Association of Faculty Perceptions of Work–Life With Emotional Exhaustion and Intent to Leave Academic Nursing: Report on a National Survey of Nurse Faculty

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ABSTRACT

The current and projected nurse faculty shortage threatens the capacity to educate sufficient numbers of nurses for meeting demand. As part of an initiative to foster strategies for expanding educational capacity, a survey of a nationally representative sample of 3,120 full-time nurse faculty members in 269 schools and programs that offered at least one prelicensure degree program was conducted. Nearly 4 of 10 participants reported high levels of emotional exhaustion, and one third expressed an intent to leave academic nursing within 5 years. Major contributors to burnout were dissatisfaction with workload and perceived inflexibility to balance work and family life. Intent to leave was explained not only by age but by several potentially modifiable aspects of work, including dissatisfaction with workload, salary, and availability of teaching support. Preparing sufficient numbers of nurses to meet future health needs will require addressing those aspects of work–life that undermine faculty teaching capacity. [*J Nurs Educ.* 2014;53(10):569-579.]

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For more than a decade, numerous studies have projected a severe shortage of nurses. Despite the positive effects of a weak economy on the nurse labor supply, recent analyses indicate the persistence of a significant shortage (Staiger, Auerbach, & Buerhaus, 2012). The U.S. Department of Labor, Bureau of Labor Statistics (2012) projects a need for 1.2 million new nurses by 2020 to meet increasing demands and losses due to retirement.

In the face of this demand, considerable evidence of a nurse faculty shortage exists, which is expected to worsen over the next decade. A survey reported by the American Association of Colleges of Nursing indicated that of all budgeted full-time faculty positions in baccalaureate (BSN) and graduate degree programs, 1,088, or 7.7%, were vacant (Fang & Li, 2012). A telling indicator of the inadequate supply of faculty are reports that baccalaureate and higher degree programs, as well as associate degree nursing (ADN) programs, turn away thousands of qualified applicants due to a lack of necessary educational resources. The availability of faculty is one of several interrelated factors cited in explaining constraints on teaching capacity. In a survey of baccalaureate and higher degree programs, almost two thirds of these nursing schools identified faculty shortages as a reason for not accepting all qualified applicants into entry-level baccalaureate programs (American Association of Colleges of Nursing, 2012). Other top-cited reasons for not accepting all qualified applicants were insufficient clinical teaching sites and limited classroom space. A more recent survey by the National League for Nursing (2013) reported that, although the percentage of qualified applicants turned down by ADN programs slightly decreased from 51% to 45% between 2011 and 2012, the percentage of qualified applicants rejected by BSN programs remained steady at 36% over the same period.

The faculty shortage has been attributed to a number of causes:

- Demographic characteristics. Nurses generally pursue faculty roles at an older age than their counterparts in other academic fields (Joynt & Kimball, 2008), and they typically retire at an early age (62.5 years), resulting in short faculty careers (Berlin & Sechrist, 2002). The average age of nurse faculty with graduate degrees ranged from 50.7 years for assistant profes-

sors with a master's degree to 60.5 years for professors with doctoral degrees (American Association of Colleges of Nursing, 2012).

- Low salaries. Opportunities in the practice sector that typically offer better compensation may have an adverse effect on the supply of nurse faculty (Yordy, 2006).
- Changing workload demands. Unmet expectations of their roles associated with such changes may affect faculty satisfaction and commitment (Yordy, 2006), although the evidence related to faculty workload is not strong and is largely limited to single institutions or regions (Gerolamo & Roemer, 2011).

