Processes and Perceptions of Remaining Current

Diane Paul

Follow this and additional works at: http://digitalcommons.wku.edu/theses
Part of the Psychology Commons

Recommended Citation
http://digitalcommons.wku.edu/theses/1813

This Thesis is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Masters Theses & Specialist Projects by an authorized administrator of TopSCHOLAR®. For more information, please contact topscholar@wku.edu.
PROCESSES AND PERCEPTIONS OF REMAINING CURRENT

A Thesis
Presented to
the Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Diane I. Paul

November, 1990
AUTHORIZATION FOR USE OF THESIS

Permission is hereby

☑ granted to the Western Kentucky University Library to make, or allow to be made photocopies, microfilm or other copies of this thesis for appropriate research for scholarly purposes.

☐ reserved to the author for the making of any copies of this thesis except for brief sections for research or scholarly purposes.

Signed: [Signature]

Date: December 3, 1990

Please place an "X" in the appropriate box.

This form will be filed with the original of the thesis and will control future use of the thesis.
PROCESSES AND PERCEPTIONS OF REMAINING CURRENT

Date Recommended 11/21/90

Director of Thesis

Alex Paepke

Mary E. Hezard

Date Approved December 6, 1990

Elmer Bray
Dean of the Graduate College
Acknowledgements

I would like to express my gratitude to the members of my thesis committee, Dr. John Bruni, Dr. Mary Hazzard and Dr. Aaron Podolefsky. I particularly appreciate their time, expertise and guidance that led to the completion of this project.

I am also grateful for the patience and encouragement of friends and family. Thanks to my mom, Fay Johnson Paul, for helping me to grow to this point and to my husband, Sean Lovely, for his love, encouragement, computer, and faith in me.
# Table of Contents

Introduction to Obsolescence .................................................. 1
Components ................................................................................. 1
The obsolescence problem ......................................................... 4
  Technological factors ............................................................... 4
  Organizational factors ............................................................... 5
  Individual factors ..................................................................... 6
    Education ............................................................................... 7
    Motivation .............................................................................. 8
Training ....................................................................................... 8
Promotions ................................................................................... 9

Obsolescence in Nursing ................................................................. 10
Promotions in nursing ................................................................. 12

Purpose and Objectives .................................................................. 14

Method ......................................................................................... 16
Sample ......................................................................................... 16
Subjects and Design ..................................................................... 17
Procedure ...................................................................................... 20
  Interview instrument ................................................................. 20
  Survey instrument ................................................................. 21
Design of Analysis ........................................................................ 22
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>25</td>
</tr>
<tr>
<td>Continuing Education</td>
<td>25</td>
</tr>
<tr>
<td>Promotions to Administration/management</td>
<td>29</td>
</tr>
<tr>
<td>Conflicting responsibilities</td>
<td>29</td>
</tr>
<tr>
<td>Resources and Training</td>
<td>31</td>
</tr>
<tr>
<td>Middle managers</td>
<td>33</td>
</tr>
<tr>
<td>Hospital size and administrative nursing</td>
<td>35</td>
</tr>
<tr>
<td>Factors Related to Hospital Size</td>
<td>37</td>
</tr>
<tr>
<td>Specialization</td>
<td>37</td>
</tr>
<tr>
<td>Similarities</td>
<td>41</td>
</tr>
<tr>
<td>Methods available</td>
<td>41</td>
</tr>
<tr>
<td>What affects keeping up</td>
<td>45</td>
</tr>
<tr>
<td>Summary and Conclusions</td>
<td>48</td>
</tr>
<tr>
<td>References</td>
<td>71</td>
</tr>
</tbody>
</table>
List of Tables

Technological Causes of Obsolescence .................. 5  
Organizational Causes of Obsolescence ................. 5  
Individual Causes of Obsolescence .................... 6  
Response Rates for Survey Portion of Research ....... 19  
Outline of Categories in Results ....................... 24  

This research examined the problem of professional obsolescence and mechanisms available to employees to avoid becoming obsolete. Current literature is reviewed on obsolescence and on remaining current in the nursing profession. Specific areas addressed are indicators of obsolescence and an examination of what happens to skills and abilities when an individual moves from a technical field into its administration. Participants in the research include registered nurses at three hospitals. The research is composed of two phases: an interview phase and a survey phase. Qualitative and quantitative analysis reveal categories of concerns about remaining current. The special concerns and obsolescence of administrative nurses is also addressed.
Introduction to Obsolescence

The present section provides an introduction to the obsolescence literature. The definitions of obsolescence are reviewed along with a discussion of its causes. Additionally, the impact of training as a method of combating the problem is reviewed. Finally, the literature specific to nursing and nursing administration leads to the purpose and objectives.

Components. It is important to have a clear understanding of obsolescence. This understanding begins with an examination of the important components of the concept.


Deficiencies in the operationalization of obsolescence, as well as the imprecision of the definition, make its study difficult (Shearer and Steger, 1975). Thus, it is hard to
draw coherent conclusions because of a lack of uniformity and standardization in the research.

The literature does, however, suggest paths to obsolescence. These paths lead to the components of obsolescence that will be examined for the purpose of this research. The two components of obsolescence are as follows:

1) Obsolescence is the perceived degree to which an individual lacks the knowledge and skills associated with their profession. And/Or

2) Obsolescence is the perceived degree to which an individual lacks the knowledge and skills to perform their specific job effectively.

This definition does not address performance directly since performance is affected by numerous variables besides obsolescence. This first component includes the path to obsolescence where there is a lack of up-to-date knowledge and skills related to the general knowledge/skills base of the profession. The employee may have lost touch with the broader skills of their profession but still be able to perform their job at a specific level of effectiveness. For example, while a director of nursing may still be considered a nurse, he or she may be nonetheless unable to perform those technical duties associated with the nursing profession.
Component 2 encompasses the path to obsolescence where a person is perceived obsolete in relation to performance at a specific level of effectiveness. The person may not have remained up-to-date on new procedures, technologies, etc., that are necessary to perform their job duties.

Before proceeding with an examination of obsolescence, it is important to make the point that the process of obsolescence described in component 1 is not necessarily a negative one. Two possible paths to obsolescence are for individuals to specialize to the point that they lose touch with the changes that are occurring in the rest of the field, or for an individual to move from a technical field into management (Dubin, 1972). In these instances, obsolescence may be expected and accepted. An organization may prefer workers to be experts in a specialized area (O.B. Nursing, for example) rather than to keep abreast of all changes in their field, some of which may not be applicable to their current job duties.

Obsolescence could be present simultaneously with good job performance. One could become less than up-to-date in one’s occupation yet perform the job effectively. This may happen when individuals move into management. The organization, therefore, may prefer that the employee concentrate on becoming effective in the new job duties.

The obsolescence problem. This section discusses research associated with the effect of obsolescence on
workers and organizations. The technological, organizational, and behavioral causes of obsolescence are examined and symptoms of its occurrence are identified.

In order for a better understanding of obsolescence, an examination of who will become obsolete and the associated conditions related to obsolescence is necessary. Bracker and Pearson (1986) identify three major categories of causes of worker obsolescence. These categories are technological, organizational, and individual.

**Technological factors.** Technological changes include advances in products and the addition of novel knowledge and tools (see Table 1). Although these technological developments should increase the efficiency of the worker and the organization, they may require new skills and knowledge the employee does not have. The individual worker must be able to adjust to these changes in order to avoid obsolescence.
Table 1

Technological Causes of Obsolescence

<table>
<thead>
<tr>
<th>Robotics</th>
<th>Telecommunications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>Information explosion</td>
</tr>
<tr>
<td>CAD/CAM techniques</td>
<td>Inventory techniques</td>
</tr>
<tr>
<td>Miniaturization</td>
<td>Distribution techniques</td>
</tr>
<tr>
<td>Substitute Products</td>
<td>Purchasing techniques</td>
</tr>
</tbody>
</table>

Organizational factors. Examples of organizational factors that cause obsolescence are listed in Table 2. The organizational structure and corporate culture may influence obsolescence, as do the resources the organization provides its employees.

Table 2

Organizational Causes of Obsolescence

<table>
<thead>
<tr>
<th>Organizational structure</th>
<th>Co-workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate culture</td>
<td>The job itself</td>
</tr>
<tr>
<td>Position</td>
<td>Limited resources</td>
</tr>
<tr>
<td>Corporate strategy</td>
<td>Lack of long term goals</td>
</tr>
<tr>
<td>Performance expectations</td>
<td>Performance measures</td>
</tr>
</tbody>
</table>

Another examination of obsolescence demonstrates that obsolescence may be inadvertently fostered by the organization. Organizations may contribute to its occurrence by making only limited demands on employee
talents (Dubin, 1972). Organizations may force their employees to adopt a very limited scope of overspecialization. Workers may therefore lose touch with the changes that are occurring in their field. Shearer and Steger (1975) agreed that individuals with less varied job experience are more likely to experience obsolescence. Organizational size and structure, therefore, are directly related to potential causes of obsolescence such as corporate culture, performance expectations, and the job duties.

