The retention of nursing faculty is a growing concern in the United States and a major challenge for nursing education administrators. Aim: This descriptive study used Herzberg's Motivation–Hygiene Theory of Job Satisfaction to explore the factors that predict nursing faculty's job satisfaction and intent to stay in academe. Method: Institutional review board approval was obtained, and consent forms with self-administered questionnaires were posted on Survey Monkey. Participants included a convenience sample of nursing faculty teaching in baccalaureate and graduate nursing programs in Florida during the months of May and June 2010. Participants (N = 134) were directed to an on-line site to retrieve and complete the following questionnaires: (a) Job Satisfaction Survey, (b) Nurse Educators' Intent to Stay in Academe Scale, and (c) a researcher-designed demographic questionnaire. Results: Highly educated, experienced nursing faculty reported having more intent to stay (P < .05) in academe. Conversely, age, health-related conditions, and family responsibilities were not significantly related to intent to stay. A significant relationship was found between the motivation–hygiene factor score and the intent to stay score, F(4, 94) = 13.196, P < .00. The significant relationship between the motivational factors (job satisfiers) and the hygiene factors (job dissatisfiers) and intent to stay indicated that the nursing faculty overall were satisfied with their jobs. The mean job satisfaction score was 105.20, with a standard deviation of 30.712. Conclusions: The results provide support that Herzberg's Motivation–Hygiene Theory is a strong predictor of nursing faculty's intent to stay in academe in Florida. (Index words: Job satisfaction; Retention; Nursing faculty; Intent to stay) J Prof Nurs 30:19–25, 2014. © 2014 Elsevier Inc. All rights reserved.
doctoral prepared faculty, and (h) difficulty recruiting qualified faculty because of the rapid growth of advanced practice programs (AACN, 2012).

The state of Florida has also been affected by the number of unfilled faculty positions. Factors that contribute to the faculty vacancy rates in Florida are similar to the factors that contribute to national vacancy rates. During the 2010–2011 academic school year (AY), there was a 7.6% faculty vacancy rate in associate degree nursing (ADN) and a 12.2% vacancy rate in baccalaureate degree nursing (BSN) programs. In addition to the increased faculty vacancy rate, Florida nursing schools are faced with the projected retirement of current faculty members over the next 10 years. Approximately 19% of the BSN program faculty members in Florida are more than 60 years of age. It is projected that more than 80 faculty members will retire in the 2010–2011 AY. The retirement projections of the aging faculty will continue to increase over the next 5 years (Florida Center for Nursing [FCN], 2009, FCN, 2012).

Additional factors that contribute to the diminishing pipeline of nursing faculty in Florida include a decline in the enrollment in Ph.D. programs and low salaries. Despite the shortage of nursing faculty, a career in nursing education is not as lucrative when compared with the salaries of nurses in the clinical settings. According to the United States Department of Labor Occupational Employment and Wages (2011), the median national estimate annual wage for registered nurses (RNs) was $65,950, whereas the national estimate of the median annual wage for nursing instructors and teachers in postsecondary institutions as of May 2011 was $59,380. If the current enrollment of students in nursing education and Ph.D. programs continues to decline, the pipeline of future nursing faculty will be significantly reduced in the future (FCN, 2009).

Although recruitment of new faculty is necessary, it is not the most viable solution for solving the faculty shortage in the short term. Many schools of nursing are facing longer periods of faculty vacancies, as aggressive marketing strategies are not yielding viable candidates, or the candidates who are recruiting are unwilling to accept salaries that are noncompetitive with the clinical setting or private practice (Allen, 2008). The graduation of students currently enrolled in academic programs will hardly address the current faculty vacancies, much less address the impending retirement of more than 50% of the current faculty within the next 5 years. Therefore, the most urgent need is to keep the aging nursing faculty workforce in place, for as long as possible.

**Literature Review**

The academic world is faced with high expectations. Nursing faculty are not exempt from these requirements. In addition to research, nurse educators must keep current in clinical knowledge through professional development and the use of technical skills in specialty areas (Halstead, 2007). The career satisfaction and success of nursing faculty have been threatened by heavy workload, multiple role expectations, insufficient time, lack of mentoring, and lack of collegial support (Gazza, 2009; Gerolamo and Roemer, 2011; Gormley, 2010). These stressors can lead to decreased job performance, negative attitudes toward work, lack of motivation, and eventually detachment from the job (Candela, Gutierrez, and Keating, 2012).