As part of a larger initiative to address concerns about limited capacity for preparing the nursing workforce and funding research to evaluate interventions to decrease the nursing faculty shortage (http://www.EvaluatingInnovationsInNursing.org), the authors conducted a national survey of nurse faculty. The intent was to establish baseline data about nurse faculty work–life, perceived workload and productivity, and satisfaction with specific aspects of the job. A Web interface (http://www.evaluatinginnovationsinnursing.org/nufaqs-nurse-faculty-data-query/?intro=Yes) was created for the use of individual nursing programs to compare their own faculty members with the national averages for programs of similar scope, research intensity, and other salient characteristics on variables of interest. From the survey, a high level of reported emotional exhaustion was discovered, which is a key component of occupational burnout and intent to leave academic nursing, both of which are likely to exacerbate the nurse faculty shortage.

The current study examines the contribution of potentially changeable aspects of work–life to these worrisome outcomes (emotional exhaustion and intent to leave academic nursing). The primary research question was: How are aspects and perceptions of work–life associated with emotional exhaustion and intent to leave academic nursing? To address this question, the analyses addressed (a) how faculty members vary on aspects of work–life, as well as other key characteristics of their jobs; and (b) the relative contribution of these aspects of work–life to each of the outcomes.

Emotional exhaustion and, more broadly, occupational burnout is a psychological response to chronic stressors in the workplace. It has been shown to have an adverse impact on job performance and negative consequences for the health and well-being of workers (Cimiotti, Aiken, Sloane, & Wu, 2012; Cropanzano, Rupp, & Byrne, 2003; Hakanen & Schaufeli, 2012; Vahey, Aiken, Sloane, Clarke, & Vargus, 2004; Wright & Cropanzano, 1998) and may contribute to faculty members' decisions to leave academic nursing. Although substantial empirical literature exists documenting the negative outcomes of burnout among staff nurses, including the impact on intent to leave and attrition (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Flynn, Thomas-Hawkins, & Clarke, 2009), the prevalence and correlates of burnout among nurse faculty members have not been explored. Awareness of factors contributing to burnout is essential to identifying potential strategies for prevention, with the aim of ensuring a high-performing faculty workforce. Studying intent to leave aims to identify the contribution of changeable factors, other than reaching retirement age, that may have a direct impact on retaining existing faculty members and ultimately on the adequacy of the supply. Taken together, identification of sources of occupational burnout and factors associated with intent to leave is critical to developing approaches to enhance the supply of nurse faculty members and their capacity to educate sufficient numbers of nurses with the competencies required in a reformed health care system.

METHOD

Data Collection

A national survey of a random, stratified sample representative of all full-time faculty was conducted from October 2010 to May 2011. A two-stage sampling strategy was designed to yield a minimum of 3,000 survey respondents. First, a comprehensive list was compiled of schools and programs that offered, at a minimum, one prelicensure degree program. The list was assembled using the most recent roster of prelicensure programs published by the National Council of State Boards of Nursing and supplemented by information compiled by the Association of American Colleges of Nursing and the directories of the National League for Nursing Accrediting Commission and the Commission on Collegiate Nursing Education. From this list, a sample was selected that was proportionally representative of all programs in the United States by prelicensure degree (ADN or BSN) offered, urbanization (urban or rural), and research intensity (defined as residing in a doctoral-granting institution or not, adopted from the Carnegie Classification System [Carnegie Foundation for the Advancement of Teaching, 2009]). Information for stratifying the sample was gathered from the database of the National Center for Education Statistics and the Carnegie Classification dataset. Using standard survey procedures, the sample was drawn in replicates (i.e., smaller subsets, each of which was representative and stratified as noted previously) to monitor responses to ensure a yield of 3,000 faculty members.

Second, rosters were compiled of full-time faculty at these randomly selected schools, and the accuracy of each school's roster was confirmed with the respective dean's office. All full-time faculty members (n = 3,975) teaching in undergraduate or graduate programs or both at the selected schools were invited to participate. Questionnaires, administered by mail and e-mail, with telephone follow-up, were completed by 3,120 faculty members, for a response rate of 78.5% from 269 schools. Prior to data collection, the research was approved by the Institutional Review Board at Rutgers University. Only respondents with no missing data on variables in the regression models were included in the analyses.