**Individual factors.** Individual factors that may cause obsolescence include an inability to retrain (Bracket and Pearson, 1987). Causes of this inability to retrain include employee motivation, values, knowledge, stress, loyalty, adaptability, and fear of re-training (see Table 3).

Table 3

<table>
<thead>
<tr>
<th>Individual Causes of Obsolescence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
</tr>
<tr>
<td>Knowledge</td>
</tr>
<tr>
<td>Loyalty</td>
</tr>
<tr>
<td>Experience</td>
</tr>
<tr>
<td>Creativity</td>
</tr>
<tr>
<td>Values</td>
</tr>
<tr>
<td>Physical ability</td>
</tr>
<tr>
<td>Stress</td>
</tr>
<tr>
<td>Initiative</td>
</tr>
<tr>
<td>Adaptability</td>
</tr>
</tbody>
</table>

There are also individual difference factors that contribute to obsolescence. These include the factors that are most frequently discussed in the literature, such as
differences in education and motivation. These differences may make some employees more susceptible to obsolescence than others.

**Education.** Many studies have examined the effects of education on obsolescence. Attitudes toward education, education level, and time out of school are important in the examination of remaining current.

Shearer and Steger (1975) found support for the hypothesis that the lower a person's education level, the more obsolete the person is likely to be. They further found that the longer a person has been out of school, the more obsolete he or she is likely to be.

Rubin and Morgan (1967) measured the attitudes of research and development engineers toward continuing education. Resumes were randomly given to 312 engineers. One third of the resumes depicted a research and development engineer as having a Masters of Science degree through continuing education. One third of the resumes depicted engineers who completed only one course since they received their BS. The last third portrayed an engineer who completed seven courses. Results indicated that engineers who received the MS were not viewed any differently than those who completed seven courses. These two groups, the MS group and the seven course group, were seen as more ambitious, more intelligent, more professional, and more up-to-date than those who completed only one course.
Continuing education is seen as an indication of avoidance of obsolescence. The same attitude was found among the supervisors of engineers (Rubin and Morgan, 1967).

Motivation. Another individual difference variable that has been studied that may determine who will become obsolete is motivation. One indicator of motivation that Shearer and Steger (1975) examined was perceived duty to remain current. This refers to whether the employee feels it is their responsibility to avoid obsolescence. Results indicated that a person with a lower perceived duty to stay up-to-date was more likely to become obsolete. Those who did perceive a duty to stay up-to-date spent more off duty time doing just that.

Research, therefore, indicates that individual indicators impact which employees will become obsolete. An awareness of these differences may allow organizations to better predict which employees are most susceptible to obsolescence.

Training. It is commonly accepted that extensive and frequent training or retraining is one of the most effective ways to prevent rampant obsolescence (Feuer, 1987). This section provides a review of literature on the importance of training in avoiding obsolescence, as well as various methods of training, and the problem of fear of training.

Several authors have addressed the implications of training (Feuer, 1987, Dubin, 1972, and Bloch, 1984). Dubin
(1972) suggested a number of self educational approaches for training that include: reading; working on projects that extend one’s capacity to the limits; conversation, discussion, and argumentation with colleagues; and studying by correspondence or television. The type of continuing education/training that is most effective at improving performance varies. This effectiveness can be moderated by the organization (Kaufman, 1988).

It should also be noted that there are times when the employee’s fear of becoming obsolete is countered by the person’s fear of change. This fear of change may cripple employees who resist retraining even though they are aware that the training will ultimately lead to greater job security (McClintock, 1984).

Therefore, if training is provided in a timely manner, obsolescence is not inevitable (Dubin, 1972). Providing training for employees requires detailed and strategic planning. This life-long education, however, is the responsibility of both the individual and management (Bloch, 1984).

**Promotions.** While training is important to remaining current, it is also imperative to provide that training on appropriate issues and procedures. It is important to address the unique problems of remaining current for those promoted from technical fields into management and their special training needs.
Promotions can present the need for retraining. Many older and more experienced engineers, for example, are promoted to managerial positions. Many times, however, the engineers have no educational experience in management, yet they are expected to perform effectively (Zelikoff, 1969). So, not only do professionals need further training in their area of expertise, they also need training in areas to which they are promoted. Zelikoff (1969) concludes that organizations should be cautioned not to reward their technically current employees by promoting them into positions where their technical expertise will be diluted.

Obsolescence in Nursing

Although much of the research on obsolescence examines the field of engineering, other occupations are similarly affected. Nursing, for instance, is one such occupation that continues to face the problems of obsolescence and has developed formalized programs to combat obsolescence among its members. Nursing and its response to increasing knowledge and technologies is examined. Also, licensure as a method of combating obsolescence is reviewed.

Remaining current is an obvious concern of nurses. Because of the continual advances in health care technology, it is important that nurses make time to remain up-to-date (National Commission on Nursing, 1981). The scope of knowledge and skills required continue to increase (National Commission on Nursing, 1981). In order to avoid
obsolescence, nurses must continue to educate themselves after they have completed their formal schooling.

The nursing profession has responded to this threat of obsolescence by seeking further education to improve its members' knowledge and skills. Licensure has been an important mechanism in the nursing profession that is aimed at stimulating continual self-improvement and therefore possibly negate obsolescence (Styles, M.M., and Committee, 1979). In the 1970s most states began to require strict continuing educational requirements for licensure (Weeks and Spor, 1987). Those in the profession view competence not as a static concept but as a dynamic attribute which must be maintained (Styles, M.M., et al, 1979). Continual education is therefore important since competence is based on expanding knowledge (Styles, M.M., et al, 1979).

While licensure is the norm, it is still not without its opponents. For licensure to achieve its goal of maintaining competence there must be support from the organization, reward, and individual motivation in addition to properly designed programs (Warmuth, 1987). There is debate in the field of nursing, however, as to the actual impact of continuing education.

Many suggest that attending continuing education classes does not ensure that the individual learns or will transfer what they learn to the work environment. Still others believe that licensure boards do not have the right
to mandate continuing education (Weiss-Farnan and Willie, 1988). They feel it should be a personal choice.

Nursing is therefore a profession whose members are faced with the demands of avoiding obsolescence. The literature reviewed above indicates that remaining current is important to registered nurses. These needs are responded to by requiring licensure, a process by which nurses renew their license to practice nursing. This renewal is accomplished by those participating in this research by completing 30 contact hours every two years. One contact hour is earned in one 50 minute session or program and 10 contact hours are equal to one continuing education unit (CEU). The literature reviewed also suggest that nurses seek means beyond those required by licensure in an effort to improve knowledge and skills.

Promotions in nursing. The present section reviews the literature concerning one type of specialization, that where nurses move from clinical nursing into administration. As indicated earlier, promotions can present the need for retraining.

Once a nurse is promoted into administration, he or she faces new challenges. One challenge is that of becoming an effective administrator. According to the National Commission on Nursing (1981), these promotions to administrative positions are most often based on clinical skill or seniority. The nursing educational systems,
however, have not altered their programs to reflect these administrative opportunities afforded the members of the profession (Southern Council on Collegiate Education for Nursing, 1987). And while health care institutions need nurse managers adept in the complex techniques of modern administration, between 1971 and 1980 only about 7 percent of nurses completing graduate degrees in nursing had a concentration in administration (Division of Health Care Services, Institute of Medicine, 1983). A 1988 study by Carey, S.J, Craighead, P.S. and Netzel, C., also indicated that of those nurses who are moved into administration, only 11 percent of those with advanced preparation indicated that the focus of their major was in nursing administration.

An important concept in examining obsolescence associated with moving from clinical nursing into administration is the identification of potential profiles of how nurses deal with and perceive this path to obsolescence. In a study by Scalzi (1988), for example, overload was indicated as the major source of job stress in nurse executives. This overload included conflicting expectations from hospital administration and the nursing department. Thus, nurse administrators are expected to contribute to executive management decisions beyond nursing services (Division of Health Care Services, Institute of Medicine, 1983), as well as seek information, as needed, to improve their knowledge and skills in nursing areas
The problem now becomes apparent. When those in technical fields move into management and are attempting to acquire a set of new knowledge and skills, what is the impact on their technical skills?

