With the aging of America and the large number of elderly who continue to

reside in urban areas and those migrating into the city, the utilization of urban nursing facilities will be of the utmost importance and may have implications for nursing home administrators.

Research Questions

The following research questions were addressed:

1. What are the most significant occupational stressors identified by practicing nursing home administrators?
2. What magnitude estimation is attributed to each of the identified stressors in 1994/1995 and 1999 relative to the median stressor?
3. What differences exist in the magnitude of the stressors across various demographic variables for 1994/1995 and 1999: personal information (age, ethnic background, gender, marital status); education level; licensure information; employment history; and work environment information (auspice, level of care provided, number of beds, number of private beds, number of Medicaid beds)?
4. What differences exist between administrators managing rural versus urban nursing facilities with regard to the stressors, and does this difference remain stable over time?
5. What, if any, change in the relative importance of occupational stressors among nursing home administrators has occurred over the past five years?
6. Are specific occupational stressors identified with specific "stress" levels?

Research Hypotheses

Demographic variable hypotheses. The four demographic hypotheses are related to research questions three and four. Hypotheses one through four are based on research findings for managers in general and are hypothesized to result in similar outcomes for

nursing home administrators. Hypothesis four is written as a null hypothesis as research to support a direction was not found.

Hypothesis 1: Male nursing home administrators will rate the stressor “employee disciplinary actions/termination” significantly higher than female nursing home administrators.

Hypothesis 2: Male nursing home administrators will rate the stressor “employee problems” significantly higher than female administrators.

Hypothesis 3: Female nursing home administrators will rate the stressor “lack of communication” significantly higher than male administrators.

Hypothesis 4: There are no significant differences between urban nursing home administrator’s perceptions of stressors and rural nursing home administrator’s perceptions of stressors in 1994/1995 and 1999.

Stressor Stability Hypotheses. The final eight hypotheses are related to the fifth research question. The theoretical framework proposed by Selye (1956) is being utilized to guide these hypotheses. Selye’s theory describes the stress response in terms of the General Adaptation Syndrome (GAS). Only the first two stages of this theory are being tested as the current study is honing in on the stressors’ stability over time and not the actual stress response.

According to Selye, adaptation to a stressor is dependent on how it is perceived, either positively or negatively. Factors that influence this perception include when, where, and how much each stressor occurs. During the course of the current study, legislation has been a major focal point for nursing home administrators and how they manage their facilities. Since 1995 the federal government stepped up its oversight of nursing homes with significant enforcement regulations over the next five years. Thus, Selye’s “when” equals the past five years, his “where” equals within the nursing facility industry, and his “how much” equals the numerous

regulatory changes that occurred during this time. These three factors in conjunction with the emphasis on legislation will have an impact on nursing home administrator's perceptions of occupational stressors in 1999. As a result, the occupational stressors specifically related to legislative changes would be expected to increase according to Selye and the remaining stressors would remain relatively stable over time. The following eight hypotheses will test this theory.

Hypothesis 5: The occupational stressor "Federal and State inspections" will be perceived by nursing home administrators as significantly more stressful in 1999 than in 1994/1995.

Hypothesis 6: The occupational stressor "unrealistic expectations of inspectors" will be perceived by nursing home administrators as significantly more stressful in 1999 than in 1994/1995.

Hypothesis 7: The occupational stressor "maintain high quality care" will be perceived by nursing home administrators as significantly more stressful in 1999 than in 1994/1995.

Hypothesis 8: The occupational stressor "increasing number of regulations" will be perceived by nursing home administrators as significantly more stressful in 1999 than in 1994/1995.

Hypothesis 9: The occupational stressor "attitudes of inspectors" will be perceived by nursing home administrators as significantly more stressful in 1999 than in 1994/1995.

Hypothesis 10: The occupational stressor "keeping current with regulations" will be perceived by nursing home administrators as significantly more stressful in 1999 than in 1994/1995.

Hypothesis 11: The occupational stressor “concern over health care reform” will be perceived by nursing home administrators as significantly more stressful in 1999 than in 1994/1995.

Hypothesis 12: The remaining 28 occupational stressors will remain stable from 1994/1995 to 1999.

Stress level hypothesis. The following “stress” level hypothesis is related to research question six and is written as a null hypothesis.

Hypothesis 13: There are no differences between the stress levels of nursing home administrators and the occupational stressors.

Assumptions

The following assumptions were made:

1. Occupational stressors result in negative stress outcomes.
2. Nursing home administrators experience occupational stress.
3. Nursing home administrators are capable of identifying stressors associated with their profession.
4. Nursing home administrators will respond truthfully to the stress instrument.
5. Nursing home administrators voluntarily participated in the study.

Limitations

The following limitations were identified:

1. Any generalization made from the current research will be limited to licensed practicing nursing home administrators in Virginia who work in a nursing facility, excluding hospitals with skilled nursing units, thus requiring further validation in other states.
3. Nursing home administrators from Phase I of the instrument development were also

utilized in Phase II secondary to the small sample size. Note that the questionnaires were different in Phase I and II. The Phase I questionnaire asked administrators to list up to five stressors thought to have the greatest impact on their job as a nursing home administrator. Phase II, on the other hand, listed 35 stressors (derived from the Phase I responses) and asked administrators to rank each one and identify the number of times each stressor had occurred in the last 6 months.

Delimitations

The delimitations of the study were as follows:

1. Information utilized to validate the instrument was obtained from nursing home administrators registered with the Board of Nursing Home Administrators in Virginia and currently managing a nursing facility as of June 1, 1994 for Phases I and II and as of June 3, 1999 for Phase III.
2. The newly developed instrument only measured occupational stressors relative to a median stressor.
3. One follow-up mailing in each phase of the study was used.

Definition of Terms

The following definitions guided this study:

1. Nursing Home Administrator: individual licensed by the state to manage a nursing facility (Virginia Department for the Aging, 1989). In the current study only those administrators actively working in a nursing facility were utilized. Administrators managing skilled units of acute care hospitals were not included, as they are not required to be licensed by the state and are therefore not subjected to the same regulations.
2. Nursing Facility: a long-term care facility where 24 hour nursing services are

required to maintain the health and well-being of persons requiring assistance with activities of daily living and/or those with chronic illnesses and/or a need for rehabilitation after an illness or injury (Virginia Department for the Aging, 1989).

3. Stress: "The nonspecific response of the body to any demand made upon it" (Selye, 1956). Stress is a "state manifested by a specific syndrome which consists of all the nonspecifically induced changes within a biologic system" (Selye, 1976, p. 64).

4. Occupational Stress: "The nonspecific response of the body to any perceived demand made upon it by the organization whereby the individual views the situation or event as a stressor" (Selye, 1973); "job-related stress", (Al-Assaf & Taylor, 1992) whereby the stressor igniting the stress are generated at work, either the job itself or the organizational context of the job.

5. Stressor: stimuli (conditions or events), which activate the stress response or anything, perceived as a threat (Selye, 1956).

6. Occupational stressor: demands, conditions, or events associated with the job such as task and occupational demands, physical environmental demands, position role demands, and interpersonal and status demands (Al-Assaf & Taylor, 1992) as perceived by the nursing home administrator.

7. Median Occupational Stressor: the occupational stressor considered to be somewhere in the middle of the continuum from least to most stressful as perceived by the nursing home administrator.

8. Time: two time periods; 1994/1995 and 1999.

CHAPTER II

REVIEW OF THE LITERATURE

The intent of this chapter is to lay the foundation for this study through established research findings. The following six categories are included in the literature review: (1) Stress Theory; (2) Occupational Stressors; (3) Occupational Stressors and Managers; (4) Occupational Stressors and Health Professionals; (5) Stability of Longitudinal Stressors; and (6) Aging Demographics.

Stress Theory

The conceptual framework for the current research was Hans Selye's Physiological Theory of Stress (Selye, 1956/1976), which provided a mechanism for defining concepts and guiding this research. The main concepts examined for this study were time and occupational stressor.

Hans Selye (1956) investigated the responses to unpleasant demands or stressors in animals, mainly rats. In 1936 he discovered that a wide variety of stressors resulted in similar physiological responses he referred to as the General Adaptation Syndrome (GAS) or stress response. Though not actually tested, the results from animal studies were assumed to apply to humans as well. The current study did not use Selye's GAS theory in its entirety as it honed in on the stressors and not the actual stress response. The research focus was on the first two stages of his theory.

According to the GAS, there were three stages to the stress response: (1) the alarm reaction; (2) the stage of resistance (or general adaptation); and (3) the stage of exhaustion. The alarm reaction was the physiological change triggered when an individual first encountered/perceived a stressor to which he/she had not yet adapted. During the stage of

resistance, adaptation to the stressor occurred whereby the symptoms either disappeared or improved. The final stage, the stage of exhaustion, occurred when the adaptation reserves were depleted and resistance could no longer be maintained, signs of illness or even death would then result. This was more likely to occur with severe and prolonged exposure to the stressor (Selye, 1983a, p. 5).

Selye's theory emphasized that virtually any demand placed on the body acted as a source of stress (Selye, 1976, p. 63), the focus of this study. Adaptation to a stressor was based on how the stressor was perceived, either positively or negatively. Stressors perceived as negative or unpleasant were labeled as distress and were indicative of an individual's inability to adapt to the stressor. Stressors perceived as positive or pleasant, labeled eustress, were less harmful and would therefore lead to a minimum amount of stress, as the individual was better able to adapt. The current study was concerned with distress, referred to hereafter as stress.

According to Selye (1956, p. 218) the stress response was not only dependent on the three basic components of stress (stressor, resistance, exhaustion) but also on time, space, and intensity. More specifically, when, where, and how much each stressor occurred were crucial components to adaptation to a stressor. As applied to the current study, Selye's theory suggested that the independent variable, or the timing of the stressor's occurrence (1994/1995 or 1999) would influence the dependent variable (occupational stressor). The significance of the nursing home reform legislation that occurred during the 1994/1995 testing and the continued heightened nursing home oversight during the next few years (Selye's when, where and how much) may have impacted nursing home administrator's perceptions of occupational stressors.

Selye's theory would predict that the stressors may or may not remain stable over time. The stressors themselves would continue to serve as stressors, however, the stability of the

stressors was, in part, a reflection of when, where, and how much the stressors occurred. The stressors, in general, would remain stable. However, those occupational stressors affected the greatest by the increased regulatory oversight would be perceived as more stressful by nursing home administrators over the five year period.

Occupational Stressors

Research on stress in organizations has grown and expanded over the last twenty years. According to Kahn and Byosiére (1992) much of the research focused on the consequences of occupational stress and overlooked the causes. "We know too little about the organizational and extraorganizational factors that generate stressful stimuli" (Kahn & Byosiére, 1992, p. 572). This could be viewed as somewhat illogical as it would make more sense to deal with the conditions or events that activate the stress in an attempt to avoid or lessen negative stress outcomes. Even so, numerous studies have investigated the stressors associated with occupational stress in a wide variety of occupations. The majority of these studies and literature reviews categorized the stressors according to like groups, generally 10 or fewer categories, with varying titles. This reorganization into numerous stressor categories has resulted in increased difficulty in comparing research findings.

In a 1976 literature review of occupational stressors, Cooper and Marshall identified and categorized sources of stress at work into five categories. The following stressor categories emerged: (1) stressors intrinsic to the job; (2) stressors related to the individual's role in the organization; (3) career development stressors; (4) stressors related to relationships at work; and (5) organizational structure and climate stressors. Stressors intrinsic to a job included poor physical conditions, work overload, time pressures, and physical danger. An individual's role in an organization was comprised of role ambiguity, role conflict, responsibility for people, and

conflicts regarding organizational boundaries (internal and external). The third category "career development", included over or under promotion, and lack of job security. Relationships at work included poor relations with the boss, subordinates, or colleagues as well as difficulties in delegating responsibility. The final category, "organizational structure and climate" was comprised of the stressors little or no participation in decision-making, restrictions on behavior (budgets, etc.), office politics, and lack of effective consultation. Cooper and Marshall's (1976, p. 27) review further stated "the extensive research reviewed here provides seminal evidence to support the notion that the work environment and modern organizations have an impact on the physical and mental health of their members."

Similarly, the National Institute of Occupational Safety and Health (NIOSH) identified six categories of stressors thought to have the greatest impact on an employee's psychosocial well-being (Sauter, Murphy, & Hurrell, 1990). The categories included (1) work load and work pace, (2) work schedule, (3) role stressors, (4) career security factors; (5) interpersonal factors; and (6) job content. These categories were also arrived at through a review of the occupational stress literature, "in terms of quantity and convergence of evidence" (Sauter et al., 1990, p. 1150).

In a 1992 review of the occupational stressor literature since 1976, Kahn and Byosiore identified over 250 studies that examined job stressors. They categorized the findings into two conceptual groups. The dimensions of variety-monotony and the physical conditions on the job characterized the first category, "task content and its concomitants". Jobs with greater variety and less monotony generally resulted in higher stressor levels and were included in the subcategory "variety-monotony". Concomitant job characteristics such as vibration, light, noise, and temperature were included in the "physical conditions of the job category". The

requirement of heavy lifting or large-muscle work was also included in the physical conditions dimension. "Role properties", the second grouping, included the stressors role conflict, ambiguity, overload, and the social aspects of the job such as supervisory and peer relations.

In his 1998 book, "Stress and Job Performance", Jex described the five most commonly cited and researched occupational stressor groupings. They were similar to those identified by NIOSH (listed above) in 1990. A review of these job-related stressors are warranted at this point.

Role stressors. Role conflict and role ambiguity have been researched extensively as major causes of occupational stress (Beehr, 1985; Jayaratne & Chess, 1984; Kahn, R. L., Wolfe, B. N., Quinn, R. P., & Snoek, J. D., 1964; Seers, McGee, Serey, & Graen, 1983; Schaubroeck, Ganster, Sime, & Ditman, 1993). Role conflict was defined as what occurred when an employee was given contradictory requests or had to complete tasks the individual felt was not part of the job description (Kahn et al., 1964). In other words, role conflict referred to aspects of the job that created confusion or lack of direction (Jackson & Schuler, 1985). Contradictory requests could come from a single manager. For instance, the President for a chain of long-term care facilities could instruct the Administrators to keep the daily census above a certain budgeted figure. At the same time the President was focused on profit and instructed the Administrators to aim for private pay, subacute and skilled care residents. The inherent problem with this scenario was that in order to keep the census on target for budget purposes residents must be admitted without regard to financial status under many circumstances. Furthermore, the Administrator at a particular facility might be asked to greet each resident brought into the facility on the day of admission. This request was in conjunction with reports of increased resident turnover within the first three days of admission. The administrator might feel Social

Services should handle this. Thus, dependent on the perception of the Administrator this situation could be viewed as a stressor and result in higher levels of stress. Conflicting messages could also come from more than one individual of a role set. A role set was referred to as the "various sources that communicate role-related information to employees" (subordinates, coworkers at the same level, customers) (Jex, 1998, p. 10). To continue with the latter example, another manager might ask the administrator to spend less time with the residents and more time developing pertinent inservices (sensitivity training, interpersonal skills) and educating staff. Again, this could enhance the stressor level resulting in increased stress.

Role ambiguity, on the other hand, occurred when an employee received ambiguous, vague, and/or unclear requests/information (Kahn et al., 1964). This could make the task at hand difficult; in turn create distress for the worker. Tracy and Johnson (1981) suggested role conflict and role ambiguity in conjunction with one another form another category "role stress". This was in accord with other researchers (Jex, 1998; Pursel & Terry, 1986; Sauter, Murphy, & Hurrell, 1990) who had also combined the two categories. Jex (1998, p. 10) defined a role "as a set of behaviors that are expected of a person occupying a particular position." Both role stressors, role conflict and role ambiguity, have been linked to decreased job satisfaction (King & King, 1990, p. 11).

Workload. Stress could also be caused by an individual's workload, either too much (work overload) or too little work (work underload). Workload has also been referred to as "work content" (Leppanen & Olkinuora, 1987). According to Albrecht (1979, p. 45), "the worker simply has been assigned an unreasonable number of tasks or an unreasonable level of production to accomplish in a given period." Anxiety, a sense of hopelessness, frustration and/or a loss of reward could result. These same psychological manifestations could occur if a

worker was not provided with an adequate workload (Albrecht, 1979; Schultz & Schultz, 1998). An individual's "perception" of their quantitative workload was vital to how that individual responded to a stressor (Jex, 1998). For example, two administrators who managed almost identical nursing facilities could perceive their workload differently. One administrator could feel overworked with too many tasks to complete whereas the other administrator might feel comfortable with the same workload. Schultz et al. (1998) pointed out that as companies continue to downsize the probability of employees carrying out the job responsibilities once completed by two individuals would rise as well.

A second type of workload stress, qualitative in nature, resulted from perceptions by individuals that they were not equipped to handle the task at hand or were actually incapable in terms of their skills and abilities (Quick, Quick, Nelson, & Hurrell, 1997; Schultz, et al., 1998). This was especially true with the continued advances in technology, thus requirements to learn and perfect new skills. Quick et al. (1997, p. 30) pointed out that with technological advances comes "the likelihood that employees will suffer from qualitative work overload.

Interpersonal conflict An individual's working relationship with his or her coworkers, customers, and/or contractors could be a source of satisfaction as well as a source of stress. "Interpersonal stressors come from the demands and pressures of social system relationships at work" (Quick, et al., 1997, p. 34). Conflict in working relationships could result in increased turnover, job neglect, and job dissatisfaction (Leppanen et al., 1987). Competition has been identified as a factor that increased the likelihood of interpersonal conflict (Forsyth, 1990; Roberts, 1995).

Situational constraint. Factors in the work environment that "inhibit or constrain" an individual's ability to perform his or her job were referred to as situational constraints (Peters &

O'Connor, 1980). These stressors were classified into 11 constraint categories: (1) job-related information; (2) budgetary support; (3) required support, (4) materials and supplies, (5) required services and help from others; (6) task preparation; (7) time availability; (8) the work environment; (9) scheduling of activities; (10) transportation; and (11) job-relevant authority (Peters et al., 1980). When these factors were perceived as unavailable or inadequate, work performance was affected.

Perceived control or autonomy. The amount of control individuals have over their job responsibilities, either too much or too little, could result in stress. Sauter, Hurrell, and Cooper (1989) found a lack of control to be one of the most significant stressors encountered in the work environment. Jex (1998) referred to perceived control in terms of an individual's job autonomy and participation in decision-making. Similarly, Sauter and coworkers (1989) suggested control encompassed the extent to which an individual had control over job tasks, decision-making and their environment. Long-term care administrators must deal not only with their organizational guidelines but those of the state and federal government.

There was great difficulty in making comparisons between the above four literature review categorizations of stressors. The overriding similarity was in the categorization of what Jex (1998) referred to as role stressors that appeared in every recategorization. When carefully examined, Cooper and Marshall (1976) and Sauter, Murphy, and Hurrell (1990) had classifications similar to that of Jex (1998). Both research teams also included the stressor category related to career development. Jex (1998) did not include this category in his top five most commonly cited stressor groupings. In general, it appeared that at least four of Jex's five categories were included in the three literature review stressor categorizations. Jex's "perceived control" was the only category not singled out in the other three reviews.

Occupational Stressors and Managers

Managers/Administrators. In 1997, occupational stress experienced by management level personnel was described as approaching epidemic proportions and costing industry an estimated \$20 million annually (Marino, p. 14). This is not surprising considering administrators were identified as the seventh most stressful occupation almost 25 years ago (Smith, Colligan, & Hurrell, 1977). The National Institute for Occupational Safety and Health (NIOSH) differentiated between high and low stress occupations through the examination of 22,000 individual's health records (death certificates, mental health center and general hospital admissions) representing 130 different occupations (Smith, Colligan, & Hurrell, 1977). Individuals who had died or who were admitted to a hospital or a mental health facility with the attributing cause as a stress-related disease (coronary heart and artery disease, hypertension, ulcers and nervous disorders) were included in the sample. Of the 40 occupations with a higher than expected incidence of stress related disorders, Administrators were ranked seventh. The top twelve occupations stood out with a highly significant incidence of stress related diseases. Of the remaining 28 high stress-related disease incidence occupations, six were in the health care field. Three of these included occupations crucial to the survival of the nursing facility: licensed practical nurses (LPN); registered nurses (RN); and nurses' aides. Ironically, social workers, another key player in the nursing home industry, were also among the high stress-related disease incidence occupations. The actual occupational stressors precipitating the high stressed occupations were not examined in this study.

In his book, "What Managers Think About Their Managerial Careers", Pearse (1977) examined approximately 5,000 managers in the private sector and identified 3 categories of

stressors: individually oriented factors; interpersonally oriented-factors; and organizational factors. The later two were in accord with what the current research defined as occupational stressors. Individually oriented factors were characteristics of the person such as the fear of failure or the actual physical and emotional impact of long hours and deadlines. Interpersonally oriented stressors were job-specific and included inadequate support by superiors, poor performance by superiors, and inadequate performance by subordinates. The political climate, unclear job-expectations, inadequate information regarding career advancement and the lack of recognition fell under the category organizationally oriented sources of stress. These stressors in addition to the interpersonally oriented stressors fell into Kahn and Byosiére's (1992) "role properties" category that encompassed four of the five categories of stressors identified by Cooper et al (1976).

Cooper and Melhuish (1980) investigated the relationship between stressors and health outcomes of managers among a group of senior male managers. To assess the stressors, an 89-item Likert type questionnaire (The Marshall and Cooper Job Pressures and Satisfaction Questionnaire) was factor analyzed into 12 items. The resulting stressor categories included: social and support from work and home; spouse-work interface; promotion; relationships with subordinates and colleagues; relationship with boss and company; demands from other people and company; organizational climate; career management; role ambiguity; conflict between company and personal values; demands of home life on work; and lack of responsibility. Poor physical fitness, high blood pressure, and emotional instability were the health measures used. Stepwise multiple regressions were used to predict the three health outcomes. The stressors with the most predictive power for raised blood pressure were conflict between personal values and company, poor

relationships with subordinates and colleagues and little social support from home and family. Poor physical fitness predictors included demands from other people and company, conflict between personal and company values, and poor organizational climate. The only stressor entering into the poor mental health equation was job insecurity. All of the equations also included various personality factors. Cooper and Melhuish pointed out that the personality factors for both physical health outcomes were related to Type A behaviors (“assertive and achievement-oriented”) (p. 592). Managers more susceptible to poor mental health were tense, serious, and apprehensive.