There remains a significant gap in the literature regarding the factors that predict the job satisfaction and the intent to stay of nursing faculty in academe. Job satisfaction has also been identified in the literature as a variable that promotes retention in organizations. Individuals who are satisfied with their jobs have high levels of motivation and organizational commitment (Gormley, 2010; Sharma and Jyoti, 2009). The multiple role expectations derived from teaching, research, and service have a great potential to create conflict with one another, which in turn could impact their job satisfaction and/or job dissatisfaction. With the current shortage of nursing faculty, it is imperative to discover the factors that predict job satisfaction and/or job dissatisfaction of nursing faculty. An understanding of these factors will assist deans and directors of nursing programs to develop and implement strategies that will encourage the retention of the current faculty members and indirectly increase nursing's workforce.

Intent to stay is the dependent variable that will be investigated in this study. Price and Mueller (1981) defined intent to stay as the “estimated likelihood of continued membership in an organization” (p. 546). Garbee and Killacky's (2008) study support the notion that there is a significant relationship between job satisfaction and nursing faculty's intent to stay in academe. The intent to stay scores of faculty who worked 40 hours per week ($M = 8.24$, $SD = 2.48$) were significantly higher than the mean scores of faculty who worked 60 hours per week ($M = 7.13$, $SD = 2.45$).

This study was guided by Herzberg et al.'s (1959) Motivation–Hygiene Theory of Job Satisfaction. Frederick Herzberg, noted as a pioneer researcher in the field of motivational theories, explored the factors that contributed to high or low morale in the work environment and the effects of these feelings on job performance. Herzberg's Motivation–Hygiene Theory specifically identified the motivation–hygiene factors as significant factors that promote motivation or the lack of motivation in the workplace. Herzberg contended that during times of negative job attitudes, individuals will perform job searches, set up interviews, and actually resign from their jobs. Inversely, individuals who experience positive job attitudes will turn down attractive job offers (Herzberg et al., 1959).

Several researchers used Herzberg's (1959) Motivation–Hygiene Theory of Job Satisfaction to investigate the factors that contribute to the job satisfaction of academic and nonacademic employees (Ali, 2009; Beavers, 2010; Lane et al., 2010). Although Herzberg's theory was developed in 1959, it is vital to understand if the concepts of the theory can be applied to workers in today's work
environment. Herzberg specifically identified the motivation–hygiene factors as significant factors that promote motivation or lack of motivation in the workplace. However, he did not investigate the relationship between the selected demographic variables, the motivation–hygiene factors, and intent to stay in general nor specifically in academe. It is believed that the select demographic variables of (age, level of education, health, teaching experience, and family responsibilities) can directly impact the job satisfaction (motivational factors), job dissatisfaction (hygiene factors), and intent to stay. Figure 1 represents the proposed conceptual model.

**Purpose**

The purpose of the study was to use Herzberg's Motivation–Hygiene Theory of Job Satisfaction (1959) to discover the motivation–hygiene factors and selected demographic variables of (age, level of education, health, teaching experience, and family responsibilities) that predict nursing faculty's job satisfaction and intent to stay in academe.

**Study Hypotheses**

The study’s hypotheses that were tested included the following: (a) There will be a significant positive relationship between the select demographic variables of age, level of education, teaching experience, and nursing faculty's intent to stay in academe; (b) there will be a significant negative relationship between health-related conditions, family responsibilities, and nursing faculty's intent to stay in academe; (c) there will be a significant positive relationship between the motivational factor score and the intent to stay score; (d) there will be a significant positive relationship between the hygiene factor score and the intent to stay score; and (e) there will be a significant positive relationship between the motivation–hygiene factor scores and the intent to stay score after controlling for selected demographic variables.

**Methods**

**Design**

A descriptive correlational design was used to collect data from full-time BSN and graduate nursing faculty who teach in nursing schools in Florida that are accredited by the Commission of Collegiate Nursing Education (CCNE) and/or the National League of Nursing (NLN). The selection of CCNE- and/or NLN-accredited nursing programs was an attempt to control for institutional variations such as teaching, research, and service, which can vary across ADN programs compared with BSN and graduate nursing programs.