Purpose and Objectives

The purpose of this research is to continue the investigation of obsolescence. More specifically, the purpose is to identify potential profiles of how nurses deal with and their perception of obsolescence in terms of: moving from clinical nursing into administration; and factors related to hospital size such as organizational climate and structure.

As the literature suggested, the movement from clinical nursing into administration raises a curious spectrum of increased obsolescence. In examining the profiles of how individual nurses deal with this move and how they try to remain current, other related topics will be examined. These issues include what happens to the registered nurses' clinical skills when promoted, how the registered nurses obtain new skills in administration and management, and the effect of various organizational structures on the registered nurse.

The impact of different size hospitals examines differing organizational factors and their effect on how
nurses deal with and perceive obsolescence. This will be accomplished by examining hospitals of different size. Related issues include specialization versus non-specialization; access to information and new technologies; and effect of job duties on obsolescence.

The profiles of currency in this study are depictions of the perception of obsolescence in the field of nursing and factors associated with its occurrence.

Profiles of obsolescence for two groups of R.N.'s are identified and compared. These R.N.'s are 1) floor nurses and 2) administrative and management nurses. This examination allows a determination of how profiles of obsolescence change when one moves from a technical field into its administration.

Failure to remain current could affect job performance but there are also numerous other causes of ineffective performance. This strategy of examining the nurses perceptions of obsolescence is reasonable because perceptions are precursors to behavior. Perceptions influence how nurses respond to the exponential changes in technology and medications.
Method

Sample

Participants in the study include registered nurses (nurses) from three acute care hospitals in the South Central part of the United States. The number of acute care beds of the participating hospitals are as follows: Hospital A, 208; Hospital B, 100; and Hospital C, 30. Nursing literature traditionally classifies hospitals by the number of beds.

Different size hospitals were chosen because literature and informal discussion with subject matter experts suggested that size may affect organizational structure and job responsibilities. Hospital A is one of the larger hospitals in the district. Hospital C is the smallest and Hospital B is a relatively mid-sized hospital in its district.

The less formalized Hospital C employs 12 nurses. The organizational structure is different in that there is only one nurse who is performing administrative duties on a full time basis, the nursing director. She also would feel quite comfortable, however, helping on the floor with patient care, if the need were to occur. Being the only full time administrative nurse, the nursing director is also
responsible for inservice education and infection control, among other duties. At the two other hospitals, Hospital A and Hospital B, separate individuals performed each of these duties. Also at the two larger hospitals, nurses in administrative nursing rarely, if ever, are expected to assist in floor nursing duties.

Hospital C is unique in another aspect. Nurses at Hospital C work all areas of the hospital. They do not specialize (work exclusively on one unit, such as Intensive Care). At the two larger hospitals, however, nurses are generally assigned to one specific area or unit and become a specialist in that type of care.

In larger hospitals, the lines between the duties of administrative nurses and floor nurses were clearer. Also in the larger hospitals, nurses were more specialized and less likely to move from area to area. These two factors have been associated with obsolescence (Dubin, 1972; Zelikoff, 1969). Thus, the choice of these hospitals allows the researcher to begin an examination of the effects of hospital size and related organizational factors on obsolescence.

Subjects and Design

This research utilizes a combination of quantitative and qualitative research methodology. The first phase, the qualitative portion, consists of interviews with four nurses from each hospital; two interviews were conducted with floor
nurses and two interviews with nurses who work in a supervisory or administrative position. These twelve participants are considered "key informants," who report on the organizational/nursing system, not just themselves. Initial participants were recommended by each hospital's nursing director. These participants were asked to suggest other nurses to be interviewed.

All the nurses who were interviewed were female, with an average age of 36.45 years. The majority were married, 83.33%. These nurses had been in the nursing profession for an average of 11.04 years, working at their current hospital for an average of 9.91 years. The majority of the nurses, 58.33% had an Associate degree. Others had Bachelor degrees (33.33%) or a diploma in nursing (8.33%).

The second phase, the quantitative portion, consists of a survey distributed to all nurses employed at each of the three hospitals. Surveys were distributed with the pay check of each nurse. The number of nurses that received and returned surveys, respectively, is reported (see Table 4).
Table 4

Response Rates for Survey Portion of Research

<table>
<thead>
<tr>
<th></th>
<th>Beds</th>
<th>R.N.s</th>
<th>Returned</th>
<th>Response %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital A</td>
<td>208</td>
<td>68</td>
<td>34</td>
<td>50.00%</td>
</tr>
<tr>
<td>Hospital B</td>
<td>100</td>
<td>35</td>
<td>18</td>
<td>51.43</td>
</tr>
<tr>
<td>Hospital C</td>
<td>30</td>
<td>12</td>
<td>5</td>
<td>41.67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>115</td>
<td>57</td>
<td></td>
<td><strong>49.57</strong></td>
</tr>
</tbody>
</table>

All nurses who participated in the questionnaire portion of the research were females. In this sample, the largest percentage of nurses, 30.4%, were between 37 and 44 years of age and married, 84.2%. Full time nurses comprised 84.2% of those surveyed. The highest percentage, 22.8%, had worked as a nurse for 11-15 years, with 29.8% indicating 0-5 years at their current hospital. The degree in nursing that most nurses held was an Associate degree, 64.9%. The others held either a Bachelor degree, 19.3%, or a diploma in nursing, 15.8%. Responding staff nurses included 42.1% of those surveys returned. Administrative nurses, including middle management nurses, comprised 57.9% of those responding (see Appendix A).

This combination of quantitative and qualitative methodology provides the opportunity for a more thorough examination of obsolescence. Because this research is exploratory in nature and seeks to develop profiles of
perceptions relating to obsolescence, a maximum amount of information may be gained with the utilization of the two methodologies.

**Procedure**

Nursing directors at each hospital were contacted in order to secure permission for the research. After permission was obtained, each nursing director then suggested two nurses to act as key informants or "expert witnesses" for the interview (qualitative) portion of the study.

The interview portion of the study used qualitative analysis techniques. This phase was also used to develop the questionnaire distributed in the survey portion of the study.

**Interview instrument.** After nurses had been suggested for the interview portion, the researcher contacted those nurses by telephone. The potential subjects were given a brief oral description of the research as well as the interview process. Nurses were informed that permission had been secured from the nursing director to conduct the interviews. One nurse refused to be included in the research. Twelve interviews were conducted, two of which took place in the nurses' homes. The remaining interviews took place at each nurse's respective hospital.

The interviews were tape-recorded and preceded by a consent form (see Appendix B) and a short demographic
questionnaire (see Appendix C). This portion of the research utilized a semi-structured interview format. The general questions that were asked had been developed through a review of the literature on nursing and obsolescence (see Appendix D). Probing questions were also used to secure a maximal amount of information. Participants were encouraged to talk freely as confidentiality was assured. The interviews lasted approximately 45 minutes. After the interview, a short post interview check list was completed on which the researcher rated the interview (see Appendix E).

Survey instrument. Surveys were also developed through a review of the literature on obsolescence and nursing. Surveys were, however, revised to include information gained from the interviews. The instrument consisted of 13 demographic items (see Appendix A) and 63 items that were grouped into 14 subsets (see Appendix F). The last 2 groups of questions were asked only of administrative nurses. Nurses were generally asked to rate the extent or the importance of each item on a likert type scale. Surveys were administered to all paid registered nurses, a total of 115. Surveys were distributed with the nurses’ pay check. A cover letter explained the purpose of the survey and assured confidentiality (see Appendix G). A stamped, addressed envelope was attached to the cover letter to
encourage the participants to return the survey by mail. A total of 57 completed surveys were returned.

**Design of Analysis**

The interview data collected was content analyzed using The Text Collector (Copyright 1987, O'Neill Software, San Francisco, CA), a process of computer assisted topical sorting. This method calls for the researcher to develop coding categories for each topic of interest. According to an unpublished article by Podolefsky (1989), this process involves a running summary of the interviews and then developing a set of coding categories. A code number or numbers is then assigned to each topic discussed in the interviews. The process can be outlined as follows:

1) Reviewed literature suggests coding categories
2) The interviews are read and reread, the coding categories are modified and changed
3) Appropriate codes are entered next to each paragraph
4) The Text Collector is used to list and print all paragraphs containing a particular code
5) This coded data is then discussed and integrated with literature and survey.