Measures

Emotional Exhaustion. To measure emotional exhaustion, the emotional exhaustion (EE) subscale from the Maslach Burnout Inventory (MBI) was used, which is a standard measure of occupational burnout that has been extensively validated in multiple disciplines (Maslach, Jackson, & Leiter, 1996). Of the three subscales composing the MBI (the other two are depersonalization and personal accomplishment), the EE scale has been established theoretically and empirically as measuring the core element of burnout (Kallaith, O'Driscoll, Gillespie, & Bluedorn, 2000; Koeske & Koeske, 1993; Lee & Ashforth,

1993; Leiter, 1993; Reilly, 1994). Maslach (2003) described emotional exhaustion as emotional overload that is characterized by feelings of being drained and used up by one's work and lacking energy to face another day. To reduce respondent burden, three of the nine items composing the EE subscale were used. Principal component analyses were conducted of responses to all nine items in an existing dataset, consisting exclusively of nurse faculty, which were collected but not analyzed for a broader study of RNs (Flynn, Liang, Dickson, & Aiken, 2010). Consistent with Maslach's theory, the three items representing feelings of being drained, feelings of being used up, and lack of energy were identified as those that best predict the overall nine-item score (ranging from 0 to 54, using a Likert-type, 7-point response scale in which 0 = *never* and 6 = *every day*). The aim was to approximate the MBI-EE subscale to apply Maslach's criteria for differentiating faculty members reporting high levels of emotional exhaustion from those reporting average or low levels. That threshold (>27 on a score of 0 to 54 among workers in the health professions) has been demonstrated by numerous studies to identify individuals who are at risk for adverse health consequences and diminished capacity to perform their jobs (Cimiotti et al., 2012; Cropanzano et al., 2003; Hakanen & Schaufeli, 2012; McHugh, Kutney-Lee, Cimiotti, Sloane, & Aiken, 2011; Wright & Cropanzano, 1998).

To approximate the Maslach MBI-EE scale using the three items, an adjustment ratio was calculated by dividing the mean of the nine items by the mean of the three items, which was then applied to the data; 38.8% of faculty members were classified as reporting high levels of emotional exhaustion, according to Maslach's criteria. To provide validation of this adjustment strategy, a larger existing data set was used of more than 14,000 RNs working in varied settings who were randomly sampled and surveyed in a study of the effects of work environments on performance outcomes (Flynn et al., 2010). The adjustment ratio was then applied to estimate the average total score; the estimated score was 19.6, compared with the actual score of 19.4, for a difference of 1%. In addition, in calculating an adjustment ratio based on the validation sample and applying it to the data, 38.8% of faculty members were classified as having high emotional exhaustion, which is identical to the percentage designated by using the ratio calculated with the current study data.

Intent to Leave Academic Nursing. Faculty members were asked how likely they were to leave teaching in the next 5 years, using a 4-point response scale (1 = *very likely*, 2 = *somewhat likely*, 3 = *somewhat unlikely*, 4 = *very unlikely*). For the dependent variable, the responses were dichotomized (*somewhat* or *very likely to leave*, contrasted with *somewhat* or *very unlikely*).

Domains of Predictors. A comprehensive set of factors was incorporated to predict emotional exhaustion and intent to leave academic nursing in the current study models. The following variables were selected to capture spheres of influence having varying levels of specificity to the respondent's role as a nurse faculty member:

1. Demographic and background factors that are generally established prior to entry into the profession, including age, gender, race/ethnicity, and highest nursing degree as currently reported (78% of respondents earned their highest nursing degree prior to accepting a full-time faculty position).

2. Characteristics of the respondent's institution that affect all of those employed there (whether they teach at a school offering an ADN or BSN degree, research intensity of the school, and urban/rural locale).

3. Characteristics of the respondent's particular job and status (rank, tenure status, whether he or she is teaching in a postbaccalaureate program, extent of administrative responsibilities, salary).