Job search behavior has been referred to as a precursor to job turnover, which has been identified as a behavioral consequence of job stress. In a study examining the job search behaviors of managers, managers in the medical and health care industry were found to engage in significantly more job searching than in any of the other industry (Bretz, Boudreau, & Judge, 1994). Managers were randomly chosen from the Paul Ray Berndtson database, a large executive search firm. The sample was mainly Caucasian (97%) and male (93%). According to the U. S. Department of Labor (1993) the general population of managers was characterized by 90% Caucasian, 59% male, with an average annual salary of \$46,400, thus the Bretz sample had a much higher percentage of males. A 39% response rate was achieved in the initial mailing and a 48% in a 15-month follow-up. Nonrespondents were not significantly different than respondents in this study. Job stress was measured using a 16-item questionnaire combining questions from existing instruments. A Likert-type scale was attached where 1 = “produces no stress” to 5 = “produces a great deal of stress”. Job search behaviors such as revising a resume, reading position listings in journals or newspapers, interviewing for a job, and submitting

resumes were included in the job search measure. Though this study did not hone in on occupational stress, it did find that job stress and job search behaviors were positively correlated. In other words, as perceived job stress increased, job search behaviors also increased.

Cavanaugh, Boswell, Roehling, and Boudreau (2000) carried the 1994 Bretz and coworker study one step further and reclassified the stressors experienced by managers into two categories: challenge-related and hindrance-related self-reported job stress.

Challenge-related stressors were defined as productive stressors. Even though there was the potential for stress, work-related demands also had the potential for gains creating feelings of achievement. Challenge-related stressors included the number of projects/assignments, amount of time at work, volume of work to be accomplished in a set time period, amount of responsibility, and scope of responsibility. Hindrance-related stressors were defined as unproductive stressors/demands that interfered with work achievement and were not associated with gains but with negative feelings. Hindrance-related stressors included the degree to which politics rather than performance affected organizational decisions, inability to clearly understand job expectations, the amount of red tape, lack of job security, and the degree to which their career appeared stalled. Job search behavior was defined as in the Bretz and coworker (1994) study. Cavanaugh and coworkers (2000) found that, as predicted, challenge-related stressors were negatively related to the job search behaviors of high-level managers and hindrance-related stressors were positively related. The sample was obtained from an executive search firm. The managers were mostly Caucasian (96%) and male (91%). There was a 19% response rate.

Note that the stressor categories used in this study were similar to the eustress and distress distinction made by Selye.

Gender differences. With larger numbers of women entering the workforce comes an increased number of women entering male-dominated professions, including management (Davidson & Cooper, 1992, pp. 11-12). Not surprisingly, the majority of the earlier studies were based mainly on male managers. Studies looking at the relationship between gender and occupational stress have been limited (Burke, 1988). According to Martocchio and O'Leary (1989), research examining whether males or females are more stressed has not provided any concrete findings.

In a recent study, gender differences among middle level managers in the public, private, and government sector were examined utilizing the Organizational Role Stress (ORS) questionnaire (Mohan & Chauhan, 1999). The ORS was made up of the following 10 stressor dimensions: "inter role distance"; "role stagnation"; "role expectations conflict"; "role erosion"; "role overload"; "role isolation"; "personal inadequacy"; "self role conflict"; "role ambiguity"; and "resource inadequacy". The focus of the study was on the organizational sector not gender. Each stressor was measured on a five-point Likert scale with "1 = never" and "5 = very frequently". The total of all ten dimensions determined managerial stress levels. No significant differences were identified between male and female manager's stress levels, though females did score higher than males. There were also no gender differences on any of the 10 stressor dimensions.

Unlike Mohan and Chauhan (1999), Davidson and Cooper (1986) found a number of significant differences between male and female managers. Davidson and Cooper examined stressors experienced at all levels of management. The four management levels

were senior, middle, junior, and supervisor. They developed a survey instrument based on previous research and existing valid instruments. There were a total of 104 stressors managers responded to on a five point Likert-scale with "1 = no pressure" and "5 = a great deal of pressure". The total list of stressors was not provided only the significant results. Stressors considered to be high had a mean score of 2.5 or above.

A number of demographic differences between male and female managers emerged from the data (Davidson & Cooper, 1986). First the female manager was somewhat older, more likely to be married, and was childless or had fewer children who were older. Female managers were also more likely to have been divorced or separated. There was little difference between the numbers of degrees, including postgraduate, between male and female managers. In terms of stressors, female managers reported a greater number of significantly higher stressor scores than male managers.

Managers were looked at both as a group and in terms of managerial level. In the senior management group, the only stressor female managers rated significantly higher than male managers was "lack of consultation/communication" (Davidson & Cooper, 1986). "Under promotion" was viewed as significantly more stressful for male than female senior managers. Both male and female senior managers identified "work overload" and "time pressures" as above average stressors.

Female middle managers rated the stressors "feel they have to perform better at job than opposite sex colleagues" and "dilemma as to whether to start a family" as significantly higher than male middle managers (Davidson & Cooper, 1986). Male middle managers identified "rate of pay" and "sacking someone" significantly higher than their female

counterpart. Both male and female middle managers rated "work overload", "time pressures" and "lack of consultation/communication" as above average stressors.

Female junior managers rated "job promotion due to gender", "office politics", and "dilemma as to whether to start a family" significantly higher than male junior managers (Davidson & Cooper, 1986). Male junior managers rated "disciplining subordinates", "sacking someone", and "underpromotion" significantly higher than their female counterpart. Both male and female junior managers rated "work overload" and "time pressures" as above average stressors.

Female supervisors rated none of the stressors significantly higher than their male counterpart (Davidson & Cooper, 1986). Male supervisors, on the other hand, rated "long hours" significantly higher than female supervisors. Both male and female supervisors rated "time pressures" and "lack of consultation" as above average stressors.

When all of the managers were compared, female managers in general rated the "dilemma to start a family" significantly higher than male managers (Davidson & Cooper, 1986). Male managers rated "underpromotion" significantly higher than female managers. Both groups of managers rated "work overload", "time pressures", and "lack of consultation" higher than average. Overall, middle and junior level female managers identified the greatest number of stressors rated above average.

In 1985, Cooper and Melhuish looked at managerial stress and health and focused on gender differences. They utilized 482 senior managers, 311 male and 171 female, representing various areas of management (personnel, marketing, finance, production, engineering, purchasing and general management). The Marshall and Cooper Job Pressures and Satisfaction Questionnaire was used. A single "stress" score was obtained

for each manager by summing the 89 items. Both mental and physical health was measured. A number of significant stressor differences between male and female managers were revealed. Male managers rated the “number of promotions”, “work relocations”, and “nights of travel” as well as “degree of responsibility for people at work”, “degree of support from others at work” significantly higher than female managers. The overall stress score for male managers was also significantly higher. The only factor female managers rated significantly higher was “change of employment”. In terms of health outcomes, female managers were more susceptible to mental ill health, whereas male managers were more vulnerable to poor physical health (more at risk for high blood pressure, poor health predisposition, and poor physical fitness). Also noted was the fact that Type A behaviors were important in the stress equations for both males and females.

Nelson and Quick (1985) identified “discrimination”, “stereotyping”, “conflicting demands of marriage and work”, and “social isolation” (unsupportive working environment) as unique stressors encountered by female professionals. Thus, female managers had to contend with additional stressors, not experienced by male managers. They conducted a literature review to obtain these results. The actual time span for the literature review was not stated, however articles from 1960s to 1984 were highlighted.

Age differences. Pradhan and Mishra (1999) identified significant age differences among executives from both the public and private sectors in an Indian organization. Young executives were described as between 25 and 45 years of age and “old “ executives were between 45 and 65 years. Half of the executives were young ($N = 120$) and half were old ($N = 120$). Additionally, half of the young executives were from the private sector ($N = 60$) and half from the public sector ($N = 60$). This same pattern followed for the old executives. The

Organizational Role Stress questionnaire, previously discussed, was used. Young executives reported significantly higher stress scores than old executives on the stressor dimensions, “role erosion”, “role ambiguity”, and “role stagnation”. Other stressor dimensions may have revealed significant differences, however, tables were not presented and inconsistencies were noted in the discussion and abstract. Overall stress levels were noted to be significantly higher among the young executives.

Public and private sector differences. Mohan and Chauhan (1999) examined middle level managers in Government, Public, and Private sectors of “the Indian industry” (p. 46). The Organizational Role Stress questionnaire was again used. Although the differences were not significant, the Public sector managers revealed the most stress, followed by the Government and then the Private sector. The stressor categories role erosion and self-role conflict were significantly more stressful for the Public sector managers than the Government and Private sector managers.

Pradhan and Mishra (1999) identified similar findings in Indian organizations. They found that public sector executives reported significantly higher overall stress scores than private sector executives. Unlike the Mohan and Chauhan study (1999), the stressor dimension role erosion was rated as significantly more stressful for private sector executives. Again the Organizational Role Stress questionnaire was used. Unfortunately, the article only discussed the results, tables were not presented, and other results could not be deciphered.

Occupational Stressors and Health Professionals

Nursing home administrators. Only one study was located addressing occupational stress or stressors among nursing home administrators and it was specific to a small area in the

state of Texas. Mullen's (1985) study sought to identify and rank occupational stressors identified by nursing home administrators in Dallas and Tarrant Counties. As statewide regulations tend to vary as well as qualifications for nursing home administrators, the stressors identified could vary state to state. Mullen (1985) derived a list of 77 occupational stressors from two meetings with four different administrators to be used in Phase I. One hundred and twenty-six nursing home administrators were mailed test packets that included the stressor list and a demographic questionnaire. Each administrator was contacted via telephone prior to and after the mailing with a resulting 60% response rate within two weeks. The Phase II questionnaire included the top 29 ranked stressors from Phase I and 32 additional stressors suggested by the respondents, for a total of 61 stressors. All of the administrators who responded to the first mailing and eleven administrators who returned their packet after the cutoff date were sent the final refined list of stressors in Phase II. A 71% response rate was obtained (or 48% of the original sample).

Stressors were regrouped into the following ten categories of stressors: (1) Employee relations; (2) State Agencies; (3) NHA Job-Related Role; (4) Nursing Staff; (5) Administrative Duties; (6) Upper Management; (7) Patient-Family Relations; (8) Personal Life Conflicts; (9) Physicians; and (10) General Public. In order of importance to the administrator, "State Agencies", "General Public", "Patient-Family", and "Employee Relations" were viewed as the most stressful categories. Note that the three most stressful categories involved persons or agencies external to the nursing facility. Stressors in the State Agencies category included the number one stressor, "legislators making public statements to press and not knowing the facts"; the number two stressor, "negative approach by politicians" (due to their accepting unsubstantiated information); "amount of time surveyors spend in a facility"; "inspectors not

being aware of (or sensitive to) nursing home everyday problems"; "inconsistent interpretations of standards by inspectors"; "state agencies accepting anonymous patient complaints"; and other conditions involving persons or agencies external to the nursing facility (Mullen, 1985). In the General Public category the following stressors were identified: "negative approach by press" (number three stressor); "poor image of NHAs by media" (number four stressors); "varying (public) perceptions of quality health care"; and "poor public image" (Mullen, 1985).

Patient/Family stressors included: "unrealistic expectations of family members concerning patient care", "families and residents ignoring the rules", "runaway patient" (resident); "family's unrealistic expectations due to a lack of public information/education"; and "family expectations of care and recovery without giving of themselves to help" (Mullen, 1985).

The fourth most important category, Employee Relations, consisted of stress-producing factors internal to the nursing facility. The stressors included: "people not doing their jobs"; "theft of patients' personal items by employees"; "maintaining a full staff (daily) as scheduled"; "lack of care and concern by staff"; "attitude of employees toward cooperative relationships"; "keeping an adequate staff"; "having to counsel and/or fire employees, especially department heads"; and "staff not showing up when scheduled and calling in" (Mullen, 1985).

Nursing home administrators manage a small health care business. Thus, they are prone to the same stressors experienced by other business managers (Mullen, 1985). What makes identifying stressors among nursing home administrators (as well as other occupations) important is the uniqueness of the environment in which they work. The working environment of a nursing home administrator is somewhat different from that of university administrators or administrators from other nonhealth oriented organizations, as the nursing home administrator must deal with life and death situations on a regular basis.

In his 1997 book "Nursing Home Administrators: Their influence on quality of care", Douglas A. Singh pointed out four areas nursing home administrators frequently encountered which could significantly impact the overall quality of care within the facility (pp. 5-6). Though the term stressor was not mentioned, these issues were viewed as potential stressors. He addressed the "inability to attract qualified staff" secondary to lower pay scales, "limited opportunities for skill enhancement" and the "negative image of the nursing facility compared to the acute care setting". "Poor reimbursement from public sources" was also identified. Medicare and Medicaid reimbursement for resident care has not been commensurate with the actual amount of care the resident required and obtained. As a result, facilities looked for private-pay residents for compensation and other means of cost containment that could impact quality of care. The third area identified by Singh was the "high rate of turnover and absenteeism" among nursing assistants in particular that could have a negative effect on the care residents' received. And lastly he pointed to the "numerous regulatory requirements" with which the nursing home administrator must contend. He noted that nursing homes were one of the most regulated industries in the United States.

Hospital CEOs. Like nursing home administrators, hospital CEOs are bombarded with bureaucratic paperwork, deal with government regulations and governing boards, cater to the public, scrutinize financial concerns, and work hard to ensure that quality care was provided (Lappa, 1989). Hospital CEOs were viewed as highly susceptible to executive burnout, a unique type of burnout that resulted from "excessive job-related stress" unless managed effectively (Al-Assaf & Taylor, 1985, p. 88).

A telephone survey of 380 hospital executives revealed that more than 98% of this sample experienced high, moderate, or low levels of stress, with the respective percentages,

57.6%, 37.6%, and 4.8% (Lappa, 1989). Some 69% felt that job stress reduced their overall daily productivity. The top six stressors identified included: Financial problems (74.3%); Staffing problems (65.2%); Workload (63.3%); Medical staff relations (57.8%); Board pressure (27.4%); and Public/community pressure (21.8%). Responses were rated on a five point Likert scale whereby five represented the "most stressful". Results were based on CEOs who rated the stressors as a 4 or 5. This emphasis on financial problems as a major stressor was quite different from the number one stressor experienced by the nursing administrator. In fact, of the top 30 stressors listed in Mullen's (1985) article on nursing home administrators, not one dealt with financial issues.

Hospice administrators. An exploratory study in job stress and stressors among hospice administrators in Michigan revealed a population of almost all females (91%), Caucasian (99%), married (81%), with at least a bachelors degree (78%) (Peters, 1998). Hospice administrators reported moderate levels of stress with an average stress level of 5.98 on a scale from 0 to 10 (0 = no stress, 10 = extreme job stress). Peters arrived at the stressor instrument based on a "review of the literature and input from administrators" (p. 36, 1998). Peters divided occupational stressors into four categories (extra-organizational, organizational, group, and individual) and administrators rated each stressor with 0 = none, 1 = slight, 2 = moderate, 3 = severe, or 4 = extreme. There were a total of 46 stressors with at least 10 stressors in each category.

The top two individual stressors were "too many tasks" and "managing multiple roles". The stressor "preventing staff burnout" was the most stressful group stressor. "Late referrals" and "managing the bottom line" were the organizational stressors viewed as contributing the most to stress levels. The "turbulent health care system" and the "lack of physician

understanding of hospice” were the top two extra-organizational stressors. As a whole, the top two stressors were “too many tasks” and “late referrals”, followed by “managing the bottom line” and “turbulent health care system” which were tied in level of stressfulness, and “managing multiple roles” which was also tied with “decreasing patient average length of stay”. The least stressful stressor was “lack of own hospice education” followed by “decline in personal health” (both individual stressors), “laying off hospice staff” (group stressor), “fear of being taken over by home health” (group stressor), and “board problems” (organizational stressor).

Nursing personnel. Nursing is one area where stressors have received great attention. A number of job stressors have been repeatedly identified in nursing research. Utilizing the interview method of data collection, Dewe (1989) generated a 53 item check list of work stressors which was then categorized into five areas of work stressors: (1) work overload; (2) difficulties relating to other staff; (3) difficulties involved in nursing the critically ill; (4) concerns over the treatment of patients; and (5) dealing with difficult or helplessly ill patients.

Nurses were asked, “What sort of things cause pressure and what sort of things do you do to cope?” The 10 stressors causing the most tension in rank order according to Dewe (1989) were as follows: (1) trying to deal with too many patients; (2) dealing with staff shortages; (3) dealing with emergencies which threaten the lives of patients; (4) looking after patients who are in a critical and unstable condition; (5) too much to do in a given time; (6) not enough time to provide the needed emotional support to patients; (7) difficulties in completing tasks because of interruptions; (8) working with staff who are not pulling their weight; (9) dealing with sudden unexpected changes in a patient's health; and (10) dealing with demanding, difficult or uncooperative patients.

The development of the checklist was only a small part of the researcher's study.

Unfortunately it was unclear as to what type of nurses were sampled, how many, and where they were sampled from. It was clear that once the entire packet was developed nursing staff from general and obstetric hospitals located throughout New Zealand were utilized. Whether this same sample was utilized to arrive at the job stressors utilized in the checklist was questionable.

Wolfgang (1988) utilizing the Health Professions Stress Inventory (HPSI) identified three categories of stressors experienced by practicing registered nurses. Situations dealing with "work overload", "patient needs", and "conflicts" were found to be the most stress inducing. These findings are similar to those identified by Dewe (1989). Items included in the "work overload" category dealt with quantity of work and staffing shortages. The "patient needs" category included items addressing patient's emotional needs, care of the terminally ill, and personal feelings/emotions interfering with patient care. The last area, "conflict", dealt with problems arising at work with supervisors, coworkers or other health professionals.

The sample employed in Wolfgang's research (1988) included 379 nurses randomly selected from a national mailing list. A two-week follow up mailing which included a copy of the questionnaire was utilized to increase the response rate to 42.1%. How many nurses were actually mailed the HPSI could not be determined as the sample receiving the test instrument included other health professionals as well. Note that the HPSI was developed for this study with the intention of examining stress levels of nurses, physicians, and pharmacists. The instrument included a total of 30 situations with which a health professional might come into contact while on the job.

Occupational stressors among nursing care staff (all levels of nursing) working in nursing facilities have also been examined. Dunn, Rout, Carson & Ritter (1994) conducted a three phase study to identify occupational stressors among care staff in the United Kingdom. The top five stressors identified included: (1) unsatisfactory wages; (2) shortage of essential resources; (3) not enough staff per shift; (4) feeling undervalued by management; and (5) lifting heavy patients. Factor analysis of the 44 stressors revealed 5 factors or underlying response patterns encompassing 28 of the items. The factors were as follows: (1) differing expectations about how patient care should be carried out (29.1%); (2) management factors (7.3%); (3) not getting adequate support from other staff (5.1%); (4) feeling inadequately trained to deal with the emotional and practical demands of the job (4.2%); and (5) home-work conflicts (3.9%). Job overload, a commonly cited occupational stressor, was not found to be highly stressful for this sample (Dunn et al, 1994). Note that three of the top five sources of stress (unsatisfactory wages, shortage of essential resources, and feeling undervalued by management) were related to "management" factors.

In Phase I of the Dunn and coworkers (1994) study each subject ("3 trained nurses and five care assistants" from two nursing facilities, one rural and the other urban) participated in semi-structured interviews lasting an average of 15 minutes. The same researcher carried out all interviews and an independent observer recorded each session. Based on these interviews a 44-item questionnaire with a five-point Likert scale was developed and mailed to 40 care staff in six nursing facilities in Phase II. Note that the response rate was not indicated for the pilot testing of this instrument (Phase II). In Phase III the "stressor check-list" developed from Phases I and II was mailed to 12 nursing facilities "chosen" from a registry of all nursing facilities in the United Kingdom but only those in two easily accessible areas were selected. The head nurse in

each facility distributed and retrieved the questionnaires from their care staff. A 30% response rate was obtained from the sample of 375 care staff in this final phase.

Nuclear medicine technologist. In a study similar to the current research, nuclear medicine technologists were mailed questionnaires requesting their identification and eventual ranking of stressors experienced in their profession (Sechrist & Frazer, 1990). The five most significant stressors in order of stressfulness were as follows: (1) Equipment malfunctions; (2) Add on exams; (3) Uncooperative physicians; (4) Lack of staff; and (5) Uncooperative patients. The first mailing was to a random sample of 25 certified nuclear medicine technologists. Of the 300 randomly selected nuclear medicine technologists mailed the second questionnaire (from a total of 7,045) in which the stressors were listed and respondents were asked to rank the stressors, only 63 returned the questionnaire for a low response rate of 21%.

Dentists. Stressors among dentists have been identified as well. In 1981 Godwin, Starks, Green, and Koran utilized the self-report format to identify the "sources of greatest stress" in practice by recent dental graduates. Of 200 questionnaires mailed 133 were completed and returned for a response rate of 66.5%. The following categories were identified: patient management issues (73%); business management issues (50%); perfectionism (38%); incompetent staff (33%); and time pressures such as falling behind schedule (26%). Items referring to patient fear and anxiety, missed or late appointments, and dissatisfied patients made up the category of patient management issues. Business management issues included problems regarding cash flow, collections, overhead and insurance.

Ingersoll, Ingersoll, Seime, and McCutcheon (1978) found similar results in an earlier study. The most stress producing categories identified through self-reported questionnaires were business management, patient compliance, fearful patients, and patients who missed,

canceled or were late to appointments. These categories fell into Godwin and coworkers first two categories.

Social workers. Stress amongst social workers has been a relatively unresearched area. Most of the research was of a qualitative nature. Fineman (1985) utilized a qualitative analysis approach to study stress in social workers employed in an urban social services department. Taped interviews of 40 subjects analyzing four areas were examined: (1) characteristics of the self, (2) job features; (3) home circumstances; and (4) quality and quantity of support. Almost half of the Social Workers reported increased anxiety, depression, feelings of pressure, loss of confidence, and panic. Results revealed that lack of support and communication between senior management and social workers was a factor in the amount of stress they experienced. More support and ongoing communication resulted in less stress. This was indicative of the importance of upper management on the success of the entire organization.

In addition to occupational stressors, events in an individual's personal life such as the death of a spouse or loved one, marriage, divorce and retirement could also lead to stress and compound the problem further. The Social Readjustment Rating Scale (Holmes & Rahe, 1967) measured such life events stressors. It is beyond the scope of this research to deal with such life events stressors, thus these factors will not be addressed in the remaining sections.