The categories discussed in this research were developed in two stages. Stage one consisted of topics that originated from a review of obsolescence literature and of nursing literature. Stage two of category development
consisted of recurring and emphasized topics derived from the interview data (transcribed interviews). This was accomplished through reading and rereading the interview transcripts. Each paragraph was annotated with all code numbers that applied to that paragraph. It was then possible to retrieve all interview material that was related to a specific topic. The categories that emerged from this analysis will be discussed individually. The nurses' specific responses are presented in a paraphrased fashion. Table 5 provides an outline of categories that are discussed.
Table 5

Outline of Categories in Results

I. Continuing education

II. Promotions to administration/management
   A. Conflicting responsibilities
   B. Resources and training
   C. Middle managers
   D. Hospital size and administrative nursing

III. Factors related to hospital size
   A. Specialization
   B. Similarities
      1. methods available
      2. what affects keeping up

The survey data collected was analyzed using quantitative methods. Descriptive statistics, means, standard deviations, and frequencies, were calculated using the Statistical Package for the Social Sciences (SPSS).
Results

Results of the research are reported as follows. The categories that were developed through content analysis are reported. For each category, qualitative and quantitative data are integrated with reviewed literature.

This examination of how nurses deal with and perceive obsolescence begins with the topic of licensure. Next, the qualitative and quantitative data related to obsolescence in terms of moving from clinical nursing into administration is discussed. The organizational factors related to hospital size and their influence on remaining current is discussed. This topic includes the differences in the three hospitals as well as the similarities in profiles of currency.

Continuing Education

Continuing education is a very important mechanism that the nursing profession has adopted as a means of avoiding obsolescence (Styles, M.M., et al, 1979). Nurses researched are required to obtain 30 contact hours every two years to retain their licensure. For example, to renew a license by October 31, 1990, a registered nurse would need to complete 30 contact hours within the time period of November 1, 1988, to October 31, 1990. This nurse would then have a current license until October 31, 1992. A nurse would obtain one
contact hour for a fifty minute program or class. A total of ten contact hours would equal one continuing education unit (CEU).

Although nursing literature suggested there was a debate as to the actual impact of continuing education, participants seem to feel that continuing education is an effective means of keeping abreast. There are, however, concerns regarding the availability of contact hours, and how selective nurses are when choosing their 30 contact hours.

As stated, participating nurses perceived continuing education as an effective means of keeping abreast. It was one of the most cited methods of remaining current.

Interview 9 "But the continuing education as a whole...is probably the most effective."

Continuing education, however, is not a panacea for avoiding obsolescence. In order to be optimally effective, nurses must attend programs on relevant topics, learn the material, and transfer what they learn.

One issue that nurses were concerned about regarding continuing education is its availability in close proximity to their home and work. Many nurses suggested that they would take those hours which were available nearby, regardless of whether it was applicable to their job duties.
Interview 10  "Nurses will 100% go to free offerings within their own facility, if they're available. That's the most popular one."

Interview 7  "But a lot of times what we see nurses doing is ... attend a continuing education program that is offered close by - just so they can get the credit hours and that is not necessarily pertaining to their field."

Nurses, however, felt that it is the individual nurse's responsibility to be selective in choosing which continuing education units to take.

Interview 7  "Now they do not require what areas we get (contact hours) in and, I feel like,... we are responsible as individuals to obtain the kind of continuing education that we need for our particular field."

Interview 5  "You have 30 hours in 2 years [which] gives you the opportunity to be selective about what you want that is really pertinent to your area or that brings you up-to-date on an area that maybe you are a little rusty in."

Hospitals have assumed some responsibility in assisting nurses in attaining their 30 continuing education units.

Interview 9  "And the hospital has taken a vital role in that I think, to offer (contact hours) and usually ... either free or very minimal cost which is good...And then we (the hospital) provide the programs and try to meet the needs. We survey the staff every year to see what their needs are, what they want to have for the next year and try to meet those needs."

Only one nurse mentioned that nurses may resent the forced responsibility of the 30 contact hours every 2 years. She suggested that the contact hours may not be as an effective method of remaining current.
Interview 2  "So, I think sometimes they’ll work very hard and then they’ll take their day off and they’ll come to a CE (continuing education) class and they’ll take it. They’ll learn, but they won’t learn as much because personally I think they begrudge it a little bit. They would rather do it at a time that is more convenient for them and simply because they want to do it."

Other problems include programs not being available on the topics nurses wanted. This seemed to especially be the case for administrative nurses. Of course, some felt the available classes were boring and repetitive.

Nurses who participated in the survey portion of the research were asked further about contact hours. These nurses rated the extent various reasons affected their choice of continuing education units (see Appendix F, question 7). The mean response to each item was used to rank order these influences. The first reason that nurses choose the programs that they do is that the classes are of interest to them.

1. The classes are of interest to you
2. They will assist you to perform more effectively
3. To be confident in your abilities
4. They fit into your schedule
5. To perform as well as the other R.N.’s
6. Cost of the continuing education classes
7. Ease of access; they are convenient for you to attend
8. Your co-workers or friends are going.

Despite concerns, nurses are generally pleased with continuing education programs as a means of remaining current. They may not always want to attend, but in the end they feel it’s for the best.

Promotions to Administration/Management

This category examines the obsolescence indicator of registered nurses who have been promoted into administration/management. As discussed earlier, Zelikoff (1969) suggested that promotions may necessitate further training in one’s field of expertise, nursing in this instance, as well as in the area to which one is promoted.

In examining the issues of remaining current with regard to administrative nurses, several topics will be addressed. These issues include the misconceptions of floor nurses concerning administrative duties and responsibilities; the training available to administrative nurses; the concerns of those nurses who are middle managers; and the effect of hospital size on administrative nurses.

Conflicting responsibilities. One of the problems that administrative nurses face is being caught between administration and floor nursing. Besides a misunderstanding of their roles, these nurses must also deal with the pressures of remaining current in both fields.
The problem of conflicting responsibilities is exacerbated by the fact that floor nurses may have unrealistic expectations of administrative nurses' roles. For example, floor nurses may expect administrative nurses to have the best clinical nursing skills and be the best manager. Administrative nurses must deal with this confusion.

Interview 10  "The largest percent of nurses today have an Associate Degree. I don’t think they’re educated to the point that they understand what a nurse manager is. And I think that many times the hardship that is placed on a nurse manager is that the staff under her doesn’t understand her role- her job."

They must also learn to accept that it is alright for their skills as a hands on nurse to become atrophied.

Interview 10  "When someone moves from caregiver to manager, their skills as a manager develop and increase, but their technical skills become rusty. But that’s OK because they’re not expected to be a top notch caregiver any more. They’re to be a manager. It’s extremely difficult for a nurse who moves into management to keep up with her bedside skills because she has moved into a full time, consuming job and if she tries to keep up, she’s going to go nuts."

In the survey portion of the research nurses were asked to rate the importance of various duties for nurses promoted into administration (see Appendix F, question 11). The mean response for each item was used to rank order the items in terms of perceived importance. The ranking is as follows:

1. Keeping up-to-date with administrative techniques and policies
2. Taking classes that would enhance knowledge and skills in performing administrative duties
3. Keeping up-to-date with the new technologies and equipment in nursing
4. Contributing to executive management decisions
5. Performing routine nursing duties.

In the next part of the survey, only administrative nurses were queried. Administrative nurses responded as to the extent the following caused problems for them (see Appendix C, question 13). The means were used to rank order the concerns of administrative nurses.

1. Conflicting expectations of subordinates and administration
2. Balancing management/administration duties with patient care duties
3. Finding continuing education classes that are pertinent to your area.

In sum, nurses who are promoted into administration face conflicting responsibilities and expectations. These conflicting expectations and responsibilities may cause these nurses to face problems associated with role stress (Scalzi, 1988).

**Resources and Training.** The present section reviews the problems administrative nurses have in preparing for their specific job duties. A major problem of nurses in administration is finding the resources, such as nearby
programs that they need in order to be current in their new position. As one administrative nurse stated:

Interview 11 "Well, the problem is, ...a lot of things like infection control, there's usually just one (person performing this function) at each hospital and most opportunities for (programs) specific to my area are usually far away."

These nurses may have double duty. Many try to keep up when they get new equipment in the institution because they don't want to be completely in the dark about it. As far as training for their new position, there may be a lack of opportunities.

Interview 11 "Another thing that bothers me going into administration is you're not really trained for it a lot of the times. You know, management skills - you learn flying by the seat of your pants a lot of times. You learn by your mistakes."

Nurses interviewed also talked about the lack of training for nurses promoted into administration. One concern of nurses was that nursing school did not prepare nurses for administrative positions or how to deal with other aspects of the job besides patient care (Southern Council on Collegiate Education for Nursing, 1987).

Interview 11 "But a lot of times, maybe our nursing education is amiss (in preparing nursing for administration/management) sometimes, but you never know what level you're going to go into administration to."