4. Their reported performance in their role, including workload (number of hours per week devoted to all work activities, service on school or departmental committees) and productivity (development of new courses, revising courses, conversion to online format, number of articles publications, preparation of grant applications).

5. Perceptions of the adequacy of their work and role (dissatisfaction with aspects of work–life).

6. Health status, which may be affected by factors from all levels.

Within each domain, those items that were significantly related to the outcome variables in bivariate analyses ($p < 0.05$) were retained in the analysis. In a few cases, the variables were included for conceptual completeness, whether or not they met the bivariate criterion (e.g., the institutional characteristics that served as stratifying variables in the sampling).

Suited to the focus of the analysis, particular attention was devoted to the fifth domain (i.e., perceptions of the adequacy of their work and role). Items were developed that reflect the terms and conditions of work (e.g., salary, workload, job security, availability of resources), as well as the content of work (e.g., meaningfulness, autonomy and independence, rewards for innovation). Respondents rated satisfaction with each (*very satisfied*, *somewhat satisfied*, *somewhat dissatisfied*, *very dissatisfied*). None of the items retained in the analysis were intercorrelated at a level of 0.60 or higher. **Table 1** and the **Figure** provide details on all predictors.

Analysis

To identify factors associated with emotional exhaustion and intent to leave academic nursing, logistic regression models were estimated for each of these dependent variables using Stata statistical software. Stata svyset and svy commands were used to adjust for complex design effects (i.e., clustering due to the two-stage sampling procedure and stratification).

FINDINGS

As presented in **Table 1**, the age of faculty members averaged 51.4 years; 15.8% were within 5 years of retirement (age 66 years), 95% were women, 88% were White, and 19.7% held a doctorate as their highest degree, whereas 70.6 % held a master's degree. Although 28.6% were tenured and 20.8% were on a tenure track but not yet tenured, the majority were either at an institution that did not offer tenure (26.2%) or they were not on a tenure track (24.4%). Slightly more than one third were either full or associate professors, whereas almost two thirds occupied junior ranks. Regarding type of school, 46.2% taught

TABLE 1

Characteristics of Study Sample (*N* = 2,401) and Reported Aspects of Work–Life

Characteristic	*n* (%)	Mean (*SD*)
Demographic		
Age (y)		51.4 (9.38)
Within 5 years of retirement age	367 (15.8)	
Not within 5 years of retirement age	1,953 (84.2)	
Sex		
Male	119 (5)	
Female	2,282 (95)	
Race and ethnicity		
White	2,112 (88)	
Other	289 (12)	
Education: Highest nursing degree		
Baccalaureate	151 (6.3)	
Master's	1,696 (70.6)	
Doctorate	473 (19.7)	
Other	81 (3.4)	
Health status		
Excellent	811 (33.8)	
Very good	1,068 (44.5)	
Good	448 (18.7)	
Fair	72 (3)	
Poor	2 (0.1)	
Job characteristics and status		
Years as full-time faculty in current institution		8.0 (7.81)
Rank		
Full professor	401 (16.7)	
Associate professor	466 (19.4)	
Assistant professor	740 (30.8)	
Instructor	691 (28.8)	
Lecturer	39 (1.6)	
Other	64 (2.7)	
Tenure status		
On tenure track but not tenured	500 (20.8)	
Not tenured because institution has no tenure system	629 (26.2)	
Not on tenure track	586 (24.4)	
Tenured	686 (28.6)	
Teaching post-BSN programs		
Yes	576 (24)	
No	1,824 (76)	

TABLE 1 (Cont.)