Stability of Longitudinal Stressors

The majority of longitudinal studies which examined stressors identified by various health care professions focused on the consequences of stressors in terms of health outcomes, performance outcomes, and stress levels. The stressors were either identified or identified and compared to some outcome. The actual stability of stressors over time has been a relatively unresearched area. There were no articles identified in a literature search from the 1970s to

2000 that were specific to practicing health care professionals and stressors over time.

However, two articles looking at the stability of stressors among medical school students were found.

Carmel and Bernstein (1990) examined changes in personality characteristics in a three-stage study of perceptions of stressors, trait anxiety and sense of coherence among medical school students attending a six-year program at the Ben-Gurion University of the Negev in Israel. The purpose of their study was to look at the stability of trait anxiety and sense of coherence, two personality traits considered to be relatively stable, within a previously identified stressful social environment (medical school). Data collection occurred prior to the beginning of the first year of medical school during orientation, in the middle of the first year, and the middle of the second year. A test packet which consisted of a demographic questionnaire, the Hebrew version of the Trait portion of the State-Trait Anxiety Inventory, the Sense of Coherence scale, and a 22-item stressor questionnaire. The stressor instrument was developed based on stressors identified in previous medical school stressor research.

Note that a high trait score indicated that an individual had a strong tendency toward appraising a situation as threatening. A high sense of coherence score was indicative of an individual's perception of environmental demands or stressors as challenging, not stressful. Thus, an individual with a high trait-anxiety score would be expected to have a low sense of coherence score when faced with a threatening situation.

Results of Carmel and Bernstein's study revealed no differences in the perceptions of stressors, trait-anxiety and sense of coherence between different classes tested during the same stage in medical school. Differences were found for each of these variables over the three stages. As predicted, stressor scores and trait-anxiety scores increased, and sense of coherence

scores decreased over time. Second year medical students evaluated the stressors as significantly higher than first year or orientation medical students. The three most stressful stressors included the “death of a patient”, “academic demands”, and “professional status”. Note however that the stressor “death of a patient” did not reveal significant changes over time like the latter two stressors but increased scores were found. Thus, support was obtained for the hypothesis that as demands increased (from orientation through the second year) medical school stressors would be perceived as increasingly stressful. Carmel and Bernstein concluded that exposure to a stressful environment was manifested in personality changes, specifically trait-anxiety and sense of coherence changes.

Utilizing the same data, Bernstein and Carmel (1991) again looked at stressors, trait-anxiety, and the sense of coherence over time. The focus of this study, however, shifted to gender differences. Results indicated that both male and female medical school students had a significant increase in their overall stressor scores over time, however no gender differences were found. In other words, male and female students perceived medical school similarly over time (increasingly stressful). The only significant difference identified was with the stressor “death of a patient” and female students viewed this as more stressful than male students. The increase in stressor scores over time for males was attributed to the stressor academic demands and for females was attributed to the stressor professional status issues. Trait-anxiety scores again increased and sense of coherence scores decreased for both male and female medical school students. Gender differences were identified with anxiety scores in the first two stages whereby male students reported significantly lower anxiety scores than females. This difference disappeared in the third stage (second year medical school). However, male anxiety scores

increased more over time than female anxiety scores. Both of these studies suggested that stressor levels changed over time and were manifested in personality changes.

Aging Demographics

The following specific demographic changes currently taking place must be reported to understand the demands placed on the nursing home industry. The elderly (65+) population continues to be the fastest growing age group in the United States. Baby boomers, persons born between 1946 and 1964, will reach age 65 between the years 2010 and 2030, which is where the most rapid increase in older Americans is purported to occur. Approximately one person in eight is 65 or older and this ratio is expected to increase to one person in five by the year 2025 (United States Administration on Aging, 1990). By the year 2030 there will be some 66 million Americans aged 65 or older (22% of the American population) resulting in an increase of nearly two and one-half times since 1980 (United States Administration on Aging, 1990).

Not only are the numbers of elderly growing, but the older population itself is aging. In 1991, there were an estimated 31,753 persons 65 or older (U. S. Department of Health and Human Services, (April 1995). There has been a continuous increase in the 65 to 74, 75 to 84, and 85+ age groups since 1950. The most recent available resident population data for the United States was in 1991 and is only calculated every 10 years via the U.S. Bureau of the Census. However, a 1995 report from the Division of Health Care Statistics estimated the elderly population at 33.5 million (Dey, 1997). Note that the steady increase in the 65+ group was not demonstrated with any other age group (U.S. Department of Health and Human Services, April 1995). By the year 2000, 13% of the population will be 65 or older. Of those persons who turn 65 today at least another 16 years could be added to their life expectancy, in

turn, increasing the median age of this 65+ population (Virginia Department for the Aging, 1989).

There will be an increase in the demand for long-term care services as the population continues to age, particularly in the 85+ group. The number of persons 85 and older, part of the fastest growing segment of the American population, will nearly double in the next 20 years. In 1988, the 85+ group was 23 times larger than in 1900 (United States Administration on Aging, 1990). Unfortunately, it is in these later years of life that chronic health conditions become more prominent and prolonged dependency becomes much more common. Consequently limitations with basic activities of daily living (ADLs) which include bathing, dressing, toileting, transferring in and out of bed or chair, continence (bowel or bladder control or both), and eating become more pronounced. In 1987, approximately 25% of all persons aged 65 needed some form of daily assistance (National Center for Health Statistics). These numbers will undoubtedly increase as Americans live longer. Thus, the need for long-term care services becomes more probable, particularly when there are inadequate family and community services available. In addition to health status and family relations (including marital status), living arrangements and income can impact a person's need for nursing facility placement.

The U.S. Senate Committee on Aging (1991) elaborated on the projected increase in the demand for long-term care service. Approximately 7 million elderly in 1990 were in need of long-term care services either in the home, community or a nursing facility. This figure is expected to increase to 9 million by the year 2005, 12 million by the year 2020 (the United States General Accounting Office (1988) put this figure at 14.3 million), and 18 million by the year 2040. At any given time approximately 5% of our nation's elderly are residing in a nursing facility. A total of 1.5 million elderly resided in nursing facilities between July and December

1995 (Strahan, G. W., 1997). This figure is expected to increase as the country continues to "gray." It has been estimated that the nursing facility population will increase to 2.6 million by the year 2020. Even with the slight decrease in nursing facility utilization noted in 1995, secondary to increased home health care abilities and hospice within the home setting, services not previously provided in the home, the decreased physical/functional and cognitive abilities of the oldest population and the aging of the older population itself will warrant services provided only by a nursing facility (i.e., 24 hour nursing care) (Strahan, 1997). Thus, nursing facility placement could be the only available alternative.

As the price of in-home and community based long-term care services rise, the number of persons able to afford such care will diminish. Medicare does not cover nursing facility care, as many Americans tend to believe, nor does it cover personal care or home health aides unless a skilled service is being provided. Unfortunately, this is generally for a maximum of 2 hours for assistance with morning care (bathing and dressing). On the other hand, Medicaid covers nursing facility care costs as well as personal care via a certified nursing assistant. The maximum amount of time provided within the home for personal care via the Medicaid program in the state of Virginia is eight hours. Unfortunately, this is not the norm and families allotted this amount of time are unable to manage the needs of their loved one once the nursing assistant leaves and therefore poor quality care is more likely to be provided. In other words, unless an individual is financially secure and/or has a strong support system, 24 hour care in the community for the physically and cognitively impaired is not feasible.

Dramatic demographic changes occurring in the American workforce confound the problem further. A study conducted by the Virginia Department for the Aging (1989) indicated that in the 1950's, 75% of American families were comprised of a father who worked for pay

and a mother who stayed at home with the children. Only 10% of American families fit this classic model in 1988. The contemporary family consisted of double-income couples both of which worked outside the home. Geographic mobility of the American population has created numerous long distance families as well. At present, more than half of all married women with infants one year or younger work outside the home. This figure doubled since 1970. Forty-four percent of the paid workforce is made up of women in 1988. In addition, mothers of some 24 million children worked outside the home. It is anticipated that the number of women in the paid workforce will continue to grow. Many of these women were working out of economic necessity. Two out of every three women who worked outside the home were either the sole providers for their children or had husbands who earned less than \$15,000 per year. Thus, as more and more women enter the paid workforce there will be fewer caregivers at home to tend to the needs of aging dependent relatives.

These changing demographics in the workplace coupled with the increase in our aging population and the anticipated increase in the need for nursing facility placement will inevitably lead to an increased burden on the long-term care industry, ultimately the nursing home administrator responsible for the care of this population. Since the nursing facility population is getting older and older, it is only logical that the residents within such facilities are becoming less healthy. With the increasing cost of providing nursing facility care and the increased dependency of residents the picture becomes bleaker. The reimbursement rates for providing care have not been commensurate with the amount of care needed. In 1995, Medicaid paid for approximately 40% of the care delivered in long-term care facilities at the time of admission and 56% once individuals insurance for skilled services was exhausted such as Medicare or private insurances (Dey, 1997). The second most common source of payment was private insurance or

personal income at 32% and 13% respectively. Unfortunately Medicaid's reimbursement has generally not been commensurate with the level of care the individual received, thus the administrator has had to remain creative to stay afloat. Thus, with "sicker and sicker" residents, nursing facilities suffer larger and larger deficits. The 1987 Omnibus Budget Reconciliation Act (OBRA) regulations added more fuel to the fire by increasing the amount of bureaucratic paperwork and therefore increased the workload.

This chapter provided an overview of stress theory. The most commonly cited occupational stressors in management as well as the occupational stressors associated with various health professionals as well as managers in general were reviewed. The only two studies identified examining the stability of stressors over time were discussed. A section on aging demographics completed this chapter.

It is now clear that many of the employee problems that cost money and performance as well as employee health and well being originate in physiological stress. Stress directly and indirectly adds to the cost of doing business, and it detracts from the quality of working life for a very large number of American workers (Albrecht, 1979, p. 29).

Although the aforementioned quote is over 20 years old, it continues to hold true. In order for nursing home administrators to minimize negative organizational outcomes as well as potential negative health problems, the importance of stressors cannot be overlooked. Only by dissecting stressors can we clearly distinguish the role played by the stressors from that of our own adaptive measures of defense and surrender.

CHAPTER III

RESEARCH METHODS

The intent of this chapter is to present the procedures utilized to identify stressors, determine their magnitude estimations, and determine whether the occupational stressors identified via the nursing home administrators in 1994 remained stable from 1994/95 to 1999 in light of the changes in the nursing home industry. The methods section is described in terms of the three phases of data collection. Each phase will include the following six categories: (1) Sample Selection; (2) Instrumentation; (3) Procedures; (4) Human Subjects; (5) Data Analysis; and (6) Demographic Characteristics. Phase I also includes a section on the Mail Survey Techniques utilized throughout the study. To reiterate, the three phases of data collection are: (1) Phase I (instrument development); (2) Phase II (1994/1995 data collection); and (3) Phase III (1999 data collection). The research questions will commence this chapter. The research questions addressed were:

1. What are the most significant occupational stressors identified by practicing nursing home administrators?
2. What magnitude estimation is attributed to each of the identified stressors in 1994/1995 and 1999 relative to the median stressor?
3. What differences exist in the magnitude of the stressors across various demographic variables for 1994/1995 and 1999: personal information (age, ethnic background, gender, marital status); education level; licensure information; employment history; and work environment information (auspice, level of care provided, number of beds, number of private beds, number of Medicaid beds)?

4. What differences exist between administrators managing rural versus urban nursing facilities with regard to the stressors, and does this difference remain stable over time?
5. What, if any, change in the relative importance of occupational stressors among nursing home administrators has occurred over the past five years?
6. Are specific occupational stressors identified with specific "stress" levels?

Research Design

This study involves a cohort of nursing home administrators licensed in the state of Virginia who were sampled at two points in time, 1994/1995 and 1999. It was assumed that the two groups of administrators were independent. After a comparison of the two mailings utilizing Microsoft Excel, it was determined that only 82 (30.8%) of the administrators from the 1994/1995 remained in the 1999 mailing. Of those administrators interviewed in 1999 among the group of 82, eight did not return the 1999 questionnaire. As a result, the number of administrators who were in both mailings could be reduced to 74 (27.9%).

Furthermore, question number three in the 1999 survey asked the question "Did you complete this questionnaire in 1994/1995?" Only five administrators had completed both mailings. Additionally, four of the 1999 administrators responded to the question with the following responses: "unsure", "?", "don't think so", or "don't remember". At most, 3.4% of the 1994/1995 sample completed the 1999 survey. Consequently, the samples were treated as independent groups.

Phase I

Sample Selection

Population. The population consisted of all licensed nursing home administrators in Virginia who were practicing in a nursing facility and not a hospital long-term care unit as of June 1, 1994 (N=256). There were 132 (51%) male nursing home administrators and 124 (49%) female nursing home administrators.

The mailing list of nursing home administrators was purchased from the Virginia Department of Health: Office of Health Facilities Regulation (previously referred to as the "Division of Licensure and Certification"). The listing included all operating nursing facilities and hospitals with skilled care units in Virginia; facility addresses; number of beds; auspice; type of care provided (nursing facility and/or skilled); facility addresses; and current administrator as of June 1, 1994.

Sample. Fifty nursing home administrators were randomly selected to participate in Phase I. Thirty-three administrators from the population returned their test packets for a response rate of 66%.

Instrumentation

Demographic questionnaire. A demographic survey was developed by the researcher to obtain data in the following categories: (1) personal information (i.e., age and gender); (2) educational background; (3) licensure information; (4) employment history; and (5) work environment data (i.e., number of beds, auspice (public/private), and rural/urban location). The research committee met and approved the questionnaire prior to the initial mailing (see Appendix A).

Stressor Survey. Initially the current study sought to identify and rank occupational stressors experienced by nursing home administrators as well as to develop an instrument to measure stress among this population. The purpose was to tap into the unique stressors experienced by nursing home administrators, as the stressors identified in the available stress instruments were too general. The purpose changed after Phase II from instrument development to stability of stressors secondary to the legislative turmoil occurring in the nursing home industry.

The questionnaire used in this phase was a simple statement asking nursing home administrators to identify up to five of the most significant occupational stressors encountered in the nursing home environment as well as a median occupational stressor. This method was borrowed from Frazer, Kush, and Richardson (1984). See Appendix A for a copy of the initial stressor questionnaire.

Nursing home administrators listed between zero and five stressors they felt were the most significant within the nursing home environment. A total of 151 occupational stressors were obtained from the 33 administrators (see Appendix A). Similar stressors from the list of 151 were grouped and given a new identification/classification. This procedure was carried out by two researchers (the doctoral student and the Ph.D. committee chair who was an expert in the area of stress and health) independently, and then compared to obtain the final list of stressors. The final occupational stressor survey resulted in a total of 35 stressors and can be seen in Table 1. Thirty-five stressors have been shown to be an appropriate number to employ for the purposes of this type of research (Holmes & Rahe, 1967; Frazer, Kush, & Richardson, 1984; Sechrist, Coleman & Frazer, 1994; Sechrist & Frazer, 1990, 1992; Frazer, Sechrist, & Rettie, 1994).

Table 1

Final List of Stressors as Perceived by Nursing Home Administrators

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1. Federal and State inspections
 2. Unrealistic expectations/demands of State/Federal regulators
 3. Unrealistic family expectations regarding resident care
 4. Duplication and repetition of bureaucratic paperwork
 5. Lack of public knowledge
 6. Long hours
 7. Families/residents who chronically complain
 8. Increased demands from insurance companies and case managers
 9. Retaining qualified/competent staff
 10. Employee disciplinary actions/termination
 11. Limited resources/budgetary constraints
 12. Attitudes of staff
 13. Recruitment and hiring of competent/qualified staff
 14. Staff turnover/shortages
 15. Inadequate reimbursement rate from Medicaid (difficulty making profit)
 16. Too little time to spend with residents
 17. Relying on non-management nurses to serve as managers
 18. Ever changing and increasing number of regulations
 19. Maintaining census/occupancy
 20. Attitude of inspectors
 21. Excessive number of meetings
 22. Staff who are not dedicated
 23. Keeping current with ever changing regulatory concerns
 24. Staff/resident injuries
 25. Corporate intervention in daily operation
 26. Lack of educational CEU availability to maintain administrative licensure
 27. Growing concern over health care reform
 28. Market competition (e.g. for private pay and overall occupancy)
 29. Maintaining high quality care
 30. Psychological status of residents
 31. Lack of communication between staff
 32. Contact by an attorney
 33. Resident/family conflict
 34. Employee problems
 35. Maintaining financial viability of residents
-

A median occupational stressor was defined as the occupational stressor considered to be somewhere in the middle of the continuum from least to most stressful. The median stressor, "theft of resident's personal belongings," was obtained from the responses to the question "Please identify a median occupational stressor, the one you consider to be somewhere in the middle of the continuum from least to most stressful" asked on the stressor questionnaire in Phase I. Initially the median stressor was to be based solely on frequency. The median stressor identified by each of the 25 administrators who responded to this question was placed on a list. Similar median stressors were grouped and reclassified (as with the occupational stressors). Two stressor categories emerged: theft of a resident's belongings (identified five times) and excessive paperwork (identified four times). Unfortunately, most of the administrators listed the median stressor as the one in the middle of the occupational stressors they previously listed as having the largest impact on their role as a nursing home administrator. To confirm the median stressor, the researcher contacted five nursing home administrators who identified the median stressor "theft of a resident's belongings" as somewhere in the middle of the continuum from least to most stressful. Vinton and Mazza (1994) looking at nursing home satisfaction/dissatisfaction found that theft of resident's belongings (the median stressor in this study) was one of the most frequently reported complaints by family members.

The finalized stressor questionnaire used in Phases II and III asked respondents to determine the stressfulness of each individual item (stressor) in comparison to the median stressor "theft of resident's personal belongings" utilizing the following anchored rating system developed initially by Holmes and Rahe (1967) and refined by Musada and Holmes (1967):

- (1) If the item listed was "less" stressful than the median stressor then rate it between 1 and 499;
- (2) If the item listed was as "equally" stressful as the median stressor then rate it a 500;

(3) If the item listed was "more" stressful than the median stressor then rate it between 501 and 1000; and lastly (4) if the item listed "does not affect you" in any way then give it a rating of zero (0). Quantification of small perceptual differences between stressors was made possible with such a large response range (0 to 1000). The final aspect of the questionnaire involved having the respondents indicate the number of times in the last six months they had experienced each of the items (stressors). Due to a poor response rate to the latter question however, this section was eliminated from the final analyses. See Appendix B for the resulting stressor questionnaire.

Procedures

The first phase of this research included two mailings.

Mailing 1. A test packet was mailed to each of the administrators on Tuesday, August 2, 1994. Contents of the test packet can be seen in Appendix B. Mailing labels were generated and placed on each of the 50 packets. Contents of the test packet included the following:

- a. Cover Letter which introduced the purpose of the study; the importance of the respondent's participation; a promise of confidentiality; a number to call if questions should arise; and a statement of appreciation.
- b. Stressor Survey that asked respondents to identify up to five of the most significant stressors encountered in the workplace as well as a median occupational stressor (a stressor considered to be somewhere in the middle of most stressful to least stressful).
- c. Demographic Questionnaire that covered the following areas: personal information; educational background; licensure information; employment history; and work environment data.

Mailing 2. A duplicate test packet was mailed two weeks later (Tuesday, August 16,

1994) to the same 50 licensed administrators who previously received a packet. A statement was made thanking those who had already mailed in the test packet and appealing again to those who had not. In addition a number to contact the researcher or the doctoral advisor was provided in the event the administrator had any questions or concerns with regard to the completion of the test packet. Only the cover letter changed from the initial mailing.

The updated letter can be seen in Appendix C.

Mail Survey Techniques

Many of the questionnaire/test packet construction techniques for all three phases were borrowed from Dillman's (1978) "Total Design Method" (TDM). First, initial and follow-up cover letters for all three phases of the study were developed utilizing Dillman's method. Dillman pointed out a number of pitfalls to avoid in the opening paragraph of a cover letter which included the words "questionnaire" or "survey", who the researcher is, the statement "your help is needed" or "to complete the Ph.D. degree at my university I am required to write a dissertation...." In the cover letter of the initial mailing the following elements were suggested and utilized in the current research:

Paragraph 1: Explanation of the study

Paragraph 2: Importance of the recipient

Paragraph 3: Promise of Complete Confidentiality

Paragraph 4: The studies usefulness and a "Token" reward for participation

Paragraph 5: Statement of appreciation

Other cover letter suggestions used included: dating the letter in accordance with the mailing date; cover letter name and address in normal business letter position; a personal

signature in blue ballpoint ink; and official Old Dominion University, College of Health Sciences letterhead.

The particular day of the week and whether the mailing day was near a holiday were both areas Dillman (1978) had examined. He found the most successful day to mail out questionnaires was on a Tuesday as it avoided the weekend back up and still made it possible for the packets to arrive before the end of the week. All mailings for the current research were mailed on a Tuesday.

Human Subjects

Participation in the study was both voluntary and anonymous. The cover letter in the Phase I test packet indicated "by completing the questionnaire you are granting permission to take part in this research". Phase I questionnaires were approved by the Old Dominion University Human Subjects Review Board after the study had been completed.

Data Analysis

All data analysis was computed using the statistical package SPSS, version 9. Descriptive statistics were used to describe the demographic characteristics of the Phase I nursing home administrators. In particular, frequencies and means were obtained for the demographic survey data.

Demographic Characteristics

Personal information. Of the 50 administrators who were mailed the survey, 33 responded. Table 2 shows the demographic distribution of the Phase I nursing home administrators who completed the questionnaire. Of the 33 administrators who responded to the survey, 20 (60.6%) were female and 13 (39.4%) were male. All respondents were Caucasian. Their ages fell into the following ranges: 18-29 years (18.2%), 30-39 years

Table 2

Demographic Characteristics of Phase I Nursing Home Administrators

Characteristics	N	%
Gender		
Female	20	60.6
Male	13	39.4
Age		
18-29	6	18.2
30-39	10	30.3
40-49	8	24.2
50-59	9	27.3
Marital Status		
Married	27	84.3
Single	2	6.3
Divorced	3	9.4
Ethnic Background		
Caucasian	33	100.0
Education		
Associates	6	18.2
Bachelors	18	54.5
Masters	6	18.2
Doctorate	1	3.0
Other	2	6.0

(30.3%), 40-49 years (24.2%), 50-59 years (27.3%). Thus, about 50 % of the administrators were 40 years or older and 50% were below 40 years. Twenty-seven (84.3%) of the administrators were married; two (6.3%) were single and three (9.4%) were divorced.