Administrative nurses answering the survey responded that outside reading was the number one preparation to assuming the responsibilities of administration and management (see Appendix F, question 14). The mean
responses of the items were used to develop a rank order of the extent to which each prepare nurses to assume the responsibilities of administration and/or management.

1. Outside reading
2. Supervisors
3. Subsequent degree
4. Hospital
5. Continuing education classes

Nurses who are promoted into administration do not feel adequately trained in their new duties (Southern Council on Collegiate Education for Nursing, 1987). These nurses attempt to remain current with floor nursing skills and seek outside resources, such as literature, to prepare for their administrative/management responsibilities.

Middle managers. There can also be difficulties for those nurses who are expected to perform nursing duties as well as management duties. These middle managers are in the unique position of being expected to perform nursing duties as well as carry out management responsibilities. The problems and expectations of these nurses are considered in this section.

Interview 10  "Our unit manager took this position, I think with a little hesitance because she knew that she was going to be doing patient care, she was going to be doing what we think of as charge nurse duties, but she was going to be consistently called on to be unit manager - To report to the physicians, the nursing office - the higher echelon... She is trying now to
move more into the manager role and not do charge nurse, not do patient care as frequently."

One nurse in this position went on to say that she felt like she has a "split personality." It is difficult for her to divide her time between the two responsibilities.

Interview 10  "I feel like the patient care that I am responsible for as a hands on nurse comes first, and therefore, I put off some of my management work and expectations until it kinda piles up sometimes just because I feel like the patient care comes first and it’s hard to divide time between the two."

In the survey portion of the study, nurses were asked to respond to the question of how important it is for middle managers to perform various duties (see Appendix F, question 12). The mean response of each item was used to rank order the items in terms of importance.

1. Keep up-to-date with the new technology and equipment in nursing
2. Keep up-to-date with management techniques
3. Take classes that would enhance their management skills and duties
4. Take classes that would enhance their patient care
5. Perform routine nursing duties.

Middle managers are expected to do it all - to avoid obsolescence in nursing as well as management. These nurses have to juggle the responsibilities of floor nursing with
their management duties. Many times, therefore, these nurses are understandably stressed.

**Hospital size and administrative nursing.** Hospital size affects organizational causes of obsolescence, such as job duties and organizational structure. It is therefore important to examine the obsolescence problems of administrative nurses in relation to the hospitals for which they work.

The obsolescence profiles of administrative nurses is affected by hospital size. Administrative nurses at Hospital C have distinctly different job duties compared to administrative nurses at the larger Hospitals A and B.

Administrative nurses at the smallest hospital, Hospital C, seemed to continue to a greater degree with their hands-on nursing. Floor nurses at this hospital feel comfortable with even the highest level administrative nurse assisting in hands-on care.

Interview 4 "I’ve never felt uncomfortable when we’ve been in a real bind and she [the administrative nurse] was free to come and help me, even though she was, she is behind a desk. You know, if I need her help with a patient, she has been there and I don’t think she has lost any of her skills."

At Hospital C even the nursing director continued in direct delivery of services.

Interview 2 “In a small facility, you can keep your skills because I can make rounds everyday and I still get to do a little assessment without interfering with the supervisors. If they have a problem starting an
I.V. or putting down a nasal gastric tube or something that requires the skills of somebody who has been there before and they can call on me and I can show them some various things about it and still maintain my own skills."

At Hospital C, being promoted was not a path to obsolescence.

This is not the case for administrative nurses at Hospital A and Hospital B, where administrative nurses admitted that technical skills had atrophied. Administrative nurses at Hospital C, however, did not feel threatened by a loss of skills. These administrative nurses at Hospital A and Hospital B not only felt an erosion of their skills in nursing, but also felt undertrained in management and administrative skills. Promotion is one path to the obsolescence that affected R.N.’s at Hospital A and Hospital B. The organizational structure of Hospital C and a more broad scope of duties allowed administrative nurses at Hospital C to remain current with nursing.

All in all, especially at the two larger hospitals, nurses agree that administrative nurses lose some skills. Administrative nurses are very conscious of this loss as well as the problems of keeping up with their expanding responsibilities.

Interview 5 "I think there is a certain amount of nursing that has to be hands-on. I think once you’re promoted far enough that you’re not doing patient care, you can still understand the theories...but the one thing that makes staff nurses so functional is the hands-on [duties]."
Factors Related to Hospital Size

This section discusses further the profiles of how nurses deal with and perceive obsolescence in terms of factors related to hospital size. Although different in size, Hospital A and Hospital B are more similar than different in relation to obsolescence. Hospital C is unique with regard to specialization and duties of administrative nurses. The similarities between all 3 hospitals in perceptions of issues affecting obsolescence are also discussed. Specifically, these issues include the methods available to nurses to remain current, and general issues that influence nurses in remaining current.

Specialization. While specialization may be desirable due to rapid advances, it still may cause nurses to lose touch with their profession and changes that occur in areas they do not usually work. Topics discussed in relation to specialization include why nurses should remain current with their profession, why many nurses have become specialized, the effects of specialization, and what happens when nurses do not specialize.

In the smallest hospital, Hospital C, the organizational structure was such that nurses were not specialized. In fact, they had to be able to work the entire hospital. Nurses who did not feel comfortable working all areas generally self-selected themselves out of the situation.
Interview 4  "Well, a lot of nurses that have come there don’t stay because of that [working all areas]. But that is all I knew. You know when I started there, they said, "You don’t just get to work OR here and we are going to show you how to do OB and ER and Surgery," and, you know, the whole nine yards. And I don’t think it is personally (difficult) but I can see where it would frighten someone."

Floor nurses at Hospital C are expected to be proficient in a variety of areas.

Interview 2  "As a nurse on the floor in a staff nurse position, you would wear a lot of hats. You’d cover areas you wouldn’t cover in a larger hospital simply because of the size. You cover emergency room, obstetrics, you cover surgery, recovery room, Med. Surg., pediatrics and nursery. You just sum it all up and you have to cover it all."

Working all areas was even suggested as a way to avoid burn out. Nurses at the smaller hospital did not seem stressed by working all areas. For them, it was part of the normal job functions.

While few nurses at any of the hospitals talked about keeping up with their profession as a whole, many talked about the need to keep up with the specific areas in which they usually work. One administrative nurse, however, did stress the importance of keeping up with the nursing profession as a whole. She went on to explain this importance by stating:
Interview 11  "I just think that we have to take the responsibility for our profession and keeping up with what’s going on and encouraging others to do it. I think it’s mainly [necessary] if we want to promote the profession of nursing as a whole and try to upgrade our profession. I think you all have an individual – each nurse has an individual responsibility (to keep up with the nursing profession)."

The survey portion of the research also revealed that nurses felt that keeping up-to-date and remaining current on one area that specifically affects their job was very important. Nurses were asked to rate the importance of remaining current in one area and remaining current with the nursing profession as a whole (see Appendix F, question 5). The mean response indicated that nurses felt remaining current with one area was very important as compared to keeping up with the profession as a whole which was rated as moderately important to performing their job.

The survey portion also suggested that those nurses who work in a specific area lost touch with a moderate amount of the changes that were occurring in the entire field of nursing (see Appendix F, question 10).

According to the nurses at the two larger hospitals, rapid changes have caused nurses to specialize more. Many nurses recalled that, in the past, they had worked all areas of the hospital. They would feel uncomfortable doing that now.

Interview 11  "I know back 18 years ago, I could hop from place to place to place, unit to OB to Med. Surg. and do alright but now things are getting so
specialized in each area that, that's very difficult for someone to do without special training."

In the present, when nurses are called upon to work in areas other than their usual areas, they do basic nursing tasks. For example, they may check vital signs and charts. They work as an extra aide and tend to avoid specialized tasks.

Nurses who are specialized are not often asked to work other areas. When the situation does occur where they are needed to work other units, it is stressful for the nurse who has been "pulled" to that area.

Interview 10 "They get irate. They get very unhappy about it. Their stress level goes up. They go to the other area and they feel somewhat lost. Your productivity is poor. You don’t function in that area well because you’re - it’s - you’re not used to it. Takes you ten times as long to do something as you would have done it in your own area. Nobody likes it."

Nurses at Hospital A and Hospital B are encouraged to strive for certification in a specialized area and to become proficient in that area. Specializing, however, may make it difficult for hospitals to provide inservices that apply to all R.N.‘s. One O.B. nurse stated that most of the inservices at her hospital didn’t apply to the area she worked. Another went on to explain:

Interview 11 "You know, we’re getting so specialized in nursing and I don’t see it changing. Any more, you know, you can’t have a general inservice that everybody from every area can go in to unless you do something on stress, or management, or things like that."
Rapid changes in medicines and technology were cited as precursors to the specialization of nurses at Hospital A and Hospital B. Nurses at Hospital A and Hospital B generally feel uncomfortable working different areas. Nurses at Hospital C expect to work all areas.