Characteristics of Study Sample (*N* = 2,401) and Reported Aspects of Work–Life

Characteristic	*n* (%)	Mean (*SD*)
Administrative responsibilities		
50% or more	380 (15.8)	
Less than 50%	2,021 (84.2)	
Salary		
<$50,000	401 (16.7)	
$50,000 to $74,999	1,306 (54.4)	
$75,000 to $99,999	515 (21.4)	
⩾$100,000	147 (6.1)	
Certified advanced practice nurse		
Yes	656 (27.4)	
No	1,741 (72.6)	
Institution characteristics[a]		
Degree program		
Associate	1,110 (46.2)	
Baccalaureate	1,291 (53.8)	
Research intensity[b]		
Research	565 (23.5)	
Nonresearch	1,836 (76.5)	
Locale		
Urban	1,886 (78.6)	
Rural	515 (21.4)	
Reported workload (hours/week)		
Advising or mentoring students		7.2 (4.50)
Didactic teaching		14.8 (9.41)
Clinical teaching		12.6 (8.79)
School/departmental committees		3.6 (2.02)
All work activities		48.3 (11.22)
Reported productivity (July 2009 to June 2010)		
Developed or significantly revised one course	1,068 (44.5)	
Developed or significantly revised two or more courses	822 (34.2)	
Converted one or more courses to online format	474 (19.7)	
Published one or more articles in peer-reviewed journals	475 (19.8)	
Prepared one or more grant proposals	679 (28.3)	

Note. BSN = Bachelor of Science in Nursing. Percentages may not equal 100 due to rounding. The sum of all counts within a variable may be less than N *(2,401) due to missing values.* N *reflects all responses included in either or both of the regression models presented in Tables 3 and 4.*

[a] *Institution characteristics served as stratifying variables in the study sample.*

[b] *Carnegie classification, 2010.*

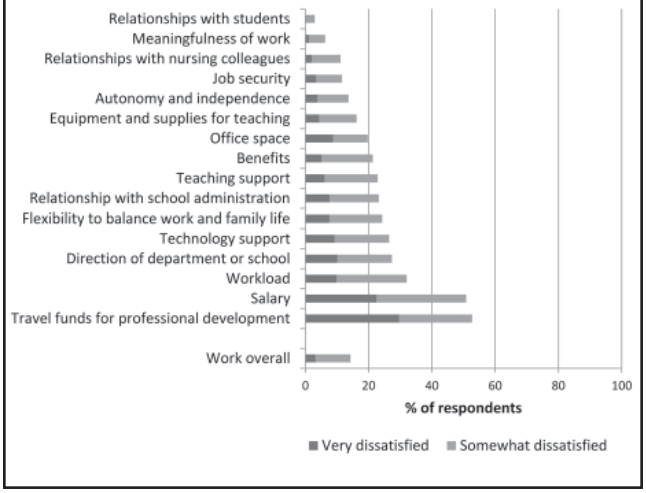

Figure. Dissatisfaction with aspects of work–life among nurse faculty (*N* = 2,401; *N* reflects all responses included in either or both of the regression models presented in Tables 3 and 4.)

TABLE 2

Distribution of Outcome Variables

Emotional Exhaustion	**Low or Average (*n* [%])**	**High (*n* [%])**
All respondents	1,469 (61.2)	932 (38.8)
Intent to Leave Academic Nursing in 5 Years	**Not Likely (*n* [%])**	**Likely (*n* [%])**
All ages (y)	1,524 (68)	718 (32)
⩽40	277 (79.4)	72 (20.6)
41 to 50	485 (79.2)	127 (20.8)
51 to 60	654 (69.1)	293 (30.9)
>61 (will be at retirement age in 5 years)	108 (32.3)	226 (67.7)

Note. Percentages may not equal 100 due to rounding. The sum of all counts within a variable may be less than N *(2,401) due to missing values.*

at schools offering an ADN degree, whereas 53.8% taught in schools offering a BSN; almost one quarter worked at research-intensive institutions, and 78.6% taught at schools located in urban areas, with the remaining 21.4% working in locales classified as rural or small towns. Regarding type of program within the schools, 76% taught exclusively in prelicensure degree programs, whereas 24% taught in graduate degree programs. Total reported workload averaged 48.3 hours per week. Regarding productivity during the previous year, 19.8% of faculty members reportedly published one or more articles in peer-reviewed journals, 28.3% prepared one or more grant proposals, and 34.2% significantly revised two or more courses.