Educational Background. Phase I nursing home administrators held a diverse educational background. Six administrators held an associates degree, 18 (54.5%) held a bachelors degree, 6 (18.2%) held a masters degree, 1 (3%) held a doctorate degree. Of the remaining two administrators (6.1%), one held a nursing diploma and the other had completed 3 years of college with a concentration in Dance. Demographic characteristics can be seen in Table 2.

Licensure Information. Administrators had held nursing home administration licenses from as little as 24 months to 276 months (2 years to 23 years). The overwhelming majority of administrators obtained their license through the Administrator-in-Training (AIT) program (66.7%), six (18.2%) from the 400 hour internship, and four (12.1%) via other means. Table 3 presents licensure data of the nursing home administrators.

Employment Information. Administrators had been in their current position from two months to 15 years ($M = 52.2$ months or 4 years, 4 months). The total length of time employed as a nursing home administrator ranged from one month to 276 months or 23 years ($M = 93.2$ months or 7 years, 9 months). Table 3 also presents employment data.

Work Environment. The majority of the facilities ($N = 23$) were located in an urban environment (69.7%) and 10 were located in a rural environment (30.3%). Only one (3.0%) facility was public, 19 were private, for profit (57.6%), and 11 were private, not for profit (33.3%). Two respondents did not answer this question.

Table 3

Employment History of Phase I Nursing Home Administrators

Characteristics ^a	Minimum	Maximum	M	SD
Months licensed	24	276	109.5	72.9
Months employed as NHA	1	276	93.2	70.6
Months in current position	2	180	52.2	45.1
Hours worked per week	37.5	70	47.7	6.6

^aN = 32 for each group.

Of the 33 facilities 7 (21.2%) provided nursing facility level of care only, 2 (6.1%) provided skilled care only, 11 (33.3%) provided nursing facility and skilled care; none provided specialized care alone, and 13 (39.4%) provided all three levels. The total number of beds in each facility ranged from 37 to 262 ($M = 128.4$ beds). The average monthly occupancy rate ranged from 80% to 100%. In terms of staffing, the number of full time employees ranged from 40 to 206 ($M = 97.8$). The number of senior level staff such as assistant administrators and department heads ranged from 0 to 14 ($M = 4.1$). The average number of hours administrators worked per week ranged from 37.5 hours to 70 hours ($M = 47.7$ hours) (see Table 3). All but 5 of the facilities were part of a system (84.8% part of a system, 15.2% not part of a system). Questions 18 and 19, related to the number of private rooms and Medicaid beds, were thrown out due to their ambiguity (pointed out by a number of the respondents). This flaw was corrected in the Phase II questionnaire and therefore comparisons between these two factors could not be made.

Phase II

Sample Selection

Population. The population consisted of nursing home administrators in Virginia practicing in a nursing facility and not a hospital long-term care unit as of June 1, 1994 ($N=256$). This is the same population utilized in Phase I, thus the number of male administrators remained at 132 (51%) and female administrators at 125 (49%). To increase the response rate, the administrators used in Phase I were also used in Phase II.

The 1994 mailing list of nursing home administrators purchased from the Virginia Department of Health: Office of Health Facilities Regulation (previously referred to as the "Division of Licensure and Certification") used in Phase I was again used. As noted in Phase I

the listing included all operating nursing facilities and hospitals with skilled care units in Virginia; facility addresses; number of beds; auspice; type of care provided (nursing facility and/or skilled); facility addresses; and current administrator as of June 1, 1994.

Sample. All 256 licensed, practicing nursing home administrators in Virginia were mailed test packets in phase II of the study. One hundred and fourteen administrators returned their test packets, which yielded a 45% response rate.

Instrumentation

The occupational stressor survey developed in Phase I was utilized in this phase. The demographic questionnaire developed in Phase I was again utilized. Some minor improvements were made secondary to suggestions made from nursing home administrators in Phase I. Question 18 initially stated “number of private beds” and changed to “number of private rooms”; question 19 changed from “number of Medicaid beds” to “number of Medicaid certified beds”; the “number of Medicare certified beds” was added in Phase II; and lastly question number 21 was broken down into number of senior staff and number of other department heads (see Appendix D).

Procedures

The second phase included two mailings and occurred four months (19 weeks) after the final mailing in Phase I. Ample time was allotted between the mailings to provide time to gather, edit, randomize, and organize the results obtained from Phase I.

Mailing 1. On the initial mailing (Tuesday, December 27, 1994) of Phase II, all administrators were mailed a test packet including the following:

- a. Cover Letter which introduced the purpose of the study; the importance of the

respondent's participation; a promise of confidentiality; a number to call if questions should arise; a method to obtain research results if interested; and a statement of appreciation.

b. Stressor Questionnaire developed in Phase I that contained the final list of 35 occupational stressors. Respondents were asked to rank the stressors and identify the number of times each stressor had occurred in the past 6 months.

c. Revised Demographic Questionnaire based on respondent's input from the initial mailing in Phase I.

The test packet utilized in the initial mailing of Phase II can be viewed in Appendix D.

Mailing 2. A follow-up postcard was mailed to all 256 nursing home administrators January 10, 1995, exactly two weeks after the initial mailing in Phase II. See Appendix E for a copy of the postcard.

Human Subjects

Participation in the study was both voluntary and anonymous. As in Phase I the cover letter in the Phase II test packet indicated "by completing the questionnaire you are granting permission to take part in this research". Phase II questionnaires also met the Old Dominion University Human Subjects Review Board criteria. The approval was again given after the completion of the study.

Data Analysis

Descriptive statistics were used to determine the demographic characteristics of the nursing home administrators and the facility they manage. Magnitude estimations were computed for each of the 35 occupational stressors to determine their relative stressfulness.

Bivariate statistics were also utilized. The stressor data was not normally distributed and therefore violated the assumptions underlying parametric statistics, thus

nonparametric statistics were used. Mann-Whitney U tests (versus Independent t-tests) were used to investigate the degree of association between key demographic variables (two group comparisons) and each of the 35 stressors. The Kruskal-Wallis, the nonparametric equivalent to the One-Way Analysis of Variance, was used to compare demographic variables with at least three groups. A Kruskal-Wallis was also computed to compare the 35 occupational stressor groups (Independent Variable - Nominal) on the 35 occupational stressor ratings (Dependent Variable - Ratio) to determine if there were any differences between the 35 stressors in 1994/1995. Post hoc Mann-Whitney U tests were performed on variables found to be significant with three or more groups to determine the location of the differences. As there were 35 comparisons made for each independent variable (demographic variables) for all bivariate analyses, a p-value of .01 was selected to reduce the chance of a Type I error (rejecting the null hypothesis when it is actually true).

The reliability of the stressor survey was also examined in Phase II. To determine the instruments reliability both the Cronbach's alpha and Spearman Brown techniques were used. Validity was determined using content and face validity techniques.

Demographic Characteristics

Personal and educational background. Descriptive statistics were utilized to analyze the demographic characteristics. There were a higher number of male administrators (57.7%) than female administrators (42.3%). This was somewhat representative of the population of nursing home administrators in Virginia with 51% male and 49% female administrators. Other sample characteristics could not be compared to the general population of nursing home administrators in Virginia, as the data could not be obtained. The Center for Quality Health Care Services and Consumer Protection who

license nursing facilities, the Department of Health Professions (Board of Nursing Home Administrators) who license the administrators, and the Virginia Health Care Association, the professional organization for nursing home administrators in Virginia, all were unable to provide the information. Each organization stated they did not track demographic data for the administrators. As the researcher had a mailing list for each phase, the number of male and female administrators could be determined.

The majority of the administrators who returned their survey were Caucasian (91.9%), followed by Native Americans (4.5%), and African-Americans (3.6%). Age ranges and the percentage falling within that category were as follows: 18-29 years (8%); 30-39 years (25.7%); 40-49 years (35.4%); 50-59 years (26.5%); and 60+ years (4.4%). Eighty-eight of the administrators were married (79.3%), seven were single (6.3%), 10 were divorced (9.0%), and six were widowed (5.4%). About eighty percent of the administrators had at least a bachelor's degree. Level of education was as follows: High school diploma (N = 5, 4.4%); associates degree (N = 13, 11.4%); bachelors degree (N = 63, 55.3%); masters degree (N = 25, 21.9%); and other source of educational background (N = 5, 4.4%). Table 4 presents the demographic characteristics of the Phase II administrators.

Licensure information. Nursing home administrators held their licenses from as few as 10 months to as many as 342 months (28 years and 6 months). The method most frequently utilized to obtain their license was through the A.I.T. program (N = 88, 77.2%). Fifteen (13.2%) administrators obtained their license through the 400 hour internship and 11 (9.6%) through other means such as the grandfather clause. Table 5 presents the frequencies and percentages for the licensure data.

Table 4

Demographic Characteristics of Phase II Nursing Home Administrators

Characteristics	N	%
Gender		
Female	47	42.3
Male	64	57.7
Age		
18-29	9	8.0
30-39	29	25.7
40-49	40	35.4
50-59	30	26.5
60+	5	4.4
Marital Status		
Single	7	6.3
Married	88	79.3
Divorced	10	9.0
Widowed	6	5.4
Ethnic Background		
African-American	4	3.6
Caucasian	102	91.9
Native American	5	4.5

Table 4 (Continued)

Characteristics	n	%
Education		
High School	5	4.4
Associates	13	11.4
Bachelors	63	55.3
Masters	25	21.9
Doctorate	3	2.6
Other	5	4.4

Table 5

Employment History of Phase II Nursing Home Administrators

Characteristics	N	Minimum	Maximum	M	SD
Months licensed as NHA*	114	10	342	9.0	76.4
Months employed as NHA	114	3	342	107.9	75.3
Months in current position	114	1	342	54.5	58.9
Hours worked per week	113	37.5	65	48.5	6.3

Note. *NHA = Nursing Home Administrator

Employment information. One administrator had been employed, licensed, and in his current administrative position for 28 years and 6 months. The range for length of time in their current administrative position was from one month to 342 months or 28 years, 6 months ($M = 54.5$ months). Similarly, the total length of time employed as a nursing home administrator ranged from three months to 28 years, 6 months ($M = 107.9$ months). See Table 5 for employment data.

Work environment. There was only one more urban facility than rural facility, 57 and 56 respectively. In terms of auspice, 70 (63.1%) were private for profit; 34 (30.6%) were private, not for profit; and 7 (6.3%) were public. Of the 114 facilities, 74 provided nursing facility care only; 51 provided skilled care only; 4 provided specialized care only; and 30 provided nursing facility, skilled care and specialized care. The number of beds in each facility ranged from 24 to 327 with a mean of 114.6. The average monthly occupancy ranged from 75% to 100%. The number of private rooms ranged from zero to 187 and Medicaid certified beds from 0 to 277. There were between zero and 100 Medicare certified beds.

In terms of staffing, the total number of FTE ranged from 17 to 500 ($M = 103.9$). The number of senior staff was broken down into assistant administrator and other department heads such as Director of Nursing and Social Services Director. The number of department heads ranged from 2 to 40 with a mean of 8.26%. The majority of the facilities (78.9%) had no senior staff and the remaining facilities had from one to 10. In terms of an average workweek, administrators reported anywhere from 37.5 hours to 65 hours per week (see Table 5). Lastly, 77 (69.4%) of the facilities were identified as part of a system and the remaining 34 (30.6%) were not.

Phase III

Sample Selection

Population. The population was the same as that used in Phase II. It consisted of nursing home administrators in Virginia practicing in a nursing facility and not a hospital long-term care unit as of June 3, 1999 ($N = 265$). There were 134 (51%) male administrators and 131 (49%) female administrators. This was the same split found among the 1994/1995 nursing home administrators.

The 1999 listing of nursing home administrators was purchased from the Center for Quality Health Care Services and Consumer Protection previously referred to as the Virginia Department of Health: Office of Health Facilities Regulation. The listing included all operating nursing facilities and hospitals with skilled care units in Virginia; facility addresses; number of beds; auspice; type of care provided (nursing facility and/or skilled); facility addresses; and current administrator as of June 3, 1999.

Sample. All 265 licensed, practicing nursing home administrators in Virginia were mailed test packets in phase III. Eighty-four administrators returned their test packet for a 30% response rate.

Telephone interview sample. Secondary to the lower response rate in this phase when compared to Phase II, 54 administrators were contacted to complete a telephone interview. Of the 54 administrators successfully contacted, 33 had not returned their test packets and agreed to be interviewed. Nursing home administrators who were interviewed via the telephone and those who returned the test packets were compared. The following questions were asked:

- (1) How long have you been a nursing home administrator?

(2) How would you rate your current level of stress (high, moderate, mild, somewhat, none)?

(3) What level (s) of care does your facility provide?

(4) Gender: Male or Female?

(5) What is the total number of beds in your facility?

(6) What is the auspice of your facility?

No significant differences were found between Phase III administrators who returned their test packets and Phase III administrators who did not on any of these factors.

Instrumentation

Demographic questionnaire. The demographic questionnaire developed in Phase I and revised in Phase II was utilized. Seven questions were deleted from the Phase II questionnaire. Question #5 "Income"; question #6 "total number of individuals 15 years of age and younger and 65 years of age and older that live in your household"; questions #8 "college major"; question #9 "length of time licensed as a nursing home administrator"; and questions #19 and #20 "number of Medicaid" and "Medicare beds". These questions were eliminated to make room for a new section on stress levels and stressor information. The questions eliminated were those assumed to have little, if any, impact on the shift over time. There was no reason to believe the deleted questions had changed significantly since the 1994/1995 mailing.

A new section with five questions was added to the questionnaire. The first question asked respondents to indicate stressors not listed in the 35. One question asked "Did you complete the questionnaire in 1994/1995?" Even though the same population was surveyed, and since the study was initially not intended to be longitudinal, it was

impossible to determine if the respondents in 1994/1995 were the same respondents being surveyed in 1999. The results of this question were inconclusive however, as many of the administrators did not respond or could not remember. The remaining three questions were related to the respondent's actual perceived "stress" level (see Appendix F). The purpose of the demographic survey was to determine if any of the variables acted as confounders or intervening variables in the shift over time. The focus of this research was the stressors themselves and whether there was any change over time. The main independent variable therefore was time (1994/1995 and 1999) and not the demographic variables.

Stressor Survey. The occupational stressor survey used in Phase II and developed in Phase I was again utilized. The 35 occupational stressors and the median stressor identified in Phase I continued to make up the stressor survey.

Procedures

The final phase included two mailings and occurred almost five years after Phase II.

Mailing 1. On the initial mailing (Tuesday, August 10, 1999) of Phase III, all 265 administrators were mailed a test packet including the following:

- a. Cover Letter which introduced the purpose of the study; the importance of the respondent's participation; a promise of confidentiality; a number to call if questions should arise; a method to obtain research results if interested; and a statement of appreciation.

- b. Occupational Stressor questionnaire developed in Phase I and utilized in Phase II.

Respondents were asked to rank the stressors and identify the number of times each stressor had occurred in the past 6 months.

c. Demographic Questionnaire, which included demographic data as well as a section on stress and stressors not previously utilized.

The test packet utilized in Phase III can be viewed in Appendix F.

Mailing 2. A follow-up postcard was mailed to all 265 nursing home administrators on Tuesday, August 24, 1999. See Appendix G for a copy of the postcard.

Human Subjects

The Phase III cover letter stated, "your responses are both anonymous and voluntary" as did the questionnaires in the previous phases. The Old Dominion University Human Subjects Review Board approved use of this test packet after the study had been completed.

Data Analysis

The same statistical approach used in Phase II was applied to the Phase III data. Additional procedures were also required for further data comparisons. Chi square tests, independent t-tests, and one-way analysis of variances were conducted on the demographic variables of the Phase III nursing home administrators who completed and returned the test packet and nursing home administrators who did not return the packet but were interviewed via the telephone.

Comparisons were made between the Phase II and Phase III data. Mann-Whitney U tests were performed to compare each of the 35 stressors from 1994/1995 (Phase II) to the same 35 stressors in 1999 (Phase III). In addition, demographic data from 1994/1995 and 1999 were compared.

A number of data transformations were attempted in an effort to analyze the data further. The following specific transformations were computed: (1) the square root of the

stressor value; (2) one divided by the square root of the stressor value; (3) the square root of the stressor value; (4) the exponential (antilog) of the stressor value; (5) logarithms; and (6) the inverse (one divided by the stressor value). None of the computations resulted in data that approximated the normal curve, thus parametric techniques could not be applied and further statistical analyses were not computed.

Demographic Characteristics

Personal and educational background. There were exactly 42 male administrators (50.0%) and 42 female administrators (50.0%). The majority of the administrators were Caucasian (88.1%), followed by African-Americans (8.3%). Hispanics, Native-Americans, and Asian/Pacific Islanders accounted for 3.6% of the sample with each represented by a single administrator. Age ranges and the percentage falling within that category were as follows: 18-29 years (11.9%); 30-39 years (19.0%); 40-49 years (29.8%); 50-59 years (33.3%); and 60+ years (6.0%). Sixty-five of the administrators were married (77.4%), 10 were single (11.9%), eight were divorced (9.5%), and one was widowed (1.2%). Over 90% of the administrators had at least a bachelor's degree. Level of education was as follows: high school diploma (N=1, 1.2%); associates degree (N=2, 2.4%); bachelors degree (N=60, 52.6%); masters degree (N=25, 29.8%); and other source of educational background (N=5, 6.0%). Unlike the previous phases, none of the respondents held a doctorate degree. Refer to Table 6 for a demographic breakdown of the Phase III nursing home administrators.

Licensure information. The method most frequently utilized to obtain their license was through the A.I.T. program (N=58, 69.9%). Ten (12.0%) administrators obtained

Table 6

Demographic Characteristics of Phase III Nursing Home Administrators

Characteristics	N	%
Gender		
Female	42	50.0
Male	42	50.0
Age		
18-29	10	11.9
30-39	16	19.0
40-49	25	29.8
50-59	28	33.3
60+	5	6.0
Marital Status		
Single	10	11.9
Married	65	77.4
Divorced	8	9.5
Widowed	1	1.2

Table 6 (Continued)

Characteristics	n	%
Ethnic Background		
African-American	7	8.3
Asian/Pacific Islander	1	1.2
Caucasian	74	88.1
Hispanic	1	1.2
Native-Americans	1	1.2
Education		
High School	1	1.2
Associates	2	2.4
Bachelors	51	60.7
Masters	25	29.8
Other	5	6.0

Note. There were no significant differences between Phase II and Phase III administrators on any of these characteristics.

their license through the 400 hour internship and 15 (18.1%) administrators through some other means of training.

Employment information. The question asking respondents how long they had been employed in their current administrative position was not calculated as it erroneously asked length of time “training” in current administrative position. Thus, data comparisons between phases II and III will not be made. However, the total length of time employed as a nursing home administrator ranged from two months to 480 months ($M = 116.9$ months).

Work Environment. There were two more rural facilities than urban facilities, 43 and 41 respectively. In terms of auspice, 53 (63.1%) were private for profit; 22 (26.2%) were private, not for profit; and 9 (10.7%) were public. Of the 84 facilities, 57 provided nursing facility care; 51 provided skilled care; 4 provided specialized care; and 18 provided nursing facility, skilled care and specialized care. The number of beds in each facility ranged from 30 to 317 ($M = 113.0$). The average monthly occupancy ranged from 75% to 102% ($M = 93.3$). The number of private rooms ranged from 0 to 158 ($M = 13.7$).

In terms of staffing, the total number of FTE ranged from 6 to 350 ($M = 102.4$). The number of senior staff was broken down into assistant administrator and other department heads such as Director of Nursing and Social Services Director. The number of department heads ranged from 2 to 32 with a mean of 8.6%. The majority of the facilities (85.7%) had no assistant administrator and the remaining facilities had from one to three. In terms of an average workweek, administrators reported anywhere from 37.5 hours to 90 hours per week ($M = 52.7$ hours) (see Table 7). Lastly, 61 (72.6%) of the facilities were identified as part of a system and the remaining 23 (27.4%) were not part of a system.

Phase II and phase III demographic comparisons. All demographics were compared.

Age, ethnic background, gender, marital status, educational background, method used to obtain nursing home administrator license, auspice, level of care provided, location of facility, and whether your facility was part of a system were all examined utilizing the chi square procedure. Analyses revealed no significant differences between the two phases

T-tests were used to compare phase II and phase III on the following continuous variables: total months employed as nursing home administrator; total number of beds; average monthly occupancy; number of assistant administrators; number of full time employees; number of department heads; average number of hours worked weekly; and months employed in current nursing home administrator position. Both average monthly occupancy and average number of hours worked each week revealed differences. Average monthly occupancy was significantly greater for Phase II administrators than Phase III administrators ($M = 96.4$ and 93.3 respectively, $p = .000$). Phase III administrators reported significantly higher average number of hours worked weekly than Phase II administrators ($M = 52.7$ and 48.5 respectively, $p = .000$). Demographic differences between the administrators in Phases II and III can be seen in Table 7.

Table 7

Demographic Differences Between Phase II and Phase III Nursing Home Administrators

Characteristic	Phase	
	II	III
Average monthly occupancy		
N	113	84
M	96.4	93.3
SD	.4	.3
Hours worked weekly		
N	113	84
M	48.5	52.7
SD	.6	.9

Note. Only significant mean differences at $p \leq .01$ are listed.

CHAPTER IV

RESULTS

The purpose of this study was to examine whether occupational stressors identified by nursing home administrators would endure the significant regulatory changes that took place over the past five years (1994/1995 to 1999) in the nursing home industry. The research questions addressed will again be reiterated:

1. What are the most significant occupational stressors identified by practicing nursing home administrators?
2. What magnitude estimation is attributed to each of the identified stressors in 1994/1995 and 1999 relative to the median stressor?
3. What differences exist in the magnitude of the stressors across various demographic variables for 1994/1995 and 1999: personal information (age, ethnic background, gender, marital status); education level; licensure information; employment history; and work environment information (auspice, level of care provided, number of beds, number of private beds, number of Medicaid beds)?
4. What differences exist between administrators managing rural versus urban nursing facilities with regard to the stressors, and does this difference remain stable over time?
5. What, if any, change in the relative importance of occupational stressors among nursing home administrators has occurred over the past five years?
6. Are specific occupational stressors identified with specific "stress" levels?