**Similarities.** Regardless of the differences among the three participating hospitals, they do illustrate numerous common concerns. This section will discuss those developed categories where the three hospitals provided homogenous responses. The size of the hospital does not appear to interact with these categories. The issues addressed are those which are related to obsolescence indicators.

**Methods available.** The first issue addressed is that of whether registered nurses are aware of methods available to them to remain current, and, of those methods, which are most important. Nurses interviewed described ways available to keep up-to-date. It became apparent that nurses were well informed as to what means were available for keeping up-to-date. The three most mentioned methods of remaining current were hospital inservices, continuing education programs, and nursing journals.

During the survey portion of the study, nurses were asked to rate the importance of various methods of remaining current (See Appendix F, question 3). The mean responses to each method of gaining new knowledge, skills, and abilities related to their job has been rank ordered.
1. Simply working at your job
2. Seminars, workshops and conferences
3. Related books (PDR for example)
4. Continuing education
4. Hospital inservice programs
5. Mock codes or simulations
5. Networking with others who have similar duties
6. Company representative providing programs on their equipment or their pharmaceutical
7. Nursing Journals
8. Staff meetings
9. Visiting other hospitals
10. Hospital newsletters
11. Obtaining another nursing related degree
12. Non-required college classes.

Work experience, i.e. simply working at their job, is ranked first with the highest ranked mean response. Continuing education programs and hospital inservice programs tied for the fourth highest ranked mean response.

Simply working at their job and related books (Physicians Desk Reference, PDR, for example) were rated higher than continuing education and inservices. Experience, of course, is important to keeping up with new technologies and procedures. It may be that learning which is patient-motivated is one of the most common methods of
remaining current. Related books (PDR) will be referred to
costantly by the nurses while dealing with their patients.

Nurses interviewed also felt that keeping up-to-date
was stressed at their nursing school.

Interview 9 "They discuss that usually the last
semester. Kinda all the way through but then the last
semester you really get in to that a little bit more,
in joining the professional organizations if you want
to do that and things ... in the future that you might
do."

In the questionnaire portion, nurses also answered to
what extent ongoing education was stressed in their formal
nursing education (see Appendix F, question 9). The mean
response indicated that ongoing education was stressed a
moderate amount. Nurses are aware of the ways available to
remain current. This information is provided through
journals, inservice departments, and co-workers. Those
responding to the survey reported patient-motivated methods
as highly effective.

Although nurses as individuals do assume the most
responsibility for remaining abreast, they do look to the
hospitals to provide assistance. Nurses expect the
hospitals to provide inservices, financial support, special
resources, and opportunities to learn and to practice what
they have learned.

Nurses look to the hospital to provide inservices on
new machinery, equipment, and medications.

Interview 11 "We have a good inservice department that
tries to keep everybody informed. If we get new
equipment, new procedures, we have inservice on it."
But they’re so busy and short staffed and a lot of times on the floor that you don’t get time to participate."

In general nurses are paid for mandatory inservices. Others are on the nurses’ own time.

Interview 8 "Now if they are mandatory, they are on the time when we are working. We can clock in. Anything that is mandatory. Anytime else that we want to do an inservice, that’s not mandatory, that’s not, it’s not, we don’t get paid for it."

Interview 7 "Our hospital has a good policy that they are willing to help pay for our continuing education. I know some facilities do that and some don’t. I think that is a help to our nurses here. They feel like they can attend and the hospital will either reimburse them or help them with the cost of the educational programs."

Hospitals will also pay for some nurses to upgrade their educational degree.

Interview 7 "And also our hospital has a policy that if you want to continue or upgrade ... your degree level or what ever...they will agree to pay for the tuition for that person to go on to school to get a furthering education, with the agreement that that employee will give back some of that time to the hospital, naturally."

Another important opportunity that hospitals provide for their nurses is the opportunity to practice new skills and abilities.

Interview 2 "...so in these classes we set up mock codes if you will. Whereas we have a mannequin and a monitor and the monitor shows you what happens to the heart when it stops. What the pattern what you see is. And then you have a team of nurses and they are in charge and you are grading them on what they do. And it’s a stressful situation but it is a situation that helps them to feel like if they can do it in this particular mock code situation, they can do it in real life and to me, that is the best training you can get."
What affects keeping up. This section concerns what affects a nurse's keeping up-to-date. More specifically, issues related to having the time to take classes, attend workshops, etc., will be addressed. Not having enough time was one of the most mentioned deterrents to remaining current. With problems such as hectic work schedules, family concerns, exponential changes in drugs and technology, and heavy patient loads, many nurses feel overwhelmed by the prospect of obtaining the 30 contact hours necessary to renew their license.

Most nurses agree that there are a lot of ways available for remaining current (see Methods Available section). The problems are in finding the time to attend, which includes working their schedules around the programs.

A majority of nurses at these hospitals are females who still assume most of the responsibilities for children and home. These nurses are pressed to balance family concerns with the duties of a professional.

Interview 9 "Most nurses within this hospital are young, child-rearing age with families and that requires a lot of time. You know, besides the hours that you work here."

Because of the overwhelming amount of information and changes every year, many nurses have difficulty coping.

Interview 12 "Sometimes, I think we feel like it’s a task to keep up with all of it. You know, we wonder sometimes if it’s worth it, you know, and sometimes you wonder if you really can keep up with everything that’s going on ‘cause there’s really not any way to keep up with every new thing that’s on the market, new way to
do something and, you know, there's always a better way usually to do something."

Nurses do acknowledge that numerous programs are available, many times even at their own hospital. The problem is being able to attend these programs.

Interview 10 "OK the most difficult thing that makes it hard for nurses to keep up with technology, is the fact quote, OUR NURSING SHORTAGE. When you arrive on the job, you have such a patient load with so many technical procedures to be completed. That, I have noticed the whole 9 years that I have been an RN that the hospitals will offer continuing education classes. There will be inservices in the building, but the nurses do not get to go to them. They are too busy at the patient's bed side. Our patient educator here in the hospital has complained many times that she offers the continuing education classes or the up dates that we ask for but we don't come. And why do we not come? It's because we have usually twice the load that we should be carrying and we cannot physically accomplish the care in 8 hours that we are assigned. So then you cannot possibly leave for an hour or 2 hour inservice."

In the survey portion of the research, nurses responded to the extent that various items affected how much time they had to keep up-to-date (see Appendix F, question 4). The means of the items were rank ordered to develop the following list. Work schedule was rated the highest in affecting how much time nurses had to remain current.

1. Work schedule
2. Family concerns
3. Expanding duties at work
4. Being tired
On the questionnaire nurses were also asked how helpful various items were in encouraging them to keep up-to-date on issues related to their job (See Appendix F, question 6). The mean response of each item were used in order to rank order the items. Nurses rated access to information about new technology as most helpful.

1. Access to information about new technology
2. Feedback and support from co-workers
3. Feedback and support from supervisors
4. Support from the hospital
5. Rewards from keeping up-to-date.

Nursing is a unique profession in that, at these hospitals, it is predominately female. These females felt time to keep up was a problem. Many also had family and home responsibilities. This, coupled with the fact that many nurses feel overwhelmed with the changes in technologies and medicines, makes nurses feel there is no way to keep up with it all.
Summary and Conclusions

This section provides a summary of the research outcomes. The results are reviewed with regard to the purpose and objectives of the research. Next, a discussion of the generalizability of this study and its contribution to the field is examined.

First, as discussed earlier, nurses researched are required to obtain 30 contact hours every two years. These contact hours are obtained through approved continuing education classes and programs. The questionnaire utilized in this research incorrectly referred to these contact hours as continuing education units, (see Appendix F, question 3a, 7, 13b and 14e). A continuing education unit, however, is actually equal to ten contact hours. While incorrect terminology was used, it is felt that since continuing education units encompass contact hours, the results are not significantly affected.

The stated purpose of this research is to continue the investigation of obsolescence. This was accomplished by identifying profiles of how nurses deal with, and their perception of, obsolescence in terms of moving from clinical nursing into administration and factors related to hospital size. An examination of the literature revealed there were
two separate components to obsolescence. These components were examined and found to be influenced by moving from a technical field into management/administration as well as by factors related to hospital size.