Nursing faculty working in ADN programs and part-time or adjunct nursing faculty members were excluded from this study.

**Sample**

The sample size of 125 was determined through a power analysis. To minimize the risk of a Type II error, the β level was set at .80 with a moderate effect size (Cohen, 1992). A convenience sample of 300 nursing faculty were invited to participate in the study. The final sample consisted of 127 useable surveys (45% response rate).

**Protection of Human Subjects**

The researcher protected the participants in the proposed study by adhering to ethical and legal guidelines. All policies for protection of human subjects mandated by the university institutional review board were followed. The cover letter indicated that participation in the study was voluntary and that participants had the right to withdraw from the study without incurring adverse consequences. By logging on to the Survey Monkey Web site and initiating the survey process implied consent; therefore, a separate consent form was not required. The researcher did not collect any personal identifiable information from the participants. The answers to the survey questions were directly imported into the Survey Monkey database file without showing the participant's name or e-mail address. Upon completion of the survey, the data were stored on the secure server by Survey Monkey until it was downloaded on the researcher's personal computer, which was password protected.

**Instrumentation**

Job satisfaction was measured by Sluyter and Mukherjee's (1986) Job Satisfaction Survey. This survey is based on Herzberg's (1959) Motivation–Hygiene Theory. The survey is designed to measure the level of job satisfaction.
based on six motivating factors (advancement, recognition, achievement, work, responsibility, and growth) and six hygiene factors (salary, company policies, supervision, working conditions, interpersonal relations, and security).

The survey consists of 24 items on a 7-point Likert scale ranging from 1 (not satisfied) to 7 (completely satisfied). The total maximum score for the instrument is 168, indicating completely satisfied, and the minimum score is 24, indicating not satisfied. A high reliability estimate was obtained from the use of this scale with the study sample of full-time nursing faculty working in academe in Florida (Crombach’s $\alpha = .968$).

Intent to stay was measured by the Nurse Educators’ Intent to Stay in Academe Scale. This instrument was developed by the researcher on the basis of the review of the literature. The self-report instrument consists of 13 items on a 4-point Likert scale format. The scale ranges from a score of 1 (strongly disagree) to 4 (strongly agree). The total maximum score for the instrument was 52, indicating strongly agree. The minimum score was 13, indicating strongly disagree. The initial draft of the instrument was reviewed by a panel of four expert nurse educators for face and content validity. The educator’s teaching experience ranged from 5 to 30 years. Modifications were made to the instrument based on the feedback from the experts to improve the clarity of the questions. A high reliability estimate was obtained from use of this scale with the study sample of full-time nursing faculty working in academe in Florida (Crombach’s $\alpha = .898$).

The demographic survey was developed by the researcher based on the review of the literature. The demographic survey provided descriptive information about the characteristics of the sample of full-time nursing faculty who teach in CCNE- and/or NLN-accredited BSN and graduate nursing programs in Florida. The survey contained 10 items and was designed to gather information relative to participants’ level of education, academic rank, years of teaching experience, years of employment at current institution, type of program primarily teaching, gender, ethnicity, and health and family responsibilities. Health and family responsibilities were measured by one question each on a 4-point Likert scale. The scale ranged from a score of 1 (strongly disagree) to 4 (strongly agree).

Data Collection

Data were collected electronically via the Survey Monkey Web site. A group e-mail was sent to the deans and department chairs of CCNE- and/or NLN-accredited BSN and graduate schools of nursing in Florida, requesting permission to disseminate information to all faculty members in the event they want to participate in the survey. The e-mail contained the link to access the survey on the Survey Monkey Web site. A follow-up e-mail was sent at 2 weeks. In addition, flyers were distributed to nursing faculty in the event they wanted to participate in the survey. The link to the survey was available for 6 weeks during the months of May and June 2010. At the end of 6 weeks, the data collection process was completed.

Data Analysis

The data were downloaded directly from the Survey Monkey secure server, entered into a Microsoft Excel program, and then imported into the Statistical Package for Social Science 16.0 (SPSS 16.0) for statistical analysis. The hypotheses were examined in two stages. The first stage used Pearson’s product–moment correlation, and the second stage used linear regression to examine the independent contribution of each of the predictors.