Results will be discussed in terms of phases II and III and will therefore be briefly addressed to refamiliarize the reader. Phase I was the instrument development phase and occurred in August 1994. Phase II took place from December 1994 to January 1995 and

entailed the mailing of a demographic questionnaire and the stressor instrument developed in Phase I to all practicing, licensed nursing home administrators in Virginia. Data for the final phase was obtained in August 1999 and was a replication of Phase II. Once again, all practicing, licensed nursing home administrators in Virginia were utilized.

Phase I

Phase I occurred in August 1994. The purpose of Phase I was to develop an instrument to measure stressors that could be used throughout this research endeavor. Phase I of the study yielded a 66% response rate, whereby 33 of the 50 randomly selected licensed nursing home administrators practicing in the state of Virginia as of June 1, 1994 returned their test packet. Demographic data was presented in the Phase I methods section.

Phase II

Phase II took place from December 1994 to January 1995 and entailed the mailing of a demographic questionnaire and the stressor instrument developed in Phase I to all practicing, licensed nursing home administrators in Virginia as of June 1, 1994 (N = 257). One respondent stated his facility had been inappropriately categorized, thus did not complete the test packet. Therefore the total population was recalculated as 256. Of the possible respondents, 114 nursing home administrators returned their test packets yielding a 45% response rate.

Phase III

The final phase occurred in August 1999 and was a replication of Phase II. Phase III included the entire population of practicing nursing home administrators in Virginia as of June 3, 1999 (N=265). Of the possible respondents, 84 nursing home administrators returned their test packets yielding a 30% response rate. Secondary to the lower than anticipated response rate, a

follow-up telephone interview was conducted with 55 subjects, 33 of which stated they had not responded to the Phase III mailings.

Phase II Results

Stressor Instrument Reliability

Two measures of internal consistency were utilized to obtain reliability estimates for the ratings of the 35 stressors, Cronbach's alpha and the Spearman-Brown. Both measures rely on a single administration of the test. An internal consistency score of .91 was estimated via the Cronbach's alpha procedure. Utilizing the Spearman Brown procedure alphas of .90 (equal-length) and .90 (unequal-length) were obtained. A grand mean estimate of .90 was determined based on the resulting three alpha coefficients from both internal consistency measures. An alpha value of 1.00 is indicative of the most reliable instrument. Alpha values, according to Carmines and Zeller (1979), must be greater than .80 for a scale to be considered sufficiently reliable and internally consistent for wide usage. Thus, the overall stressor ratings were reliable and had internal consistency.

Stressor Instrument Validity

Content validity. The stressor instrument was shown to have content validity through the analysis of each individual item. Basically, content validity is a judgment call. The committee chairperson and the researcher agreed that the 35 items were representative of the possible domain of items experienced by nursing home administrators. Content validity was further agreed upon secondary to the fact that nursing home administrators themselves identified the items.

Face validity. Two nursing home administrators assessed the face validity of the instrument, a researcher who has conducted research in the area of health professionals and

occupational job stress, and the researcher. All reviewers were in agreement that the individual items appeared, at face value, to measure the construct of stressor. Most importantly, the nursing home administrators, the individuals intended to utilize the instrument felt the content measured what it was supposed to measure.

Research Questions 1 and 2

Mean stressor scores were obtained for each of the 35 stressors (each of the dependent variables) to determine the most significant occupational stressors as perceived by practicing nursing home administrators. The items serving as the biggest source of stress relative to the median stressor "theft of a resident's belongings" were "state/federal inspections" ($M = 747$), "unrealistic expectations/demands of state/federal regulators" ($M = 631$), "maintaining high quality care" ($M = 622$), "retaining qualified staff" ($M = 611$), and "unrealistic family expectations regarding resident care" ($M = 584$). The least stressful items were "lack of educational CEU availability to maintain administrative licensure" ($M = 124$), "increased demands from insurance companies and case managers" ($M = 247$), "growing concern over health care reform" ($M = 255$), "maintaining financial viability of residents" ($M = 293$), and "corporate intervention in daily operation" ($M = 295$).

The grand mean, or mean of all stressor means, was 453 with 20 items ranked above and 15 items ranked below. Relative values/adjusted ratings were computed for easier stressor comparisons ($\text{stressor mean}/500 \times 100$). The stress attributed to "state/federal inspections" (adjusted rating = 149) is almost double that of "relying on non-management nurses to serve as managers" (adjusted rating = 75) and "resident/family conflict" (adjusted rating = 75). Table 8 provides the mean stressor ratings and their associated relative value in descending order.

Table 8

Phase II Stressor Ratings in Descending Rank Order Among Nursing Home Administrators

Stressor	N	M	SD	Relative Value
Federal/State Inspections	114	746	254	149
Unrealistic expectations of inspectors	113	631	310	126
Maintain high quality care	113	622	277	126
Retain qualified/competent staff	112	611	249	124
Unrealistic Family Expectations	113	584	245	117
Increasing number of Regulations	113	567	261	113
Staff turnover/shortages	113	563	277	113
Inadequate MCD Reimbursement	113	556	333	111
Recruitment/hiring qualified staff	113	541	265	108
Maintaining Census/Occupancy	112	520	316	104
Limited resources/budget constraints	113	517	303	103
Chronic complainers	113	505	273	101
Employee problems	112	502	251	100
Employee disciplinary actions	113	491	249	98
Market competition	112	490	298	98
Keeping current with regulations	113	487	260	97
Attitudes of staff	113	483	235	97
Too little time with residents	112	474	275	95
Attitudes of inspectors	113	466	319	93
Duplication of bureaucratic paperwork	113	464	265	93
Lack of communication between staff	113	450	261	90
Staff/resident injuries	111	443	263	89
Staff who are not dedicated	113	442	273	88
Psychological status of residents	112	393	260	79
Relying on non-management nurses	109	374	317	75
Resident/Family conflict	113	374	259	75
Contact by an attorney	114	372	351	74
Lack of Public Knowledge	112	351	246	70
Long hours	112	324	281	65
Excessive number of meetings	111	308	253	62
Corporate intervention	111	295	316	59
Maintain Financial viability of resident	111	293	259	59
Concern over health care reform	112	255	241	51
Demands from insurance companies	110	247	263	49
Lack of CEU availability	112	124	231	25

Research Question 3

Bivariate analyses were performed on all of the demographic questionnaire items by the 35 stressors for Phase II. All of the stressors (or dependent variables) were found to be skewed therefore nonparametric statistics were used. The Mann-Whitney U which is the nonparametric equivalent of the independent t-test was used for the two group comparisons: males and females, whether the facility was part of a system, urban and rural locations, the level of care provided, average monthly occupancy rate, and whether the facility had an Assistant Administrator or not. As the Mann-Whitney U was performed 35 times for each independent variable, a probability level of .01 was selected to reduce the chance of a Type I error (rejecting the null hypothesis when it is actually true).

Hypotheses 1 - 3. None of the demographic variable hypotheses proposed in this study were supported. Male nursing home administrators were not more likely to rate the stressors "employee disciplinary actions/termination" and "employee problems" higher than females. Furthermore, female administrators were not more likely to rate the stressor "lack of communication" higher than male administrators. The results, did however, point to differences not proposed. Three gender differences were revealed and can be seen in Table 9. Female administrators rated "inadequate Medicaid reimbursement", "too little time to spend with residents", and "ever changing number of regulations" significantly higher (mean rank = 68.2, 70.6, and 65.1 respectively) than male administrators (mean rank = 46.4, 44.0, and 48.6). Probability levels for significant comparison were, in order, .000, .000, and .007.

Table 9

Gender Differences Among Phase II Stressors

Stressor	Gender	
	Female	Male
<u>Inadequate Medicaid reimbursement</u>		
N	46	64
Mean Rank	68.2	46.1
<u>Too little time to spend with residents</u>		
N	45	64
Mean Rank	70.6	44.0
<u>Ever changing/increasing regulations</u>		
N	46	64
Mean Rank	65.1	48.6

Note. Higher mean rank scores indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed.

Non-hypothesized bivariate results. The level of care provided at each facility was examined as to whether the particular level of care (nursing facility, skilled, specialized care, all levels) was provided or not provided. Only one significant difference was found whereby administrators who managed facilities providing all levels of care rated the stressor “unrealistic family expectations regarding resident care” significantly higher (mean rank = 70.5) than administrators of facilities that did not provide all levels of care (mean rank = 52.3, $p = .01$).

Whether the facility was part of a system or not revealed four significant differences as can be seen in Table 10. The following stressors were rated significantly higher ($p = .007$, $p = .000$, $p = .003$, and $p = .005$, respectively) “staff turnover/shortages”, “maintaining census/occupancy”, “corporate intervention in daily operations”, and “market competition for private pay and overall occupancy” by administrators from facilities that were part of a system (mean rank = 61.0, 62.0, 60.9, and 60.7, respectively) versus administrators from facilities not part of a system (mean rank = 43.3, 38.9, 41.4, and 42.4, respectively).

Average monthly occupancy was reclassified into two groups, an occupancy rate of 96% or less or an occupancy rate of 97% or higher. Not surprisingly facilities with occupancy rates at 96% or less rated “maintaining census/occupancy” significantly higher (mean rank = 66.6) than facilities with occupancy rates of 97% or above (mean rank = 50.0, $p = .009$). No differences were found between Administrators at facilities with Assistant Administrators and those at facilities without Assistant Administrators.

Non-hypothesized multivariate results. As the stressor data were not normally distributed and therefore violated the assumptions underlying the parametric One-way Analysis

Table 10

Facility Differences Among Phase II Stressors

Stressor	Part of a System	
	Yes	No
<hr/>		
Staff turnover/shortages		
N	76	34
Mean Rank	61.0	43.3
Maintaining census/occupancy		
N	76	33
Mean Rank	62.0	38.9
Corporate intervention in daily operations		
N	76	33
Mean Rank	60.9	41.4
Market competition for private pay residents		
N	75	34
Mean Rank	60.7	42.4

Note. Higher mean ranks indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed.

of Variance, the Kruskal-Wallis (the nonparametric analogue) was used to compare factors with at least three groups. As there were 35 comparisons made for each independent variable a probability level of .01 was used. The variables analyzed included: age, ethnicity, marital status, educational background, method used to obtain license, auspice, number of department heads, months employed as nursing home administrator, total beds in facility, number of FTEs, and average hours worked weekly. Significant differences were obtained for two of these comparisons, "marital status" and "method used to obtain license".

Significant differences were identified between the methods of obtaining a nursing home administrator's license and the stressor "market competition for private pay and overall occupancy" ($p = .006$). The three methods compared were Administrator-in-Training program, 400 hour internship, and other training. Post hoc Mann-Whitney U tests were used to determine the location of the significant differences. Nursing home administrators who completed an AIT program rated market competition significantly higher (mean rank = 51.8) than administrators who completed other training to obtain their license (mean rank = 27.2).

Marital status and two stressors "unrealistic expectations/demands of Federal and State regulators" and "ever changing and increasing number of regulations" revealed significant differences ($p = .01$ and $.003$, respectively). Marital status groups were single (never married), married, divorced, and widowed. Post hoc Mann-Whitney U tests were again performed to reveal the location of the significant differences. For the stressor "unrealistic expectations/demands of federal and state regulators", significant mean rank differences were found between single and divorced administrators ($p = .01$) and single and married ($p = .009$). Divorced administrators rated unrealistic demands from Federal and State regulators significantly higher (mean rank = 11.6) than single administrators (mean rank = 5.3). Similarly,

married administrators rated the unrealistic demands of the regulators significantly higher (mean rank = 49.67) than single administrators (mean rank = 21.8). For the stressor “ever changing and increasing number of regulations”, significant differences were found between married and widowed administrators (mean rank = 44.7 and 80.3 respectively, $p = .002$). Widowed administrators also rated this stressor significantly higher than single administrators (mean rank = 10.3 and 4.2 respectively, $p = .005$). Marital status differences can be seen in Table 11.

Research Question 4

Hypothesis 4. The null hypothesis stated that there were no differences between urban and rural nursing home administrator’s perceptions of stressors. This study failed to reject this. Significant differences were not found.

Phase III Results

Research Question 1 and 2

Mean stressor scores were obtained for each of the 35 occupational stressors in Phase III to identify the most significant stressors as perceived by nursing home administrators. Table 12 provides the mean stressor rating for each of the stressors. The most stressful items identified in phase III relative to the median stressor “theft of a resident's belongings” were “State/Federal inspections” ($M = 794$), “retaining qualified and competent staff” ($M = 742$), “staff turnover/shortages” ($M = 735$), “unrealistic expectations of State/Federal regulators” ($M = 707$), and “recruitment/hiring of competent qualified staff” ($M = 674$). The least stressful items were “lack of educational CEU availability” to maintain administrative licensure ($M = 108$), “maintaining financial viability of residents” ($M = 262$), “increased demands of insurance companies/case managers” ($M = 275$), “corporate intervention in daily operation” ($M = 318$), and “excessive number of meetings” ($M = 325$).

Table 11

Marital Status Differences Among Phase II Stressors

Stressor	Marital Status			
	Single	Married	Divorced	Widowed
N	7	87	10	6
Unrealistic demands Federal/State Regulators				
Mean Rank	5.3	——	11.6	——
Mean Rank	21.8	49.6	——	——
Ever changing and increasing regulations				
Mean Rank	——	44.7	——	80.3
Mean Rank	4.2	——	——	10.3

Note. Higher mean ranks indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed. —— = no significant difference found.

Table 12

Phase III Stressor Ratings in Descending Rank Order Among Nursing Home Administrators

Stressor	N	M	SD	Relative Value
Federal/State inspections	84	794	262	159
Retain qualified/competent staff	83	742	240	148
Staff turnover/shortages	83	735	250	147
Unrealistic expectations of inspectors	84	707	326	141
Recruitment/hiring of competent staff	82	674	249	135
Maintain high quality care	84	649	296	130
Increasing number of regulations	83	649	295	130
Attitudes of inspectors	84	581	329	116
Unrealistic family expectations	84	577	252	115
Inadequate MCD reimbursement	81	573	342	115
Maintaining census/occupancy	82	543	297	109
Staff/resident injuries	84	525	279	105
Chronic complainer (family/resident)	83	521	276	104
Keeping current with regulations	84	520	299	104
Employee problems	84	516	291	103
Attitudes of staff	84	490	258	102
Too little time with residents	83	490	278	98
Limited resources/budget constraints	83	480	302	96
Lack of communication between staff	84	477	284	95
Staff who are not dedicated	83	450	295	90
Duplication of bureaucratic paperwork	84	457	294	91
Employee disciplinary actions	84	447	276	89
Market competition	83	444	287	89
Long hours	84	432	294	86
Psychological status of residents	83	432	246	86
Lack of public knowledge	84	403	291	81
Resident/family conflict	84	397	283	79
Relying on non-management nurses	82	355	320	71
Concern over health care reform	84	351	309	70
Contact by an attorney	83	331	358	66
Excessive number of meetings	84	325	285	65
Corporate intervention	83	318	336	64
Demands from insurance companies	84	275	257	55
Maintain financial viability of resident	79	262	261	52
Lack of CEU availability	83	108	197	22

The grand mean (mean of all stressor means) was 468. Twenty items ranked above the grand mean and 15 items below. Relative values were again computed for easier stressor comparisons. The relative value attributed to the stressor state/federal inspections was 159; exactly double that of resident/family conflict (adjusted rating = 79).

Research Question 3

The same bivariate analyses utilized in Phase II were performed on all of the demographic questionnaire items by the 35 stressors. Since the stressor data (dependent variables) were again skewed, nonparametric statistics were necessary. The Mann-Whitney U, the nonparametric equivalent of the independent t-test, was used for the two group comparisons: males and females, whether the facility was part of a system or not, urban and rural locations, the level of care provided, whether the average monthly occupancy rate was 96% or less or 97% or higher, and whether the facility had an Assistant Administrator or not. As the Mann-Whitney U was performed 35 times for each independent variable, a probability level of .01 was again selected to reduce the chance of a Type I error (rejecting the null hypothesis when it is actually true) occurring.

Hypotheses 1- 3. The demographic hypotheses were again not supported. Male and female nursing home administrators rated the stressors "employee disciplinary actions/termination", "employee problems", and "lack of communication" similarly. Table 13 indicates that gender differences were found however. Female administrators ranked "too little time to spend with residents" significantly higher than male administrators (mean rank = 50.4 and 33.8 respectively, $p = .002$). Similarly, female administrators rated "staff who are not dedicated" significantly higher (mean rank = 49.2) than male administrators (mean rank = 34.7, $p = .006$).

Table 13

Gender Differences Among Phase III Stressors

Stressor	Gender	
	Female	Male
Too little time to spend with residents		
N	41	42
Mean Rank	50.4	33.8
Staff who are not dedicated		
N	42	41
Mean Rank	49.2	34.7

Note. Higher mean rank scores indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed.

Non-hypothesized bivariate results. Unlike Phase II, there were no significant differences between facilities that were part of a system versus not part of a system on any of the 35 stressors in Phase III. Like Phase II, significant differences were found between administrators with 96% occupancy rates or lower and 97% occupancy rates and higher on the stressor "maintaining census/occupancy rate" ($p = .004$). Not surprisingly, administrators who had lower occupancy rates ranked "maintaining census/occupancy rate" significantly higher (mean rank = 45.76) than administrators with lower occupancy rates (mean rank = 30.6). The level of care provided and whether or not the administrator had an assistant administrator revealed no significant differences.

Non-hypothesized multivariate results. The occupational stressor data was again not normally distributed and therefore violated the assumptions underlying the parametric One-way Analysis of Variance. The Kruskal-Wallis (the nonparametric analogue) was, therefore, used to compare factors with at least three groups. A probability level of .01 was again used secondary to the large number of comparisons made for each independent variable (35). The variables analyzed included: administrator's age, ethnicity, marital status, educational background, method used to obtain license, auspice, number of assistant administrators, number of department heads, months employed as nursing home administrator, total beds in facility, average monthly occupancy rate, number of private rooms, number of FTEs, and average hours worked weekly.

Only the variable "total months employed as a nursing home administrator" revealed significant differences utilizing the Kruskal-Wallis. The "total months employed" variable was regrouped into an ordinal level variable and resulted in five categories: (1) one month to 24 months; (2) 25 months to 60 months (5 years); (3) 61 months to 120 months (10 years); (4) 121

months to 220 months (20 years); and (5) 221 months to 418 months (40 years). A significant difference was found for this factor on the stressor "lack of communication between staff" ($p = .003$). Post hoc Mann-Whitney U tests were again performed to reveal the location of the significant differences. Administrators who had been employed for one month to 2 years rated lack of communication between staff significantly higher (mean rank = 17.0) than administrators who had been employed for 20 to 40 years (mean rank = 9.3, $p = .008$). Administrators who had been employed from five to 10 years also rated lack of communication between staff significantly higher (mean rank = 22.2) than administrators who had been employed for 20 to 40 years (mean rank = 10.9, $p = .001$).

Research Question 4

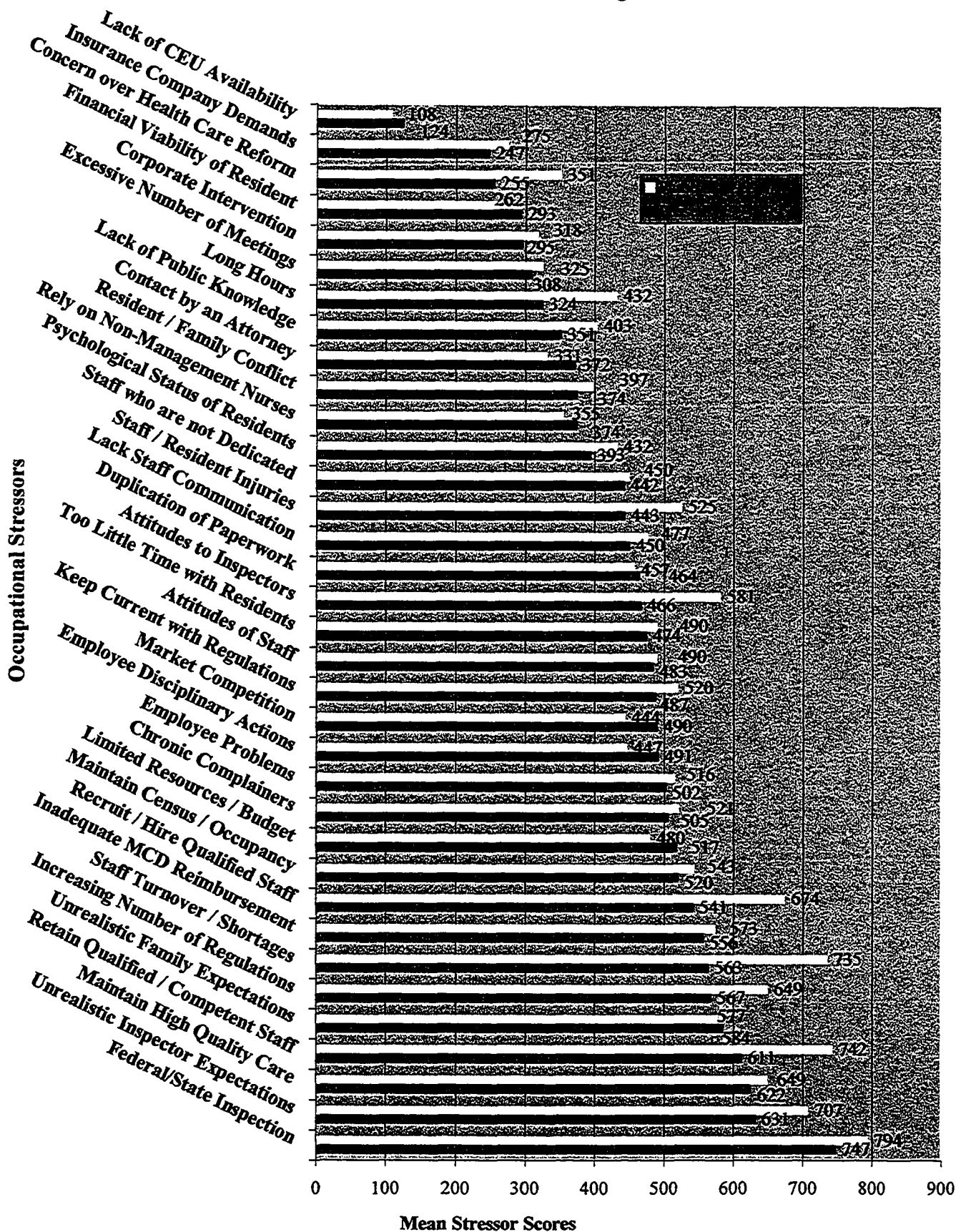
Hypothesis 4. The stressor "attitudes of staff" was found to be significantly different between rural and urban nursing home administrators. The null hypothesis was not supported. Rural administrators ranked the "attitudes of staff" significantly higher (mean rank = 49.2) than urban administrators (mean rank = 35.5, $p = .01$).