To begin, a summary of the results that pertain to the move into administration/management in nursing is provided. The literature indicated that promotions could necessitate further training in one’s field as well as in the area to which one is promoted (Zelikoff, 1969). Results indicated that these promotions do indeed precipitate a special set of problems for nurses in remaining up-to-date. Many try to remain current with new nursing technology and medicine, their nursing skills, and also try to remain up-to-date on management techniques. Nurses find this position very stressful because most agreed some nursing skills begin to atrophy. These nurses are facing component 1 of obsolescence, which is the perceived degree to which an individual lacks the knowledge and skills associated with their profession of nursing. This stress is exacerbated because of the conflicting expectations of their subordinates and other administrators.

These nurses may come into these administrative/management positions relatively untrained. Nursing school does not prepare nurses for these responsibilities. In a sense, these nurses come into this position lacking the up-to-date skills and knowledge to
perform their specific job effectively. These nurses thereby face component 2 of obsolescence. Component 2 is the perceived degree to which an individual lacks the knowledge and skills to perform their specific job effectively.

Next, a review of the results that pertain to factors related to hospital size is presented. Research indicated that hospital size, which affects organizational climate and structure, does influence obsolescence indicators largely through its effect on job duties. Nurses at the larger hospitals were more specialized and therefore faced component 1 of obsolescence. They were losing touch with changes in the profession in favor of becoming more specialized. Nurses at the smallest hospital did not specialize and were able to perform more varied duties.

The participants in this research were nurses at three hospitals in the South Central part of the United States. Nurses at all hospitals considered themselves small facilities and mostly rural. The results of this study can therefore be generalized to similar size hospitals in mostly rural areas of the country where there are requirements for licensure. These conclusions can be generalized because the nurses were reporting on the organizational and nursing system. They were key informants, who provided information beyond that of their experience. The results of this study follow from the literature reviewed. In general, variations
in research method that provide similar outcomes leads to
greater generalizability of the research.

This research contributes a further understanding of
obsolescence. Most of the research thus far on obsolescence
has been conducted on the engineering profession. This
research expands the body of knowledge by examining a
profession that has mechanisms in place to combat the
problems of remaining current.

Research should further expand this body of knowledge
on obsolescence by examining organizations with more complex
organizational structures. A comparison between those
facilities on the cutting edge of technology with those with
fewer opportunities is also an interesting area. This
expansion of knowledge on obsolescence should allow
organizations to better understand the needs and concerns of
those who face obsolescence. Also, it will provide them the
tools to retard the progression of obsolescence in their
employees and ultimately their organization.
Appendix A

Demographic Data of Survey Respondents

1. By what hospital are you employed?

<table>
<thead>
<tr>
<th>Hospitals</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (large)</td>
<td>34</td>
<td>59.6%</td>
</tr>
<tr>
<td>2 (medium)</td>
<td>17</td>
<td>29.8%</td>
</tr>
<tr>
<td>3 (small)</td>
<td>5</td>
<td>8.8%</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

2. Age:

Mean=2.857 [37-44] Standard Deviation=1.227

Categories: 1 = 20-28; 2 = 29-36; 3 = 37-44; 4 = 45-52; 5 = 53+

3. Sex:

100% were female.

4. What is your marital status?

[ ]a. Never married
[ ]b. Married
[ ]c. Divorced
[ ]d. Widowed
Mean=2.018 [b. married] SD=0.51

5. What is your employment status?

[ ]a. Full time
[ ]b. Part time
Mean=1.175 [a. full-time] SD=0.384
6. Number of years employed at current hospital:
   Mean=2.596 [11-15 years]   SD=1.425
   -categories: 1 = 0-5; 2 = 6-10; 3 = 11-15; 4 = 16-20;
     5 = 21-25; 6 = 26-30; 7 = 31+

7. Job Title:
   Mean=1.702 [middle position]   SD=0.680
   -categories: 1 = staff; 2 = middle; 3 = administrative

8. Highest educational degree in nursing:
   [ ]a. Diploma
   [ ]b. Associates degree
   [ ]c. Bachelors degree
   [ ]d. Masters degree
   [ ]e. Doctorate degree
   Mean=2.035 [b. Associates]   SD=0.597

9. Highest educational degree:
   [ ]a. Diploma
   [ ]b. Associates degree
   [ ]c. Bachelors degree
   [ ]d. Masters degree
   [ ]e. Doctorate degree
   Mean=2.071 [b. Associates]   SD=0.628

10. In what year did you receive your first degree or diploma in nursing?
    Mean=3.263 [1974-1979]   SD=1.748
11. In what year did you receive any subsequent degrees?

Mean=1.850 [1980-1984]  
SD=1.387

12. How many years have you been working as a nurse?

(Please round to the nearest year.)

Mean=3.193 [11-15 years]  
SD=1.641

13. What different positions and job titles have you held and for how long? Continue on back if necessary.

[Written response]
Appendix B

Informed Consent Form

I, __________________, agree to participate in research on the processes and perceptions of remaining up-to-date in Nursing. The research and procedures have been explained to me. I understand that if at any time I feel uncomfortable I may withdraw from the study without fear of negative consequences.

________________________  __________________________
Date                      Participant's Signature
Appendix C

Face Sheet Data

1. By what hospital are you employed? ______________

2. Age: ________ years

3. Sex:
   [ ] Female
   [ ] Male

4. What is your marital status?
   [a] Never married
   [b] Married
   [c] Divorced
   [d] Widowed

5. Number of years employed at current hospital:
   ________ years

6. Job title: __________________________

7A. Highest educational degree in nursing:
   [a] Associate degree
   [b] Bachelor degree
   [c] Masters degree
   [d] Doctorate degree

7B. Highest educational degree:
   [a] Associate degree
   [b] Bachelor degree
   [c] Masters degree
   [d] Doctorate degree

8. In what year did you receive your degree or diploma in nursing? 19_____

9. How many years have you been working as a nurse? (Please round to the nearest year.) _______ years

10. Please list your work history in nursing. What different positions and job titles have you held and for how long? (Continue on back if necessary.)
Appendix D

Interview Questions

A. Introduction of researcher and research
B. Ask for permission to tape-record and take notes, assure participant of confidentiality
C. Give nurse face sheet data to fill out
D. Ask nurse to act as expert witness about nursing and to report on the system

QUESTIONS

1. What is it like being a nurse at name hospital? What changes have taken place in the job of nursing at this hospital and in the profession as a whole in the last _____ years?

2. What are the problems that nurses face in keeping up-to-date? What kinds of things make it easy for nurses to keep up-to-date and what kinds of things make it difficult? Are there problems finding time to keep up-to-date?

3. What is the role of the nurse in keeping himself or herself up-to-date and current? What is the role of the nurses' supervisor in keeping nurses up-to-date and current? What is the role of the hospital in keeping nurses up-to-date and current? What is the role of educational institutions in keeping nurses up-to-date and current?

4. What happens to a nurse's skills and knowledge when he or she moves into administration? In what ways is it easy
for him or her to remain a current and up-to-date nurse and in what ways is it difficult?

5. What do nurses do to remain current and keep up-to-date? Do they take classes, etc.? How effective are continuing education classes in keeping nurses current and up-to-date? How effective are inservices? How do you stay informed about ways to keep up-to-date?
Appendix E

Post Interview Checklist

Interview Number:
Rate interview overall:

1----2----3----4----5

very poor excellent

Location of interview:
Personnel present at interview:
Interviewee’s reaction to interview:

Comments:

• Check tape recorder label

• Review notes: Comment
Appendix F

Means and Standard Deviations of Responses to Questionnaire

1. How responsible are each of the following in keeping you current in nursing?
   1 = Not responsible
   2 = Somewhat responsible
   3 = Moderately responsible
   4 = Very responsible
   5 = Totally responsible

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Myself:</td>
<td>4.368</td>
<td>0.723</td>
</tr>
<tr>
<td>b. My supervisor:</td>
<td>2.386</td>
<td>1.114</td>
</tr>
<tr>
<td>c. The hospital:</td>
<td>2.912</td>
<td>0.969</td>
</tr>
</tbody>
</table>

2. What has happened to the knowledge you learned while attending nursing school?
   1 = Mostly declined
   2 = Somewhat declined
   3 = Stayed the same
   4 = Somewhat improved
   5 = Greatly improved

<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.321</td>
<td>1.029</td>
</tr>
</tbody>
</table>
3. How important are the following to gaining new knowledge, skills, and abilities that are related to your job?