Results

Descriptive Results

The average age of the participants was 52.65 (SD = 8.242), with a range of 29–71 years. Regarding gender, more than 90% ($n = 119$) of the participants were women. In terms of ethnicity, most of the participants ($n = 111$, 86%) reported being Caucasian, 8.5% ($n = 11$) reported being African American (non-Hispanic), and 4.7% ($n = 6$) reported other. Although most of the participants ($n = 42$) reported that they had 1 to 5 years of teaching experience in nursing education, less than 10% ($n = 10$) reported teaching more than 30 years in nursing education.

In terms of years at current institution, 50% of the participants ($n = 64$) reported 1 to 5 years of employment at current institution, 26% ($n = 34$) reported 6 to 10 years, 11% ($n = 15$) reported less than 1 year, and 2% ($n = 2$) reported more than 30 years of employment at current institution. Regarding academic rank, most of the participants held the academic rank of assistant professor ($n = 66$), followed by lecturer ($n = 25$), associate professor ($n = 17$), and professor ($n = 17$).

More than 70% ($n = 94$) of the participants reported teaching in BSN nursing programs, 15% ($n = 19$) in master of science in nursing, 5% ($n = 6$) in Ph.D. nursing programs, and 7.2% ($n = 9$) in both baccalaureate and graduate nursing programs. Regarding highest degree completed, 42.6% ($n = 55$) of the participants completed master’s degree in nursing, 32.6% ($n = 42$) completed Ph.D. in nursing, and 22 of the participants completed other degrees. Table 1 represents descriptive statistics of major study variables.

Hypotheses Testing

Hypothesis 1. The first hypothesis stated that there will be a significant positive relationship between the select demographic variables of age, level of education, teaching experience, and nursing faculty’s intent to stay in
level of education and teaching experience were supported; however, age was not supported. A multiple regression analysis was conducted to evaluate how well the above-mentioned demographic variables predicted intent to stay. The linear combination of demographic predictors was not significantly related to the intent to stay score, \( F(3, 97) = 2.115, P = .103 \). The sample multiple correlation coefficient was .25, indicating that approximately 6% of variance of intent to stay score in the sample can be accounted for by the linear combination of demographic predictors. The null hypothesis was not rejected (Table 2).

**Hypothesis 2.** The second hypothesis stated that there will be a significant negative relationship between health-related conditions, family responsibilities, and nursing faculty's intent to stay in academe. Findings from a one-tailed Pearson’s product–moment correlation coefficient \((r)\) were nonsignificant. A multiple regression analysis was conducted to evaluate how well the above-mentioned demographic variables predicted intent to stay. The linear combination of demographic predictors was not significantly related to the intent to stay score, \( F(2, 125) = 1.280, P = .282 \). The sample multiple correlation coefficient was .14, indicating that approximately 2% of variance of intent to stay score in the sample can be accounted for by the linear combination of demographic predictors. The null hypothesis was not rejected.

**Hypothesis 3.** The third hypothesis for this study stated that there will be a significant positive relationship between the motivational factor score and the intent to stay score. Findings from a one-tailed Pearson’s product–moment correlation coefficient \((r)\) supported this hypothesis \((r = .58, P < .01)\). There was a moderate positive correlation between the motivational factor score and the total motivation–hygiene factor scores and the intent to stay score after controlling for selected demographic variables. A multiple regression analysis was conducted to evaluate how well the motivation–hygiene factor scores predicted intent to stay. There was a significant relationship between the motivation–hygiene factor score and the intent to stay score, \( F(4, 94) = 13.196, P < .00 \). The sample multiple correlation coefficient was .60, indicating that approximately 36% of variance of intent to stay score in the sample can be accounted for by the motivation–hygiene predictors. This finding suggests that the motivation–hygiene factors positively influenced the job attitudes and the intent of nursing faculty to stay in academe.

**Discussion**

**Implications for Nursing Education**

The awareness that Hertzberg’s Motivation–Hygiene Theory is a strong predictor of nursing faculty’s intent to stay in academe is very important in lieu of the nursing faculty shortage and the retirement projections of the aging faculty. Although the recruitment of new faculty is necessary, it is imperative that recruitment efforts be supplemented with strategies to retain existing faculty in academe (Conklin & Desselle, 2007). Critical attention should be placed on the educational preparedness of new faculty as they transition from the clinical setting to the academe. New faculty must receive formal developmental programs in conjunction with resources to assist them.
improve their skills as educators. Supervisors and administrators need to provide supportive environments that celebrate the successes and achievements of nursing faculty. In addition, resources must be available and accessible in the work environment, workload policies must be assessed and restructured, and the discrepancies in salaries between the clinical environment and nursing education must be addressed in an effort to improve the job satisfaction of nursing faculty, which will positively impact their intent to stay in academe. By improving and maintaining the motivation–hygiene factors in academe, the quality of nursing education will be sustained, the pipeline of future nursing faculty will be significantly improved, and the retention of current faculty will be increased. Promoting these factors will allow schools of nursing to be responsive to the high demand of students who seek nursing as a career option.