Phase II and Phase III Comparisons

Research Question 5

Hypothesis 5-12. Each of the 35 stressors from 1994/1995 (Phase II) was compared to its counterpart in 1999 (Phase III). Mann-Whitney U tests were again performed, as the data was not normally distributed. A comparison of mean stressor scores for nursing home administrators in Phases II and III can be seen in Figure 1. Hypotheses 5 – 11 were not supported. Nursing home administrators in 1994/1995 did not rate the stressors "federal and state inspections", "unrealistic expectations of inspectors", "maintaining high quality care", "increasing number of regulations", "attitudes of inspectors", "keeping current with

Figure 1. Mean stressor scores for Phase II and Phase III Nursing Home Administrators.



regulations”, and “concern over health care reform” significantly higher in 1999.

Hypothesis 12 was partially supported as 24 of the 28 stressors remained relatively stable. Of the 35 mean rank comparisons made, four stressors did however reveal significant differences. The stressor “long hours” was perceived as significantly more stressful for Phase III respondents (mean rank = 110.9) than Phase II respondents (mean rank = 89.2, $p = .008$).

“Retaining qualified and competent staff” and “recruitment of qualified and competent staff” were rated significantly higher ($p = .000$ and $p = .001$ respectively) for Phase III nursing home administrators (mean rank = 115.9, 113.9 respectively) than Phase II administrators (mean rank = 84.8, 86.5 respectively). The final significant difference between the phases was for the stressor “staff turnover and shortages”. Administrators in Phase III rated this stressor significantly higher (mean rank = 119.2) than Phase II Administrators (mean rank = 83.3, $p = .000$). Mean rank differences between Phase II and III can be examined in Table 14.

Research Question 6

Hypothesis 13. The Kruskal-Wallis was performed to identify differences between the self-reported current “stress” levels of nursing home administrators and the 35 occupational stressors. The current level of “stress” question was only asked in Phase III. The five groups compared were highly stressed, moderately stressed, mildly stressed, somewhat stressed, and not stressed. None of the respondents reported they were not stressed, thus only four groups were compared. The null hypothesis of no differences was not supported. Significant differences were identified between the five stress levels on the following stressors: Federal and State Inspections ($p = .007$), unrealistic expectations/demands of federal and state regulators ($p = .005$), retaining qualified/competent staff ($p = .000$), recruitment and hiring of competent staff ($p = .001$), staff turnover/shortages ($p = .001$), ever changing and increasing numbers of

Table 14

Mean Rank Stressor Differences Between Phase II and Phase III Nursing Home Administrators

Stressor	Phase	
	II	III
Long hours		
N	112	84
Mean Rank	89.2	110.9
Retaining qualified/competent staff		
N	112	83
Mean rank	84.9	115.9
Recruiting/hiring of competent staff		
N	113	82
Mean Rank	86.5	113.9
Staff turnovers/shortages		
N	113	83
Mean Rank	83.3	119.2

Note. Higher mean ranks indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed.

regulations ($p = .001$), and maintaining high quality care ($p = .002$).

Post hoc Mann-Whitney U tests were used to determine the location of the significant differences. Table 15 shows that nursing home administrators who were "highly" stressed rated federal and state inspections, retaining qualified staff, and recruiting/hiring of competent staff significantly higher (mean rank = 34.1, 34.2, and 35.6 respectively) than administrators who were "moderately" stressed (mean rank of 23.3, 22.1, and 21.5 respectively). The probability levels were .01, .004, and .001 respectively. Significant differences were also found between administrators who were "highly stressed" versus "mildly stressed". Highly stressed administrators rated Federal and State inspections, unrealistic expectations/demands of regulators, retaining qualified and competent staff, recruitment and hiring of competent staff, staff turnover/shortages, ever changing and increasing number of regulations, and maintaining high quality care significantly higher (mean rank = 25.3, 25.7, 26.6, 24.8, 25.9, 26.4, and 26.8 respectively) than administrators who were mildly stressed (mean rank = 14.9, 14.4, 13.1, 13.1, 13.3, 12.5, and 12.9 respectively). The levels of significance, in order, were .005, .002, .000, .002, .001, .000, and .000. Table 16 illustrates these differences.

Similar findings were revealed between "highly stressed" and "somewhat stressed" administrators in Phase III. "Highly" stressed administrators rated unrealistic expectations/demands of regulators, retaining qualified and competent staff, recruitment and hiring of competent staff, staff turnover/shortages, ever changing and increasing number of regulations, and maintaining high quality care significantly higher (mean rank = 20.2, 20.9, 19.9, 20.5, 20.0, and 20.5 respectively) than administrators who were "somewhat" stressed

Table 15

Nursing Home Administrators Stress Level Differences Among Phase III Stressors

Stressor	Stress Level	
	High	Moderate
Federal/State inspections		
N	24	31
Mean Rank	34.1	23.3
Retaining qualified/competent staff		
N	24	30
Mean Rank	34.2	22.1
Recruiting/hiring of competent staff		
N	23	31
Mean Rank	35.6	21.5

Note. Higher mean ranks indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed.

Table 16

Nursing Home Administrators Stress Level Differences Among Phase III Stressors

Stressor	Stress Level	
	High	Mild
Federal/State inspections		
N	24	17
Mean Rank	25.3	14.9
Unrealistic demands of regulators		
N	24	17
Mean Rank	25.7	14.4
Retaining qualified/competent staff		
N	24	17
Mean Rank	26.6	13.1
Recruiting/hiring of competent staff		
N	23	16
Mean Rank	24.8	13.1

Table 16 (Continued)

Nursing Home Administrators Stress Level Differences Among Phase III Stressors

Stressor	Stress Level	
	High	Mild
Staff turnovers/shortages		
N	23	17
Mean Rank	25.9	13.3
Ever changing/increasing regulations		
N	23	17
Mean Rank	26.4	12.5
Maintaining high quality care		
N	24	17
Mean Rank	26.8	12.9

Note. Higher mean ranks indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed.

(mean rank = 11.0, 9.5, 10.4, 9.0, 10.1, and 10.3 respectively). The probability levels were as follows .009, .002, .009, .001, .006, and .006. A final significant difference was identified with nursing home administrators who were “moderately” stressed rating Federal and State inspections significantly higher than “mildly” stressed administrators (mean rank = 28.65, 16.94 respectively, $p = .004$). Significant mean rank differences between “high” and “moderately” stressed nursing home administrators and the various stressors can be seen in Table 17.

Although only four significant differences were observed, 28 of the 35 mean rank comparisons revealed higher stressor scores in 1999. The seven stressors rated lower (but not significant) by Phase III respondents included: duplication and repetition of bureaucratic paperwork, employee disciplinary actions, limited resources/budgetary constraints, relying on non-management nurses to serve as managers, market competition for private pay and overall occupancy, contact by an attorney, and maintaining the financial viability of residents.

Data Transformations

A number of data transformations were attempted in an effort to analyze the data further for both phases II and III. The following specific transformations were attempted: (1) the square root of the stressor value; (2) one divided by the square root of the stressor value; (3) the exponential (antilog) of the stressor value; (4) logarithms; and (5) the inverse (one divided by the stressor value). None of the computations resulted in data that approximated the normal curve, thus parametric techniques could not be applied and further statistical analyses were not computed.

Table 17

Nursing Home Administrators Stress Level Differences Among Phase III Stressors

Stressor	Stress Level	
	High	Somewhat
Unrealistic demands of regulators		
N	24	10
Mean Rank	20.2	11.0
Retaining qualified/competent staff		
N	24	10
Mean Rank	20.9	9.5
Recruiting/hiring of competent staff		
N	23	10
Mean Rank	19.9	10.4
Staff turnovers/shortages		
N	23	10
Mean Rank	20.5	9.0

Table 17 (Continued)

Nursing Home Administrators Stress Level Differences Among Phase III Stressors

Stressor	Stress Level	
	High	Somewhat
<u>Ever changing/increasing regulations</u>		
N	23	10
Mean Rank	20.0	10.1
<u>Maintaining high quality care</u>		
N	24	10
Mean Rank	20.5	10.3

Note. Higher mean ranks indicate a higher stressor score. Only significant mean rank differences at $p \leq .01$ are listed.

CHAPTER V

SUMMARY, RECOMMENDATIONS, AND CONCLUSIONS

This chapter summarizes the research findings in terms of the research questions and hypotheses presented in Chapter 1 as well as Stress Theory. Recommendations for education, practice and research will also be discussed. The purpose of this study was to assess whether occupational stressors identified by nursing home administrators in 1994/1995 would endure the significant regulatory challenges presented to them over the past five years. More specifically, would the stressors remain stable over time? Selye's physiological theory of stress was utilized as the conceptual framework for this measurement. A summary of the findings will follow in accordance with the five research questions.

Research Question 1

The first research question asked "What are the most significant occupational stressors identified by practicing nursing home administrators?" To answer this question a random sample of 50 administrators in Virginia were mailed questionnaires asking them to identify five stressors (Phase I). A total of 33 nursing home administrators responded and identified a total of 151 stressors. These stressors were regrouped by a stress expert and the researcher into like categories and resulted in a list of 35 of the most significant occupational stressors as perceived by nursing home administrators (Table 2). The median stressor, "theft of a resident's belongings" was also identified by the sample.

Mullen's study of nursing home administrators' stressors in 1985 resulted in a larger list of stressors (77) from only eight administrators versus 33 administrators in the current study. Mullen grouped the stressors into ten categories as well as listed the 30 stressors with the

highest mean scores and their corresponding category. The larger number of stressors along with the regrouping made it difficult to compare studies. The majority of the other stressor studies cited also regrouped their stressors into 10 or fewer categories. Mullen's 10 main stressor categories included: (1) Employee Relations; (2) State Agencies; (3) NHA Job-Related Role; (4) Nursing Staff; (5) Administrative Duties; (6) Upper Management; (7) Patient-Family Relations; (8) Personal Life Conflicts; (9) Physicians; and (10) General Public.

Mullen's categories included many stressors similar to those identified in the current research. Comparisons can only be made with the top 30 stressors, as the remaining stressors were not listed. The stressors in Mullen's "Employee Relations" category "maintaining a full staff", "lack of care and concern by staff", "attitudes of employees toward cooperative relationships", "having to counsel and/or fire employees" appeared to be similar to the current study's stressors "retain qualified/competent staff", "staff turnover/shortages", "attitudes of staff", "employee problems", "staff who are not dedicated", and "employee disciplinary actions".

Mullen's "State Agency" category included the stressor "Attitudes of the inspector" which is an identical stressor in the current study. It is plausible that other stressors in Mullen's "State Agency" category such as "amount of time surveyors spend in a facility", "inconsistent interpretations of standards by inspectors", "moods/personalities of inspectors allowed to affect their decisions", and "inspectors not being aware of nursing home everyday problems" may fall within the current study's stressors "Federal/State inspections" or "unrealistic expectations of inspectors". The stressors "unrealistic expectations of family members concerning patient care", "runaway patient", and "family's unrealistic expectations due to a lack of public information/education" in Mullen's category "Patient-Family Relations" appeared to be similar

to the current study's stressors "unrealistic family expectations", "psychological status of residents", "lack of public knowledge" and "resident/family conflict".

The only stressor in Mullen's NHA Job-Related Role among the top 30 was "being on instant demand to solve virtually all problems". This stressor appears to be similar to the current study's stressor "long hours". The "General Public" category stressor "varying public perceptions of quality health care" could be viewed as similar to the current study's "unrealistic family expectations" or "lack of public knowledge". The categories "Nursing Staff" and "Administrative Duties" had no similar stressors listed in the top 30. There were no stressors in Mullen's categories "Upper Management", "Physicians", and "Personal Life Conflicts" in the top 30, thus comparisons to the current study stressors could be made. With regard to Mullen's "Personal Life Conflicts" category it is unlikely there would be any similarities, as the current study did not focus on personal issues. It should also be noted that the median stressor "theft of a resident's belongings" in the present research served as a stressor in Mullen's study. Overall, there were at least 12 stressors that were similar to those identified in the current study.

Research Question 2

The second research question proposed asked "What magnitude estimation is attributed to each of the identified stressors in 1994/1995 and 1999 relative to a median stressor?"

Stressors were measured utilizing a scale from 0 to 1000. "Theft of a resident's belongings" was identified as the median stressor with a score of 500. Nursing home administrators determined their rating relative to this median stressor. The top five stressors identified in 1994/1995 (Phase II), in order, were "Federal and State inspections", "unrealistic expectations of inspectors", "maintaining high quality of care", "retaining qualified and competent staff", and "unrealistic family expectations". Phase III top five stressors, in order, were "Federal and State

inspections", "retaining qualified and competent staff", "staff turnover and shortages", "unrealistic expectations of inspectors", and "recruitment and hiring of competent staff".

Federal and state inspections, which are vital to the success of the nursing facility, ranked the highest in both phases.

Three stressors from Phase II remained among the five highest rated stressors in Phase III: "Federal and State inspections", "retaining qualified/competent staff" and "unrealistic expectations of inspectors". In fact, of the top ten rated stressors in 1994/1995 only one, "maintaining census/occupancy", did not reappear in the top ten in 1999. The stressor "attitudes of inspectors" completed the top ten 1999 list of stressors moving up from number 19 in 1994/1995 to number eight in 1999. Based on these findings, it is apparent that the stressors identified in 1994, and longitudinally examined, remained relatively stable. What changed was the level of stressfulness attributed to each stressor relative to the median stressor "theft of a resident's belongings". Thus, the stressor rating for each of the 35 stressors changed over time, which could be a reflection of a change in the median stressors level of stressfulness.

Mullen (1985) identified stressors similar to those in 1994 and reaffirmed in 1999. The stressor category "State agencies" was the most stressful category in Mullen's study. The current study stressors "State and Federal inspections" and "unrealistic expectations of State and Federal inspectors" which are in the top five stressor categories of Phases II and III, are similar to those in Mullen's "State Agency" category. The "State agencies" category also included issues related to politicians and legislators, which were not identified as stressors in the current research.

The stressor category rated the second highest in Mullen's study was "General Public" which was made up of issues related to negative press and media attention. This is not the case

in the current study. The closest stressor to make the list of 35 was "lack of public knowledge". In Phase II this stressor was ranked 28th and in Phase III it was ranked 26th. Although this stressor does not rank as high in the current study, it did continue to make an appearance. Note, however, this decrease in the current study was relative to the "theft of a resident's belongings", the median stressor. "Theft of a patient's personal items by employees" was a stressor in Mullen's "Employee Relations Category" and it had a mean rating of 5.62 on a scale of 0 to 9, with 9 being the most stressful. Thus, the magnitude of the median stressor was actually somewhat higher in Mullen's study. The decrease in importance given the median stressor in the current study may have contributed to the decreased stressor score for "lack of public knowledge".

The third highest rated stressor category in Mullen's study was "Patient-Family" which is comparable to "unrealistic demands and expectations of families" which was ranked fourth in Phase II and ninth in Phase III. The stressor, "resident and family conflict" also fit into Mullen's "Patient-Family" category, however the ratings were among the bottom ten in both phases.

The current study found financial issues to rank among the top ten stressors in both phases II and III, which had not been found in prior nursing home research. In Mullen's (1985) study, financial issues did not even make the top 30 stressors. Hospital CEOs, on the other hand, ranked financial issues as the number one stressor (Lappa, 1989). This inclusion of financial concerns in the top ten stressors is suggestive of a changing environment for nursing home administrators and is likely reflective, in part, of the implementation of the prospective payment system which resulted in significant changes in Medicare and the advent of managed care over the past 15 years. These changes have impacted reimbursement rates for nursing facilities.

Financial issues were not identified as significant stressors by nursing personnel (Wolfgang, 1988; Dewe, 1989; Dunn et al., 1994), nuclear medicine technologist (Sechrist & Frazer, 1990), dentist (Ingersoll, Ingersoll, Seime, & McCutcheon, 1978; Godwin, Starks, Green, & Koran, 1981), or social workers (Fineman, 1985). The majority of the respondents in these studies are not management, thus financial issues are likely not part of their job responsibility.

Not surprisingly, the top five stressors in Phase III were interrelated. In actuality, the top eight stressors could have been categorized into two categories, staffing issues and Federal and State inspection issues. Three of the top five stressors in the current study were related to staffing issues. Note that the stressor "nursing shortages" was also identified as the second most stressful stressor among nurses (Dewe, 1989) and nursing care staff (Dunn, Rout, Carson & Ritter, 1989). These two groups were not necessarily management however, and both rated stressors unrelated to inspections as the number one stressor, "trying to deal with too many patients" and "unsatisfactory wages", respectively. Nursing care staff included nursing assistants, the lowest paid group of nurses. Even though these two groups were not management, the issue of nursing shortages and its effect on staff was very apparent. This was also the case in the current study.

The stressors with the least significance attributed to them in the current study were again similar in Phases II and III. In 1994/1995 the least stressful stressors were "lack of CEU availability", "demands from insurance companies", "concern over health care reform", "maintaining financial viability of residents", and "corporate intervention". In 1999, four of the five stressors continued to be perceived as the least stressful with "excessive number of

meetings” replacing “concern over health care reform. Refer back to Tables 6 and 12 for the magnitude estimations of the 35 stressors in Phases II and III.

Research Question 3

The third research question asked, “What differences exist across various demographic variables?” The majority of the gender differences obtained were unlike those of managers in prior research. In Phase II, female administrators identified “inadequate Medicaid reimbursement”, “too little time to spend with residents” and “ever changing and increasing number of regulations” significantly higher than male administrators. Not surprisingly, Phase III female administrators also found “too little time to spend with residents” significantly more stressful than male administrators. Female administrators in Phase III also viewed “staff who were not dedicated” as more stressful. These are stressors not previously examined in managerial research. Future research is needed to further support these findings.

Davidson and Cooper (1986) found senior and middle level female managers rated “lack of consultation/communication” higher than males at the same level. This was not the case in the current study. It could be that the stressor itself was viewed differently. The stressor was not elaborated on in Davidson and Cooper’s study and therefore may have had a different meaning.

Unlike the findings of Davidson and Cooper (1986), there were no stressors rated significantly higher by male administrators in either phase. Davidson and Cooper did find a gender difference with middle and junior level male managers rating “sacking someone” and “disciplining subordinates” significantly higher than female managers. These differences were not obtained at the senior management level however. It is probable that nursing home

administrators, male and female, are more comparable to senior managers, thus are not as stressed by disciplinary actions.

A number of explanations could account for the gender differences obtained in the current study. One explanation could be that the coping strategies used by males and females are different. Personality factors likely played a role. Additionally, women have been found to identify more stressors significantly higher than their male counterpart (Davidson & Cooper, 1986). Studies have also shown that professional women share some stressors with males but must deal with unique stressors such as stereotyping, marriage/work interface, and social isolation, therefore have more stressors to deal with overall (Nelson & Quick, 1985). No apparent pattern was identified related to gender differences. Further testing is necessary to build upon these results.

The stressor "unrealistic family expectations regarding resident care" was seen as more stressful among administrators of facilities who provided all levels of care (NF, SNF, Specialized) in Phase II. This was not a surprising finding, as it seems logical to have increased family expectations as the number and types of resident needs increased. What was surprising was that these differences were not found in Phase III. It could be that over the past five years facilities have become better prepared and educated in providing all levels of care, in particular, skilled and specialized care. The demand for skilled and specialized care beds has grown over the past five years and administrators are likely becoming more comfortable with the needs associated with such populations and the requirements necessary to manage such complex health care needs. Statistical power is another plausible explanation. The response rate was lower in Phase III, thus there may not have been a large enough sample to find a difference. If the sample size were comparable then a difference may have been found.

In Phase II differences were found between administrators of facilities who were part of a system and those who were not. These results were not replicated in Phase III. The stressors "staff turnover and shortages", "maintaining census and occupancy", "corporate intervention in daily operations", and "market competition for private pay and overall occupancy" were seen as more stressful by administrators from facilities that were part of a system. It is plausible that the Phase II administrators who were part of a system were frequently compared to facilities within their system and were more aware of turnover throughout the system. Thus, even if the turnover was not a large issue for that particular administrator's facility, it could have been viewed as more stressful secondary to the effect it was having on the organization as a whole. The same logic holds true for the stressors "maintaining census and occupancy" and "market competition for private pay and overall occupancy". With regard to corporate intervention, differences would be anticipated in both phases but only occurred in Phase II. This may again be a reflection of tougher regulations and shortage concerns that have made many stressors initially perceived as issues now seem a bit trivial.

The question becomes "Why were no differences found in Phase III?" The answer may lie in the nursing shortage and how it has continued to impact administrators over the past five years. Consequently, both types of facilities may be equally affected. With the changes in Medicare reimbursement and tougher regulations, market competition and overall occupancy, issues are likely to affect all levels of nursing care similarly whether or not you are part of a system. Additionally, statistical power cannot be ruled out as an explanation particularly since all of the findings were in the same direction. Nursing home administrators who were part of a system rated all four stressors higher in Phase II.

Not surprisingly, in both phases of the study, administrators of facilities with occupancy rates of 96% or lower rated "maintaining census/occupancy" as more stressful than administrators of facilities with occupancy rates at 97% or higher. Maintaining census/occupancy rate is likely not an issue if your average occupancy rate is 97% or greater.

In Phase II administrators who completed an Administrator-in-Training (AIT) program rated "market competition" more stressful than administrators who completed other training to obtain their license. This difference did not reappear in Phase III. Statistical power could again be an explanation. This and other possible explanations should be explored in future research.

Married and divorced administrators in Phase II rated "unrealistic expectations/demands of federal and state regulators" higher than single administrators. Marital status differences in Phase II were also found with the stressor "ever changing and increasing number of regulations" whereby widowed administrators rated this stressor higher than both married and single administrators. These differences did not reappear in Phase III. The value of these findings is unclear as there were only a small number of widowed and single administrators. However, the fact that a difference was obtained with such small numbers in Phase II could indicate something major is going on between the marital groups. Since the finding did not reappear in Phase III the small sample size in this phase may have actually played a role. Whether the findings would be repeated with a larger sample is unclear and further testing is necessary to clarify this discrepancy.