1 = Not important
2 = Somewhat important
3 = Moderately important
4 = Very important

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing education units (30 every 2 years for licensure):</td>
<td>3.105</td>
<td>0.900</td>
</tr>
<tr>
<td>Hospital inservice programs:</td>
<td>3.105</td>
<td>0.795</td>
</tr>
<tr>
<td>Simply working at your job:</td>
<td>3.491</td>
<td>0.759</td>
</tr>
<tr>
<td>Nursing journals:</td>
<td>2.772</td>
<td>0.780</td>
</tr>
<tr>
<td>Non-required college classes:</td>
<td>1.946</td>
<td>0.903</td>
</tr>
<tr>
<td>Company representatives providing programs on their equipment or their pharmaceuticals:</td>
<td>2.842</td>
<td>0.862</td>
</tr>
<tr>
<td>Obtaining another nursing related degree:</td>
<td>2.018</td>
<td>1.044</td>
</tr>
<tr>
<td>Visiting other hospitals:</td>
<td>2.246</td>
<td>0.851</td>
</tr>
<tr>
<td>Mock codes or simulations:</td>
<td>2.912</td>
<td>0.872</td>
</tr>
<tr>
<td>Seminars, workshops, and conferences:</td>
<td>3.246</td>
<td>0.662</td>
</tr>
<tr>
<td>Related books (PDR for example):</td>
<td>3.228</td>
<td>0.682</td>
</tr>
</tbody>
</table>
1. Hospital newsletters: 2.070 0.904
m. Staff meetings: 2.491 0.889
n. Networking with others who have similar duties: 2.912 0.892

4. To what extent do the following affect how much time you have to keep up-to-date and current?

1 = Not at all
2 = Some extent
3 = Moderate amount
4 = A great deal

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Family concerns:</td>
<td>3.088</td>
<td>1.023</td>
</tr>
<tr>
<td>b. Child care:</td>
<td>2.228</td>
<td>1.254</td>
</tr>
<tr>
<td>c. Work schedule:</td>
<td>3.281</td>
<td>0.818</td>
</tr>
<tr>
<td>d. Being tired:</td>
<td>2.860</td>
<td>0.972</td>
</tr>
<tr>
<td>e. Expanding duties at work:</td>
<td>2.982</td>
<td>0.963</td>
</tr>
</tbody>
</table>

5. How important to performing your job is keeping up-to-date in the following areas?

1 = Not important
2 = Somewhat important
3 = Moderately important
4 = Very important

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Keeping up-to-date in terms of hands on nursing/patient care:</td>
<td>3.625</td>
<td>0.702</td>
</tr>
</tbody>
</table>
b. Keeping up-to-date and remaining current with the nursing profession as a whole, not just certain areas:  
   3.125  0.854

c. Keeping up-to-date and remaining current on one area of nursing (O.B. for example) that specifically affects your job:  
   3.607  0.779

6. How helpful are the following in encouraging you to keep up-to-date and current on issues related to your job?

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Feedback and support from supervisors:</td>
<td>2.696</td>
<td>1.043</td>
</tr>
<tr>
<td>b. Feedback and support from co-workers:</td>
<td>2.839</td>
<td>0.826</td>
</tr>
<tr>
<td>c. Support from the hospital:</td>
<td>2.679</td>
<td>0.993</td>
</tr>
<tr>
<td>d. Access to information about new technologies:</td>
<td>2.929</td>
<td>0.806</td>
</tr>
<tr>
<td>e. Rewards for keeping up-to-date:</td>
<td>2.518</td>
<td>1.095</td>
</tr>
</tbody>
</table>
7. To what extent are the following reasons that you choose the continuing education units that you take?

1 = Not at all
2 = To some extent
3 = To a moderate extent
4 = To a great extent

<table>
<thead>
<tr>
<th>Reason</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be confident in your abilities:</td>
<td>3.411</td>
<td>0.708</td>
</tr>
<tr>
<td>To perform as well as the other R.N.s:</td>
<td>2.944</td>
<td>0.940</td>
</tr>
<tr>
<td>Ease of access. They are convenient for you to attend:</td>
<td>2.804</td>
<td>0.942</td>
</tr>
<tr>
<td>Cost of the continuing education units/classes:</td>
<td>2.821</td>
<td>0.876</td>
</tr>
<tr>
<td>Your co-workers or friends are going:</td>
<td>2.107</td>
<td>0.867</td>
</tr>
<tr>
<td>They fit into your schedule:</td>
<td>3.036</td>
<td>0.934</td>
</tr>
<tr>
<td>They will assist you to perform more effectively:</td>
<td>3.464</td>
<td>0.687</td>
</tr>
<tr>
<td>The classes/units are of interest to you:</td>
<td>3.714</td>
<td>0.494</td>
</tr>
</tbody>
</table>

8a. Do you have specific career goals that you are working toward or have met?

1 = Yes
2 = No
8b. If YES, what did/do you do to prepare yourself for meeting your career goals? For example, did/do you take special classes, obtain another degree, ask for certain assignments, etc?

9. To what extent was ongoing education stressed in your formal nursing education (nursing school)?
   1 = Not at all
   2 = A little
   3 = Moderate amount
   4 = A great deal

10a. Do you work in a specific area, such as O.B. or administration, 80 percent or more of the time?
   1 = Yes
   2 = No

10b. If YES, to what extent has working in a specific area, such as I.C.U. or administration, caused you to lose touch with the changes that are occurring in the entire field of nursing?
   1 = Not at all
   2 = A little
3 = Moderate amount
4 = A great deal

Mean   SD   
2.500  1.000

11. How important are each of the following for nurses promoted into administration?

1 = Not important
2 = Somewhat important
3 = Moderately important
4 = Very important

a. Keeping up-to-date with the new technologies and equipment in nursing:  
   Mean   SD   
   3.345  0.947

b. Keeping up-to-date with administrative techniques and policies:  
   Mean   SD   
   3.600  0.735

c. Contributing to executive management decisions:  
   Mean   SD   
   3.389  0.834

d. Performing routine nursing duties:  
   Mean   SD   
   2.982  0.933

e. Taking classes that would enhance their nursing skills and knowledge:  
   Mean   SD   
   3.345  0.799

f. Taking classes that would enhance knowledge and skills  
   Mean   SD   
   3.509  0.767
in performing administrative duties:

12. How important is it for a unit manager (or unit coordinator) to do the following?

1 = Not important
2 = Somewhat important
3 = Moderately important
4 = Very important

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Keep up-to-date with the new technology</td>
<td>3.893</td>
<td>0.312</td>
</tr>
<tr>
<td>and equipment in nursing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Keep up-to-date with management techniques</td>
<td>3.714</td>
<td>0.594</td>
</tr>
<tr>
<td>c. Perform routine nursing duties:</td>
<td>3.393</td>
<td>0.802</td>
</tr>
<tr>
<td>d. Take classes that would enhance their</td>
<td>3.446</td>
<td>0.658</td>
</tr>
<tr>
<td>patient care:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Take classes that would enhance their</td>
<td>3.679</td>
<td>0.606</td>
</tr>
<tr>
<td>management skills and duties:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Questions 13 and 14 were answered only by administrative nurses.

13. To what extent do the following cause problems for you?
1 = Not at all
2 = Some extent
3 = Moderate amount
4 = A great deal

**Mean** | **SD**
--- | ---
a. Conflicting expectations of subordinates and administration: 2.957 | 0.878
b. Finding continuing education classes/units that are pertinent to your area: 2.565 | 0.843
c. Balancing management/administration duties with patient care duties: 2.870 | 1.014

14. To what extent do the following prepare you to assume the responsibilities of administration and/or management?

1 = Not at all
2 = To some extent
3 = To a moderate amount
4 = A great deal

**Mean** | **SD**
--- | ---
a. Formal nursing education: 2.480 | 1.194
b. Subsequent degrees: 2.750 | 1.113
c. Supervisors: 2.783 | 0.795
d. Hospital: 2.720 0.792

e. Continuing education classes/units: 2.625 0.924

f. Outside reading: 2.880 0.881
Appendix G

Cover Letter to Questionnaire

Dear Registered Nurse,

Your participation is requested in a research study that includes registered nurses at several hospitals in the District. The research is being conducted in association with several faculty members at Western Kentucky University.

This survey includes questions relating to several important issues in the field of nursing. It was developed with the input of several registered nurses at area hospitals. Permission to include registered nurses at Hospital has been given by director of nursing, . Your participation would be greatly appreciated.

Responses will be computer analyzed and are completely confidential. The survey should take no more than 30 minutes to complete and essentially involves placing an X on the response you feel is most appropriate. Please mail the completed survey using the provided stamped envelope by Monday, May 7, 1990.

If you have any questions, feel free to contact myself, Diane Paul, at 782-8152. Thank you very much for your time.

Sincerely,

Diane I. Paul
References