**Nursing Practice**

The shortage of nursing faculty significantly impacts the supply and demand of RNs in the clinical work environments, which in turn directly affects the quality of patient care. Given the findings in this study, Hertzberg’s Motivation–Hygiene Theory significantly predicted nursing faculty’s intent to stay in academe, indicating that nursing leadership must develop strategies to promote partnerships with nursing schools, hospital systems, community organizations, and secondary schools that would lead to the retention of the current nursing workforce and the recruitment of future nurses. Increasing the supply of the nursing workforce will improve health care delivery and patient outcomes.

**Nursing Public Policy**

Findings from this study can be used to stimulate dialogue with policy makers. These public legislative representatives must be informed of the critical shortage of nurses and nurse educators at the national and state level. Creative strategies must be developed to increase the supply of the nursing workforce both in the clinical arena and in the nursing education. The U.S. government has made great strides in providing opportunities for nursing faculty to receive financial assistance through scholarships and loan repayment programs. However, nurse leaders must continue to keep nursing education at the forefront of the political arena so that these funds will continue to be available to assist nursing faculty relieve the financial burdens of student loans.

**Strengths and Limitations of the Study**

Strengths of the study include the large, available population of nursing faculty in Florida, the high response rate (45%), and the use of Survey Monkey to provide anonymity and easy access to the population. The reliability of the Job Satisfaction Survey and the Nurse Educator Intent to Stay in Academe Scale were also strengths of the study. There are several limitations that affect the external validity of the study. The sample consisted of full-time nursing faculty who teach in CCNE- and/or NLN-accredited BSN and graduate nursing schools in Florida; therefore, the findings from this study may only be generalized to institutions of higher education with similar faculty and programs to those in this study. In addition, the selection of a convenience sample may have resulted in sampling bias, further limiting the generalizability of the findings to other nursing faculty in the United States. Since the data were collected electronically using the Survey Monkey Web site, it is possible that some of the participants may have completed the survey more than once.

It is also important to note that data were collected over 6 weeks during the months of May and June; perhaps, the responses might have been different if data were collected during the fall or winter semester when the majority of nursing faculty were involved in teaching. Because the data for this study were collected via the Internet, there is a possibility that the participants did not obtain the survey because of factors that may prevent delivery (e.g., filters), or the participants may not check their inbox on a regular basis. Finally, a descriptive correlational design was used in this study. Therefore, generalization of the findings may be limited.

**Conclusion and Recommendations for Future Research**

The retention of nursing faculty continues to be a growing concern for deans and directors of schools of nursing. The findings of this study can assist nursing deans and directors to develop strategies to promote organizational changes such as flexible workload policies and monetary incentives that will target the retention of current faculty members. The results of this study can be used to develop and implement interventional research to enhance the retention of current nursing faculty. Further research should be conducted using triangulated data to explore other possible factors to predict intent to stay such as focus groups or individual interviews. Data for this study were collected from a convenience sample of full-time nursing faculty who teach in CCNE- and/or NLN-accredited BSN and graduate nursing programs in Florida in an attempt to control for institutional variations such as teaching, research, and service. Future researchers are encouraged to replicate this study using other types of nursing educators such as those who teach in the ADN, in license practical nursing programs, and in international nursing schools. The use of Internet-based instruments for data collection is fast, convenient, and accessible to nursing faculty who spend considerable amount of time on their computers. Future researchers are encouraged to replicate this study using Web-based surveys with nursing faculty.

**Acknowledgments**

The author would like to thank Dr. Pegge Bell, dissertation chair, for her support and mentorship, and Dr. Claudette Spalding, Dr. David Molnar, and Dr. Shane Neely-Smith for their expertise, guidance, and support.
References