Unlike Phase II, nursing home administrators in Phase III who had been employed for 2 years or less and five to 10 years rated "lack of communication between staff" higher than administrators employed for 20 to 40 years. After years of practice, administrators who have been employed for at least 20 years could be beyond the communication issue as they have

devised better coping strategies for the more routine stressors. Communication is one of the fundamentals of management and a necessary component of teamwork and is therefore vital to the success of the nursing facility. New administrators may have higher expectations and therefore may have a more difficult time dealing with the breakdown in communication than administrators who have dealt with this for years and have devised strategies to get around this flaw.

Research Question 4

The fourth research question asked, "What differences exist between administrators managing rural versus urban nursing facilities with regard to the stressors, and does this difference remain stable over time?" The number of urban and rural facilities in Phase II was roughly equal and resulted in zero significant differences for any of the 35 stressors. Similarly, Phase III was almost evenly split. However, Phase III rural administrators rated the stressor "attitudes of staff" significantly higher than urban administrators. An explanation for this difference was not apparent. With a smaller sample in Phase III than Phase II a difference was less likely to be detected, nevertheless a difference was obtained. This finding necessitates further research. Overall, there continued to be little difference between urban and rural administrators' stressor scores in Phase III.

Research Question 5

The fifth research question asked "What, if any, change in the relative importance of stressors has occurred among nursing home administrators over the past five years?" This question was honing in on the longitudinal aspect of this research, looking at the stability of the stressors over time. The results show, in accordance with Selye's theory, that the occupational stressors remained relatively stable over time. Four significant differences were found over the

five-year period. Nursing home administrators in 1999 rated the stressors, “long hours”, “retaining qualified and competent staff”, “recruitment of qualified and competent staff”, and “staff turnover and shortages” significantly higher than administrators in 1994/1995. Significant differences were not obtained between the remaining 31 stressors, however, administrators in 1999 rated 28 of the stressors higher than the 1994/1995 administrators.

Secondary to Selye’s emphasis on time, space, and intensity as factors affecting an individual’s ability to adapt to a stressor, it was proposed that the increased legislation from 1995 to 1999 would result in increased stressor scores for the following stressors: “federal/state inspections”, “unrealistic expectations of inspectors”, “maintain high quality of care”, “increasing number of regulations”, “attitudes of inspectors”, “keeping current with regulations”, and “concern over health care reform”. None of these hypothesized differences were confirmed. Thus, further support for Selye’s theory was not obtained in terms of his emphasis on time, space, and intensity. However, six of the seven stressors continued to remain among the top 10 stressors, emphasizing their magnitude and reiterating their stability. Even though legislative changes continued to occur their impact was not as significant as anticipated. The increased legislation did not impact the stressor scores as predicted. It is apparent that the issues related to the increased legislation were impacting the administrators during Phase II based on their high mean rank scores. It is plausible that even though legislative changes continued to occur their constant appearance in the daily lives of the administrators over the next five years resulted in some level of adaptation. Consequently, significant differences were not obtained.

Ironically, though not hypothesized in this study, three of the four stressors related to staffing shortages were significantly different in 1999. It is plausible that Selye’s time, space,

and intensity played a role in the higher stressor scores for staffing issues. These three stressors, “retaining qualified/competent staff”, “recruiting/hiring competent staff”, and “staff turnovers/shortages”, continued to rate among the top ten in Phase III. In fact they moved up to second, third and fifth in their ranking. Thus, staffing issues may have overridden legislative issues, as a nursing facility cannot run properly without appropriate staffing. Further research is warranted to examine the impact of the nursing shortage on nursing home administrators. Even more interesting would be if the increased legislation were, at least, partly responsible for the staffing shortages or related to the shortage in some way.

Research Question 6

The sixth research question asked, “Are specific occupational stressors identified with specific stress levels?” To answer this question stress levels were obtained from each of the administrators in Phase III based on the question “What is your current level of stress?” This question was not asked in Phase II of this study. Significant differences were found whereby “highly stressed” nursing home administrators rated a number of the stressors significantly higher than “moderately stressed”, “mildly stressed”, and “somewhat stressed” administrators. None of the administrators rated their stress level as “not stressed”. This finding lends support to Selye’s depiction of stress as a part of life. “Highly stressed” administrators rated “federal and state inspections”, “retaining qualified staff”, and “recruiting and hiring competent staff” significantly higher than “moderately stressed” administrators. “Highly stressed” administrators also rated “federal and state inspections, unrealistic demands of regulators, “retaining qualified staff”, “recruiting and hiring qualified staff”, “staff turnover/shortages”, “ever changing and increasing number of regulations”, and “maintaining high quality care” significantly higher than “mildly stressed” administrators. Similar results were obtained with “highly stressed” and

“somewhat stressed” administrators as well. However, there was no significant difference for the stressor “federal and state inspections”. What was apparent from these findings was that the highly stressed administrators rated stressors related to legislative and staffing issues significantly higher than administrators who reported less stress. The significance of this finding is unclear as this study honed in on the stressors themselves and not the stress response. In other word, the ill effects of the higher reported stress levels could not be determined. Further research should investigate the relationship between highly stressed administrators and stressors in terms of outcomes.

Recommendations

As the results of this study have implications for education, practice, research and policy, a number of recommendations have been drawn and will be identified in this section.

Recommendations for Education. The following recommendations were derived from this research:

1. Educate administrators as to the occupational stressors perceived as most stressful to nursing home administrators in both phases. The stressors remained relatively stable over the five year period. Two shifts in the top 10 stressors occurred resulting in 11 stressors. The stressors to be focused on are as follows: (1) “federal/state inspections”; (2) “unrealistic expectations of inspectors”; (3) “maintain high quality care”; (4) “retain qualified/competent staff”; (5) “unrealistic family expectations”; (6) “increasing number of regulations”; (7) “staff turnover/shortages”; (8) “inadequate Medicaid reimbursement”; (9) “recruitment/hiring qualified staff”; (10) “maintaining census/occupancy” and (11) “attitudes of inspectors”. Emphasis on these stressors may have an impact on the reduction, modification, or elimination of these stressors from the working environment.

2. Establish educational training programs to address stressors and stressor management. Training and practicing administrators need to be aware that the stressors they perceive as most stressful are not unique to them, there is a common thread of stressors among them.

3. Establish nursing home administrators support groups and networks to provide ongoing support and educational awareness. Administrators can work together to minimize these stressors. Continued exposure to stressors can lead to negative organizational consequences such as job turnover and absenteeism, as well as ill health if not managed effectively.

4. Establish educational awareness programs addressing the impact of stressors on organizations and individual health. The link between stressors and health needs to be understood or the motivation for this research will be lost. Once administrators are aware of the stressors and their impact on organizational and health outcomes, they will know what stressors to focus on.

Recommendations for Practice. The following recommendations for practice were made:

1. Management should examine strategies to decrease the nursing shortage such as incentive programs, bonuses, educational packages, and "shared governance" in which the nurses could have more of a participatory role in the policy and decision making regarding their work requirements.

2. Hold focus groups to discuss the top stressors and develop strategies to help nursing home administrators adapt to the stressors or manage them more effectively.

3. Include stressor education and management programs as part of the yearly

CEU requirements of nursing home administrators. This inclusion would serve two purposes: stressor education and management strategies as well as rewarding the administrator in terms of meeting CEU requirements.

4. Strategies to reduce the number of additional hours administrators must work to successfully manage their facility should also be examined.

5. Since three of the four significant differences over the five year period were related to the staffing shortage and were among the top 10 stressors in both phases, the current hiring strategies should be revisited in an attempt to develop new hiring techniques or make improvements for new strategies.

6. Evaluate current policies and procedures to determine more effective means of reducing the nursing shortage.

7. A systematic effort between nursing home administrators and nurses should be sought to better understand the causes of the nursing shortage and seek remedies. This effort could even occur at a higher level where policies and procedures could be revised or eliminated.

Recommendations for Research. The following recommendations were made:

1. Replication of the study including the stressor "theft of resident's belonging" as an actual stressor and not as a median stressor to determine if there has been a shift in the relative importance of this stressor should be examined.
2. This study should be expanded to areas outside of Virginia.
3. Stressors and various outcome measures such as job turnover, job satisfaction, stress levels, and clinical outcome measures within the nursing facility should be explored. The link between occupational stressors experienced by nursing home administrators and outcome measures needs to be made.
4. Many times the money obtained to manage nursing facility residents is not commiserate with the actual cost of care. Research into the impact of additional funding on the provision of quality health care in nursing facilities should be carried out. Model programs could then be recommended.

Recommendations for Policy. The following recommendations were derived from this research:

1. Federal and State regulators should be made aware of the stressors that most significantly effect nursing home administrators. The more hours spent worrying about the regulations the less time the administrator has to spend providing quality care to the residents. Any regulations that can be developed to empower nursing home administrators should increase their time spent efficiently and effectively managing their facility. Instead of focusing on documentation to determine what was done or not done, inspectors should examine outcomes such as number of pressure wounds, and rates of infection and falls. If these numbers are not

within normal limits then further investigation into the area of concern should be examined.

Thus, Legislators should be more outcomes based when looking for indicators of quality.

2. The relationship between administrators and the Health Care Financing Administration (HCFA) should be revamped. Currently the relationship is adversarial, HCFA wants to catch facilities off guard (unannounced surveys) and administrators cannot use inspectors to help their facilities or obtain suggestions. HCFA should take on the consultant role, offer advice, and identify other facilities with similar issues to help administrators devise a plan of action based on successful solutions.

3. Legislators need to get more involved with decreasing workforce stressors for nursing staff. Nursing is a predominantly female occupation and women now have more choices and can turn to other areas such as Pharmacy and Physical Therapy where the pay, working conditions, and hours are better for professional women. Legislators should look at better and safer working conditions such as safer needles. Unless it is legislated many health care facilities will not spend the extra money to obtain the safer needles that are currently available.

Conclusions

The results of this study contribute to the scientific body of knowledge as they provide insight into the perceived stressors of nursing home administrators, a relatively unresearched area. It improves on Mullen's study by utilizing a longitudinal, more quantitative approach. Although the stressors remained relatively stable over time, this study is, of course, more current and therefore more indicative of today's nursing home industry. In addition, the sample in the current study was statewide, possibly yielding better representation of the entire domain of stressors experienced by nursing home administrators. This study includes a theoretical

framework that in terms of the stability of occupational stressors was not evident in Mullen's study of nursing home administrators. Mullen's study only looked at administrators at one point in time and was basically exploratory in nature. Carmen and Bernstein utilized a theory of personality that was not intended to cover the time variable. Thus, the inclusion of a theory factoring in the time element with regard to stressors has not previously been examined.

This study attempted to identify and rank occupational stressors experienced by nursing home administrators and examine their stability over a five-year period. Stressors rated as the highest in terms of stressfulness in Phase II included Federal and State inspection, unrealistic expectations of inspectors, maintain high quality care, retention of qualified/competent staff, and unrealistic family expectations. Phase III revealed similar stressors, however, maintaining high quality of care and unrealistic family expectations shifted downward and were replaced by staff turnover/shortages and recruitment/hiring of competent staff. Regardless of the slight shift in the most stressful stressors, two prevailing themes emerged. Nursing home administrators are most stressed by issues related to Federal and State agencies and staffing shortages.

With the continued focus of nursing home advocates on quality of care and the resulting legislative changes, it is not surprising that the number one stressor in both phases was "State and Federal inspections". This study highlighted legislative changes over the past five years in particular and their potential impact on administrator's perceptions of occupational stressors. The nursing shortage was not identified as a major variable in the current study. The results, however, brought attention to the nursing shortage, an area that has apparently been as significant an influence in the management of nursing facilities as the increased nursing facility oversight.

Over the five-year span the top ten stressors remained relatively unchanged as compared to the median stressor “theft of a resident’s belongings.” This stability occurred in light of an increased focus on nursing homes through media and increased legislation that resulted in heightened nursing home oversight. Though there were slight shifts in the rankings of the stressors, all of the stressors continued to be rated as stressful in 1999 as Selye’s theory suggested. Only four significant differences were revealed out of the possible 35 stressor comparisons. Three of the significant stressor differences (retaining qualified/competent staff, recruiting/hiring competent staff, staff turnover/shortages) were related to staffing issues and can at least partially be explained in terms of the current nursing shortage. The significant increase in the stressor “long hours” combined with the actual significant increase in the number of reported hours further points to legislative and staffing issues requiring greater attention by the administrators. The fact that the reported number of hours worked actually increased significantly is support in and of itself for the stressor score increase in “long hours”. The lack of change in the remaining 31 stressors over time suggests that the stressors are affecting nursing home administrators similarly. The fact that no demographic differences were identified with regard to the top 10 stressors further points to the similarities of nursing home administrators in general.

None of the seven longitudinal hypotheses revealed significant differences, thus support for Selye’s focus on time, space and intensity was not obtained. However, the fact that the nursing shortage has also been at the forefront of administrators’ attention over the past five years (and not just increased legislation) tends to suggest the nursing crisis played a much larger role than anticipated. These findings, though not hypothesized in this study, lend partial support to Selye’s theory that time, space, and intensity (when, where, and how much) of the stressors

play a significant role in an individual's perception of a stressor. The current study, however, honed in on the legislative changes as potential moderators and overlooked another critical factor that had the potential to impact stressor scores, the nursing shortage. Future studies should investigate the impact of stressors related to the staffing issues and stress outcomes (physiological or psychological).

Stress among administrators and their ability to manage stressors play a critical role in the physical, as well as mental health of nursing home residents and their support systems (families and friends), not to mention their own health and the health of their organization. It is hoped that these results will encourage nursing homes to examine more carefully the perceived stressors of nursing home administrators and their impact on management practices. Courses that deal with stressors and management of the stressors should be offered more regularly as well as follow-up to ensure the techniques prescribed are being utilized and most importantly are effective. The link between stressors, stress and health cannot be overlooked or underestimated. Licensure boards may also want to look at stressor education for potential administrators and incorporate this into their training programs.

The fact that this study was focused on the causes of stress and not the actual stress response leaves the door for stressor research wide open. In particular, an approach to the study of nursing home administrators' stress that considers both individual and situational factors simultaneously is warranted. Only situational stressors were identified in this study.

Nursing facilities and the care of those who reside in such facilities will continue to be at the forefront of the legislative agenda due to our aging population. Nursing home administrators must continue to be able to meet the ever growing and changing needs of a most

worthy group of individuals, our elderly. To do this, administrators must be able to cope with the stressors they encounter.

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Appendix A

This appendix contains the master list of stressors obtained from the Phase I nursing home administrators. These stressors were reclassified into 35 stressors and used for data collection in Phases II and III.

MASTER LIST OF STRESSORS

1. Federal/State Regulations
2. Ongoing paperwork
3. Burdensome corporate paperwork
4. Personnel management
5. Lack of public knowledge
6. Growing concern over health care reform
7. Long hours
8. Census/Occupancy
9. Decreased nursing agency usage
10. Day care worries
11. State health department
12. Staffing, especially nursing
13. State surveyors
14. Budgeting
15. Families/residents who chronically complain
16. Unrealistic expectations of State and Federal regulators
17. Dysfunctional family relationships of many years whereby the nursing home is used as the outlet for families to continue the conflict
18. Dealing with ever-increasing demands from families, insurances, case managers, etc.
19. Hiring and maintaining competent staff (at all levels)
20. Ever increasing paperwork (much of which at times seems to be duplicative in nature)
21. Diminishing financial resources
22. Human resource management
23. Financial management
24. Regulatory demands
25. Market Competition
26. 24 hour call/7 day week/52 weeks a year
27. New regulations
28. Long-term incompetent staff in which job has grown more than person
29. Loss of staff
30. Board overly involved in day to day operations
31. Corporate office demands: too much paperwork and repetitive paperwork
32. Marketing for private pay and overall occupancy levels
33. Resident, family, staff complaints - human relations
34. Regulatory inspections - Federal, State, MAP
35. Self-induced due to poor organizational skills
36. Regulatory compliance
37. Employee disciplinary actions
38. Labor shortages
39. Financial viability
40. Employee conflict
41. Vulnerability/dependence on staff
42. Resident conflicts

43. Limited Resources
44. Limited Fiscal Plant Complaints
45. Regulatory Demands
46. Resident psychological problems
47. Staff turnover and attitudes
48. Regulations
49. JCAHO certification
50. Survey compliance/all regulatory compliance
51. Budgetary constraints/staff reduction when census fluctuates
52. Interviewing, hiring, orienting, retaining competent caring staff
53. Providing a safe, caring, clean environment for resident
54. State control (regulations, etc.)
55. State survey
56. Job responsibilities (e.g. problems such as abuse, fire, law suits)
57. Keeping up with changes
58. Job politics
59. Survey process
60. Hiring personnel, salaries, personnel problems, bottom line/vs. no monies for needed improvement and equipment
61. Low reimbursement rate from Medicaid vs. lack of profit
62. Vast amount of documentation (for myself and nursing)
63. Not enough time to spend with residents
64. Staffing Shortages
65. Complaints
66. Corporate supervisors
67. Lack of communication
68. Department of Health surveyors
69. Unrealistic and demanding family members
70. Federal/State inspections ie. OSHA, Licensure inspectors
71. Contact by an attorney
72. Demands of managers
73. Inadequate reimbursement
74. Employee termination
75. Staffing problems
76. Unrealistic expectations by families
77. Relying on non-management to serve as managers
78. Corporately imposed stress
79. Family problems
80. Employee problems
81. Government problems
82. Financial problems
83. Patient problems
84. Maintaining adequate number of CNAs - to properly staff
85. Changing regulations
86. Unnecessary paperwork

87. Juggling time between job and home/family
88. Managing the trouble-causing employee
89. Pressure to maintain census
90. Recruitment and retainment of qualified staff
91. Making a profit on the low reimbursement of the Medicaid program
92. Dealing with the bias "confusing" survey system
93. Poor reimbursement system for long-term care
94. Staffing (finding good quality, mature, dedicated staff)
95. Resident/Family Conflicts
96. Financial performance of facility
97. Managing staff turnover while maintaining high quality of care
98. Maintaining compliance with Federal and State regulations
99. Regulatory requirements vs resources
100. Managing budgets with staffing and supplies
101. Managing and maintaining resident/family satisfaction
102. Maintaining census and managing case-mix/payor sources
103. Staffing issues/union
104. Regulatory compliance
105. Financial issues
106. Company pressure
107. Family/Resident Concerns
108. Continuous imposition of additional regulations
109. Corporate interference in day-to-day operations
110. Customers who have no concept of what we try to do
111. The amount of paperwork
112. Attitude of some of the inspectors
113. Balancing Multiple Priorities
114. Finding a balance between work and personal time
115. Paperwork required by regulation and corporate policy
116. Dealing with unreasonable family members
117. Staff shortages
118. Meetings
119. Governmental rules and regulations
120. Paperwork
121. Welfare of employees and residents
122. Undedicated staff
123. Unrealistic family expectations and inappropriate family responses
124. Staffing issues - vacant positions, absenteeism, etc.
125. Keeping current with ever changing regulatory concerns
126. Census, payor status, collections, cost control (budget issues)
127. Demands and requirements from corporate staff
128. Death of resident I was fond of
129. Having lots of responsibilities but not a lot of authority (having to get owners permission to do things)
130. State inspections

131. Incidents where injuries occur either to resident or staff
132. Having key staff leave
133. Resident issues
134. Staffing issues
135. Budget issues
136. Regulatory issues
137. Regulations/Paperwork
138. Lack of staffing due to low pay
139. Family issues
140. 24 hour availability
141. Handling phone calls, etc at home - no break from work
142. Staffing
143. Low reimbursement rates/more expected regarding patient care
144. Surveys (Health Department)
145. Family expectations
146. Increasing state changes
147. Federal regulations
148. Lack of financial support for resident needs from owners, etc.
149. Lack of educational CEU availability to maintain administrator's license (cost and locations)
150. CEOs or equivalent not in touch with changes in LTC, impact on care and updates needed or having no experience in field at administrator's level
151. Lack of resources for staff development (live on Eastern Shore)

Appendix B

This appendix contains the test packet used in both mailings of Phase I.

August 2, 1994

Administrator
Address

Dear Name of Administrator:

Although there is an overwhelming quantity of literature addressing the issue of occupational stress and the manager, research related to the stress experienced by the long-term care administrator and its impact on the long-term care industry is scarce.

You have been randomly selected from the over 250 licensed long term care administrators practicing in Virginia to participate in the first round development of an instrument to identify stressors experienced by long-term care administrators. The best way to identify the stressors experienced by long-term care administrators is to go straight to the source. That is why your participation is so important to this project.

This questionnaire is anonymous and voluntary. Data will be reported in aggregate only. By completing the questionnaire you are granting permission to take part in this research.

No other tool exists that taps the unique stressors experienced by long-term care administrators. You may receive a summary of results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

If you have any questions please feel free to contact me at (804) 683-4409 or Dr. Gregory Frazer at (407) 823-2359. I would be more than happy to answer any questions or concerns you may have.

Thank you for your assistance.

Sincerely,

Gay Andrucci-Armstrong, M.S.
Ph.D. Candidate

The purpose of this survey is to identify sources of job stress among long-term care administrators.

Your responses will become part of an aggregate database that will be used in the development of a research instrument measuring job stress among long-term care administrators. A composite list of stressors based on your responses will be mailed to you and other long-term care administrators in Virginia to be rated in a later mailing.

Identify up to five sources of job stress you consider to have the most impact on your career as a long-term care administrator.

1. _____
2. _____
3. _____
4. _____
5. _____

Please identify a median occupational stressor, the one you consider to be somewhere in the middle of the continuum from least to most stressful.

Median Stressor: _____

Please place these responses in the self-addressed envelope included in the packet.

Thank you for taking time out in your busy schedule to complete the survey.

INSTRUCTIONS: PLACE AN X IN THE MOST APPROPRIATE BOX OR WRITE IN YOUR RESPONSE AS NECESSARY. ADDITIONAL COMMENTS ARE WELCOME.

PERSONAL INFORMATION:

1. AGE: ☐ 18-29 ☐ 30-39 ☐ 40-49 ☐ 50-59
☐ 60+
2. ETHNIC BACKGROUND: ☐ AFRICAN AMERICA ☐ CAUCASIAN ☐ HISPANIC
☐ NATIVE AMERICAN ☐ ASIAN/PACIFIC ISLANDER ☐ OTHER
3. GENDER: ☐ FEMALE ☐ MALE
4. MARITAL STATUS: ☐ SINGLE (NEVER MARRIED)
☐ DIVORCED ☐ MARRIED ☐ WIDOWED
5. INCOME: ☐ <25,000 ☐ 25,001 TO 29,999
☐ 30,000 TO 34,999 ☐ 35,000 TO 39,999
☐ 40,000 TO 44,999 ☐ 45,000 TO 49,999
☐ 50,000 TO 54,999 ☐ 55,000 TO 59,999
☐ ≥60,000
6. TOTAL NUMBER OF INDIVIDUALS 15 YEARS OF AGE AND YOUNGER OR 65 YEARS OF AGE AND OLDER THAT LIVE IN YOUR HOUSEHOLD: _____

EDUCATIONAL BACKGROUND:

7. HIGHEST LEVEL OF EDUCATION:
☐ HIGH SCHOOL
☐ ASSOCIATE DEGREE
☐ BACHELORS DEGREE
☐ MASTERS DEGREE
☐ DOCTORATE DEGREE
☐ OTHER (SPECIFY) _____

8. MAJOR FIELD OF STUDY (SPECIFY): _____

LICENSURE INFORMATION:

9. HOW LONG HAVE YOU BEEN LICENSED AS A LONG-TERM CARE ADMINISTRATOR? _ YEARS _ MONTHS
10. METHOD UTILIZED IN THE ATTAINMENT OF LICENSURE AS A LONG-TERM CARE ADMINISTRATOR:
☐ ADMINISTRATOR-IN-TRAINING
☐ 400 HOUR INTERNSHIP
☐ OTHER TRAINING (PLEASE SPECIFY: _____)

EMPLOYMENT INFORMATION:

11. LENGTH OF TIME IN CURRENT ADMINISTRATIVE POSITION:

☐ YEARS ☐ MONTHS

12. TOTAL LENGTH OF TIME EMPLOYED AS LONG-TERM CARE ADMINISTRATOR:

☐ YEARS ☐ MONTHSWORK ENVIRONMENT:

13. AUSPICE:

☐ PRIVATE, FOR PROFIT☐ PRIVATE, NOT FOR PROFIT☐ PUBLIC

14. LEVEL OF CARE PROVIDED:

☐ NURSING FACILITY☐ SKILLED☐ SPECIALIZED CARE☐ ALL OF THE ABOVE

15. LOCATION OF LONG-TERM CARE FACILITY:

☐ URBAN☐ RURAL

16. NUMBER OF BEDS: ____

17. AVERAGE MONTHLY OCCUPANCY RATE: ____

18. NUMBER OF PRIVATE BEDS: ____

19. NUMBER OF MEDICAID BEDS: ____

20. NUMBER OF FTE EMPLOYEES AT YOUR FACILITY: ____

21. NUMBER OF SENIOR STAFF (EXAMPLE: ASST ADMINISTRATORS): ____

AVERAGE NUMBER OF HOURS WORKED EACH WEEK: ____

22. IS YOUR FACILITY PART OF A SYSTEM? ____ YES ____ NO

Appendix C

This Appendix contains only the cover letter used in the follow-up mailing of Phase I as the remainder of the test packet was exactly the same as in the first mailing.

August 16, 1994

Ms. Gay Andrucci-Armstrong
233 North Fourth Street
Hampton, Virginia 23664

Administrator
Address

Dear Administrator:

Two weeks ago a questionnaire asking you to identify stressors experienced as long-term care administrators was mailed to you. If you have already returned your questionnaire I would like to extend a sincere thanks. Enclosed is another copy of the questionnaire if you did not receive it or misplaced it.

Once again I would like to stress that no other instrument exists that taps the unique stressors experienced by long-term care administrators. For a summary of the results please write "copy of results requested" on the back of the return envelope, and print your name and address below it. Please do not put this information on the questionnaire itself.

Since it has only been mailed to a small yet representative sample of long-term care administrators in Virginia it is extremely important that your input be included in the study to provide an accurate representation of stressors. The best way to identify the stressors experienced by long-term care administrators is to go straight to the source. That is why your participation is of the utmost importance to this project.

If you have any questions please feel free to contact me at (804) 683-4409 or my doctoral advisor, Dr. Gregory Frazer, at (407) 823-2359. We would be more than happy to answer any questions or concerns you may have.

Again your assistance and willingness to participate in this research is greatly appreciated.

Sincerely,

Gay Andrucci-Armstrong, M.S.
Ph.D. Candidate

Appendix D

This Appendix contains the first test packet used in Phase II.

December 27, 1994

Administrator:
Address

Dear Administrator:

In August a small group of long-term care administrators in Virginia were called upon to assist in the initial phase of developing a research instrument to measure job stress among long-term care administrators. In order to complete the developmental phase and validate the instrument, it is necessary to administer the instrument to the entire population of licensed long-term care administrators in Virginia including the original sample. In order for the results to be truly representative of long-term care administrators in Virginia it is essential for each person in the sample to complete and return the questionnaire. That is why your participation is of the utmost importance to this project.

The 35 stressors identified in the initial phase of this research, the State/Trait Anxiety Inventory (STAI), and a demographic questionnaire are enclosed. The STAI will be utilized to validate the new questionnaire of 35 identified stressors. Please answer all questions with a single response but feel free to provide additional information next to your response.

No other tool exists that taps the unique stressors experienced by long-term care administrators. Your cooperation is necessary in order to finalize the questionnaire and to estimate the stressfulness of your profession. Your responses are both anonymous and voluntary. Data will be reported in aggregate only. By completing the questionnaire you are granting permission to participate in this research endeavor. If you would like a summary of the results write "copy of results requested" on the back of the return envelope, and print your name and address below it. Please do not put this information on the questionnaire itself.

If you have any questions please feel free to contact me at (804) 683-4409 or my doctoral advisor, Dr. Gregory Frazer, at (407) 823-2359. We would be more than happy to answer any questions or concerns you may have.

Thank you for your assistance and willingness to participate.

Thank you for your assistance.

Sincerely,

Gay Andrucci-Armstrong, M.S.

DIRECTIONS

Utilizing the following rating system determine the stressfulness of each of the 35 stressors in comparison to the THEFT OF RESIDENT'S PERSONAL BELONGINGS.

If the item listed is "LESS" stressful than the THEFT OF RESIDENT'S PERSONAL BELONGINGS then rate it between 1 and 499.

If the item listed is "EQUALLY" stressful than the THEFT OF RESIDENT'S PERSONAL BELONGINGS then rate it as a 500.

If the item listed is "MORE" stressful than the THEFT OF RESIDENT'S PERSONAL BELONGINGS then rate it between 501 and 1000.

If the stressor "DOES NOT" affect you in any way then rate it as zero (0).

In the second column, please indicate the "NUMBER OF TIMES" each of the items have been a stressor to you in the last 6 months.

COMPARED TO THEFT OF RESIDENT'S PERSONAL BELONGINGS	RATING (0-1000)	# OF TIMES LAST 6 MONTHS
1. Federal and State Inspections.....	1. _____	1. _____
2. Unrealistic Expectations/Demands of State/Federal Regulators.....	2. _____	2. _____
3. Unrealistic Family Expectations Regarding Resident Care.....	3. _____	3. _____
Bureaucratic Paperwork.....	4. _____	4. _____
5. Lack of Public Knowledge.....	5. _____	5. _____
6. Long Hours.....	6. _____	6. _____
7. Families/Residents Who Chronically Complain.....	7. _____	7. _____
8. Increased Demands from Insurance Companies & Case Managers.....	8. _____	8. _____
9. Retaining Qualified/Competent Staff....	9. _____	9. _____
10. Employee Disciplinary Actions/ Termination.....	10. _____	10. _____
11. Limited Resources/Budgetary Constraints	11. _____	11. _____
12. Attitudes of Staff.....	12. _____	12. _____
13. Recruitment and Hiring of Competent/Qualified Staff.....	13. _____	13. _____
14. Staff Turnover/Shortages.....	14. _____	14. _____
15. Inadequate Reimbursement Rate From Medicaid (Difficulty Making Profit).....	15. _____	15. _____
16. Too Little Time to Spend With Residents	16. _____	16. _____
17. Relying on Non-Management Nurses to Serve as Managers.....	17. _____	17. _____
18. Ever Changing and Increasing Number of Regulations.....	18. _____	18. _____
19. Maintaining Census/Occupancy.....	19. _____	19. _____
20. Attitude of Inspectors.....	20. _____	20. _____
21. Excessive Number of Meetings.....	21. _____	21. _____
22. Staff who are not Dedicated.....	22. _____	22. _____
23. Keeping Current with Ever Changing Regulatory Concerns.....	23. _____	23. _____
24. Staff/Resident Injuries.....	24. _____	24. _____
25. Corporate Intervention in Daily Operation.....	25. _____	25. _____
26. Lack of Educational CEU Availability to Maintain Administrative Licensure...	26. _____	26. _____
27. Growing concern over health care reform	27. _____	27. _____
28. Market competition (e.g. for private pay and overall occupancy).....	28. _____	28. _____
29. Maintaining High Quality Care.....	29. _____	29. _____
30. Psychological Status of Residents.....	30. _____	30. _____

31. Lack of Communication Between Staff....	31. _____	31. _____
32. Contact by an attorney.....	32. _____	32. _____
33. Resident/Family Conflict.....	33. _____	33. _____
34. Employee problems.....	34. _____	34. _____
35. Maintaining Financial Viability of Residents.....	35. _____	35. _____

INSTRUCTIONS: PLACE AN X IN THE MOST APPROPRIATE BOX OR WRITE IN YOUR RESPONSE AS NECESSARY. ADDITIONAL COMMENTS ARE WELCOME.

PERSONAL INFORMATION:

1. AGE: ☐ 18-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60+
2. ETHNIC BACKGROUND: ☐ AFRICAN AMERICAN ☐ CAUCASIAN
☐ HISPANIC ☐ NATIVE AMERICAN ☐ ASIAN/PACIFIC
ISLANDER ☐ OTHER
3. GENDER: ☐ FEMALE ☐ MALE
4. MARITAL STATUS: ☐ SINGLE (NEVER MARRIED)
☐ DIVORCED ☐ MARRIED ☐ WIDOWED
5. INCOME: ☐ <\$25,000 ☐ \$25,001 TO \$29,999
☐ \$30,000 TO \$34,999 ☐ \$35,000 TO \$39,999
☐ \$40,000 TO \$44,999 ☐ \$45,000 TO \$49,999
☐ \$50,000 TO \$54,999 ☐ \$55,000 TO \$59,999
☐ ≥\$60,000
6. TOTAL NUMBER OF INDIVIDUALS 15 YEARS OF AGE AND YOUNGER AND 65 YEARS OF AGE AND OLDER THAT LIVE IN YOUR HOUSEHOLD: _____

EDUCATIONAL BACKGROUND:

7. HIGHEST LEVEL OF EDUCATION:
☐ HIGH SCHOOL
☐ ASSOCIATE DEGREE
☐ BACHELORS DEGREE
☐ MASTERS DEGREE
☐ DOCTORATE DEGREE
☐ OTHER (SPECIFY)
8. IF YOU COMPLETED AT LEAST 2 YEARS OF COLLEGE WHAT WAS YOUR MAJOR FIELD OF STUDY (SPECIFY): _____

LICENSURE INFORMATION:

9. HOW LONG HAVE YOU BEEN LICENSED AS A LONG-TERM CARE ADMINISTRATOR?
_____ YEARS _____ MONTHS
10. METHOD UTILIZED IN THE ATTAINMENT OF LICENSURE AS A LONG TERM CARE ADMINISTRATOR:
☐ ADMINISTRATOR-IN-TRAINING
☐ 400 HOUR INTERNSHIP
☐ OTHER TRAINING (PLEASE SPECIFY): _____

EMPLOYMENT INFORMATION:

11. LENGTH OF TIME IN CURRENT ADMINISTRATIVE POSITION:
☐ YEARS ☐ MONTHS
12. TOTAL LENGTH OF TIME EMPLOYED AS LONG-TERM CARE
ADMINISTRATOR?
☐ YEARS ☐ MONTHS

WORK ENVIRONMENT:

13. AUSPICE:
☐ PRIVATE, FOR PROFIT
☐ PRIVATE, NOT FOR PROFIT
☐ PUBLIC
14. LEVEL OF CARE PROVIDED:
☐ NURSING FACILITY
☐ SKILLED
☐ SPECIALIZED CARE
☐ ALL OF THE ABOVE
15. LOCATION OF LONG-TERM CARE FACILITY:
☐ URBAN
☐ RURAL
16. TOTAL NUMBER OF BEDS: _____
17. AVERAGE MONTHLY OCCUPANCY RATE: _____%
18. NUMBER OF PRIVATE ROOMS: _____
19. NUMBER OF MEDICAID CERTIFIED BEDS: _____
20. NUMBER OF MEDICARE CERTIFIED BEDS: _____
21. NUMBER OF FTE EMPLOYEES AT YOUR FACILITY: _____
22. NUMBER OF SENIOR STAFF: ASST ADMINISTRATOR (S): _____
OTHER DEPARTMENT HEAD (EX. DON/ADON/DIR OF ACTIVITIES): _____
23. AVERAGE NUMBER OF HOURS WORKED EACH WEEK: _____
24. IS YOUR FACILITY PART OF A SYSTEM? ____ YES ____ NO

Appendix E

This Appendix contains the follow-up postcard used in Phase II.

January 10, 1995

Two weeks ago I wrote to you seeking your expertise in the final developmental phase of a research instrument to measure occupational stress among long-term care administrators. If you have already completed and returned your questionnaire I would like to extend my sincere thanks. Your participation is extremely important in order to develop an instrument truly representative of long-term care administrators. If you did not receive your questionnaire or misplaced it, please contact me immediately at (804) 461-8500 and I will get another one in the mail to you right away.

Sincerely,

Gay Andrucci-Armstrong, M.S.
Ph.D. Candidate

Appendix F

This Appendix contains the test packet used in Phase III.

August 10, 1999

Administrator
Address

Dear Administrator

No tool exists that taps the unique stressors experienced by long-term care administrators. The ability to accurately assess job stress as well as understand the contributing factors could enhance the quality of work necessary to address the ever changing and eventful daily challenges unique to this profession. That is why your participation in this ongoing research effort is of the utmost importance.

Two questionnaires necessary to identify the job stressors relevant to long-term care administrators are enclosed. Your responses are both **anonymous** and voluntary. The entire package should not take more than **15 minutes**.

If you have any questions please feel free to contact me at (757) 851-1091 or my doctoral advisor, Dr. Paul Stepanovich at (757) 683-4519. We would be more than happy to answer any questions or concerns you may have. A summary of the results will be available upon request.

Thank you in advance for your participation in this research.

Sincerely,

Gay Andrucci-Armstrong, M.S.

Utilizing the following rating system determine the stressfulness of each of the 35 stressors in comparison to the **THEFT OF RESIDENT'S PERSONAL BELONGINGS**.

If the item listed is "**LESS**" stressful than the **THEFT OF RESIDENT'S PERSONAL BELONGINGS** then rate it between 1 and 499.

If the item listed is "**EQUALLY**" stressful than the **THEFT OF RESIDENT'S PERSONAL BELONGINGS** then rate it as a 500.

If the item listed is "**MORE**" stressful than the **THEFT OF RESIDENT'S PERSONAL BELONGINGS** then rate it between 501 and 1000.

If the stressor "**DOES NOT**" affect you in any way then rate it as zero (0).

In the second column, please indicate the "**NUMBER OF TIMES**" each of the items have been a stressor to you in the last 6 months.

COMPARED TO THEFT OF RESIDENT'S PERSONAL BELONGINGS	RATING (0-1000)	# OF TIMES LAST 6 MONTHS
1. Federal and State Inspections.....	1. _____	1. _____
2. Unrealistic Expectations/Demands of State/Federal Regulators.....	2. _____	2. _____
3. Unrealistic Family Expectations Regarding Resident Care.....	3. _____	3. _____
Bureaucratic Paperwork.....	4. _____	4. _____
5. Lack of Public Knowledge.....	5. _____	5. _____
6. Long Hours.....	6. _____	6. _____
7. Families/Residents Who Chronically Complain.....	7. _____	7. _____
8. Increased Demands from Insurance Companies & Case Managers.....	8. _____	8. _____
9. Retaining Qualified/Competent Staff....	9. _____	9. _____
10. Employee Disciplinary Actions/ Termination.....	10. _____	10. _____
11. Limited Resources/Budgetary Constraints	11. _____	11. _____
12. Attitudes of Staff.....	12. _____	12. _____
13. Recruitment and Hiring of Competent/Qualified Staff.....	13. _____	13. _____
14. Staff Turnover/Shortages.....	14. _____	14. _____
15. Inadequate Reimbursement Rate From Medicaid (Difficulty Making Profit).....	15. _____	15. _____
16. Too Little Time to Spend With Residents	16. _____	16. _____
17. Relying on Non-Management Nurses to Serve as Managers.....	17. _____	17. _____
18. Ever Changing and Increasing Number of Regulations.....	18. _____	18. _____
19. Maintaining Census/Occupancy.....	19. _____	19. _____
20. Attitude of Inspectors.....	20. _____	20. _____
21. Excessive Number of Meetings.....	21. _____	21. _____
22. Staff who are not Dedicated.....	22. _____	22. _____
23. Keeping Current with Ever Changing Regulatory Concerns.....	23. _____	23. _____
24. Staff/Resident Injuries.....	24. _____	24. _____
25. Corporate Intervention in Daily Operation.....	25. _____	25. _____
26. Lack of Educational CEU Availability to Maintain Administrative Licensure...	26. _____	26. _____
27. Growing concern over health care reform	27. _____	27. _____
28. Market competition (e.g. for private pay and overall occupancy).....	28. _____	28. _____
29. Maintaining High Quality Care.....	29. _____	29. _____
30. Psychological Status of Residents.....	30. _____	30. _____

31. Lack of Communication Between Staff....	31. _____	31. _____
32. Contact by an attorney.....	32. _____	32. _____
33. Resident/Family Conflict.....	33. _____	33. _____
34. Employee problems.....	34. _____	34. _____
35. Maintaining Financial Viability of Residents.....	35. _____	35. _____

Please answer "all" questions. Place an "X" in the most appropriate box or write in your response as indicated. Additional comments are welcome.

1. ARE THERE OTHER STRESSORS NOT INCLUDED IN THE ABOVE LISTING YOU FEEL SHOULD BE INCLUDED? IF SO, PLEASE LIST:

2. HOW WOULD YOU RATE YOUR CURRENT LEVEL OF STRESS:

1	2	3	4	5
HIGHLY STRESSED	MODERATELY STRESSED	MILDLY STRESSED	SOMEWHAT STRESSED	NO STRESS

*If you were actively managing a long-term care facility (excluding hospital long-term care units) in Virginia in December 1994/January 1995 then go to question 3. If not, skip to question 6.

3. DID YOU COMPLETE THIS QUESTIONNAIRE IN 1994/1995?
 ___ YES ___ NO

4. COMPARE YOUR LEVEL OF STRESS TODAY WITH YOUR LEVEL OF STRESS IN DECEMBER 1994/JANUARY 1995:

1	2	3	4	5
MUCH HIGHER	HIGHER	EQUAL	LOWER	MUCH LOWER

5. IF YOU ANSWERED HIGHER OR LOWER PLEASE INDICATE WHAT CAUSED THIS CHANGE:

PERSONAL INFORMATION:

6. AGE: {} 18-29 {} 30-39 {} 40-49 {} 50-59 {} 60+

7. ETHNIC BACKGROUND: {} AFRICAN AMERICAN {} CAUCASIAN
 {} HISPANIC {} NATIVE AMERICAN } ASIAN/PACIFIC ISLANDER
 {} OTHER

8. GENDER: {} FEMALE {} MALE

9. MARITAL STATUS: {} SINGLE (NEVER MARRIED)
 {} DIVORCED {} MARRIED {} WIDOWED

EDUCATIONAL BACKGROUND:

10. HIGHEST LEVEL OF EDUCATION:

- ☐ HIGH SCHOOL
- ☐ ASSOCIATE DEGREE
- ☐ BACHELORS DEGREE
- ☐ MASTERS DEGREE
- ☐ DOCTORATE DEGREE
- ☐ OTHER (SPECIFY): _____

LICENSURE INFORMATION:

11. METHOD UTILIZED IN THE ATTAINMENT OF LICENSURE AS A LONG-TERM CARE ADMINISTRATOR:

- ☐ ADMINISTRATOR-IN-TRAINING
- ☐ 400 HOUR INTERNSHIP
- ☐ OTHER TRAINING (PLEASE SPECIFY): _____

EMPLOYMENT INFORMATION:

12. LENGTH OF TIME IN CURRENT ADMINISTRATIVE POSITION:

- ☐ YEARS ☐ MONTHS

13. TOTAL LENGTH OF TIME EMPLOYED AS LONG-TERM CARE ADMINISTRATOR:

- ☐ YEARS ☐ MONTHS

WORK ENVIRONMENT:

14. AUSPICE:

- ☐ PRIVATE, FOR PROFIT
- ☐ PRIVATE, NOT FOR PROFIT
- ☐ PUBLIC

15. LEVEL OF CARE PROVIDED:

- ☐ NURSING FACILITY
- ☐ SKILLED
- ☐ SPECIALIZED CARE
- ☐ ALL OF THE ABOVE

16. LOCATION OF LONG-TERM CARE FACILITY:

- ☐ URBAN
- ☐ RURAL

17. TOTAL NUMBER OF BEDS: _____
18. AVERAGE MONTHLY OCCUPANCY RATE: _____%
19. NUMBER OF PRIVATE ROOMS: _____
20. NUMBER OF FTE EMPLOYEES AT YOUR FACILITY: _____
21. NUMBER OF ASSISTANT ADMINISTRATOR (S): _____
OTHER DEPARTMENT HEAD SUCH AS DON/ADON/DIR OF ACTIVITIES
(EXCLUDING ASSISTANT ADMINISTRATORS): _____
22. AVERAGE NUMBER OF HOURS WORKED EACH WEEK: _____
23. IS YOUR FACILITY PART OF A SYSTEM? ___ YES ___ NO

Appendix G

This appendix contains the follow-up postcard in Phase III.

August 24, 1999

Two weeks ago I wrote to you seeking your expertise in the final phase of a research effort to develop an instrument truly representative of job stress among long-term care administrators. If you have already completed and returned your questionnaire I would like to extend a sincere thanks. If you did not receive your questionnaire or misplaced it, please contact me at (757) 851-1091 and I will get one in the mail to you right away. Again, thank you for your participation in this research.

Sincerely,

Gay Andrucci-Armstrong, M.S.
Old Dominion University
Ph.D. Candidate