More than 80% of faculty members were somewhat or very satisfied with their work overall (**Figure**). The most prominent sources of dissatisfaction were availability of travel funds (52.7% reported *very dissatisfied* or *somewhat dissatisfied*), salary (50.8%), and workload (32.0%). Between 20% and 30% of faculty members were dissatisfied with the direction of their department or school, the availability of technology support, their relationship with their school administration, the flexibility to balance work and family life, teaching support, and benefits. Regarding the outcomes assessed in our analyses (**Table 2**), 38.8% of faculty members reported high levels of emotional exhaustion, and 32% indicated that they were likely to leave academic nursing in the next 5 years. By age, two thirds of faculty members who would be of retirement age in 5 years (currently 61 years or older) intended to leave; 30.9% of those currently aged 51 to 60 years intended to leave, and slightly more than 20% in the younger age groups were similarly inclined.

Predictors of Emotional Exhaustion

As shown in **Table 3**, major significant predictors of emotional exhaustion were dissatisfaction with workload (odds ratio [*OR*] = 1.82), devoting 50% or more time to administrative responsibilities (*OR* = 1.73), dissatisfaction with flexibility to balance work and family life (*OR* = 1.58), reporting fair or poor health status (*OR* = 1.46), dissatisfaction with the meaningfulness of work (*OR* = 1.36) and with the direction of the department or school (*OR* = 1.27), and time spent on all work activities (*OR* = 1.02). For example, an increase in total workload from 40 to 50 hours per week was associated with 22% higher odds of emotional exhaustion.

To assess the proportion of variance in emotional exhaustion explained by the current study's model (R^2) and the relative contribution of various facets of work–life, a linear regression model was also estimated, with a continuous version of the emotional exhaustion score as the dependent variable (calculated as the total score based on the 0 to 6 response to each item of the scale). Predictors were entered in six blocks (**Table A**; available in the online version of this article). The content of the six blocks is the same as in **Table 3**; however, the order of entry of the blocks reflects the level of specificity of the domains of variables to the faculty member's particular role (as described more fully previously)—individual characteristics, institution characteristics, job characteristics, reported workload and productivity, dissatisfaction with aspects of work–life, and health status. The model accounted for 40% of the variation in emotional exhaustion ($R^2 = 0.40$). Upon entry into the model, dissatisfaction with elements of work–life accounted for 28% of the variation in emotional exhaustion, 7% was explained by reported workload and productivity, 2% was accounted for by job characteristics, 2% by health status, and 1% by other individual characteristics; institution characteristics did not contribute to emotional exhaustion in the estimated model.

Predictors of Intent to Leave Academic Nursing

Several factors significantly predicted faculty members' intent to leave academic nursing within the next 5 years (**Table 4**)—age within 5 years of retirement (*OR* = 6.41), hav-

TABLE 3

Predictors of High Level of Emotional Exhaustion: Logistic Regression Model[a] (*N* = 2,400)

Variable	*OR*	95% CI of *OR*
Individual characteristics		
Sex		
Male	0.69	[0.42,1.15]
Female [R][b]	—	—
Race and ethnicity		
Not White	0.68*	[0.49,0.93]
White [R][b]	—	—
Education: Highest nursing degree		
Baccalaureate	0.93	[0.54,1.61]
Master's	1.15	[0.84,1.58]
Doctorate [R][b]	—	—
Other	1.71	[0.99,2.97]
Institution characteristics		
Degree program		
ADN	0.96	[0.73,1.26]
BSN [R][b]	—	—
Research intensity		
Research	1.16	[0.89,1.52]
Nonresearch [R][b]	—	—
Locale		
Urban	0.91	[0.72,1.14]
Rural [R][b]	—	—
Job characteristics and status		
Years as full-time faculty in current institution	1.01	[1.00,1.03]
Rank		
Full professor [R][b]	—	—
Associate professor	0.92	[0.66,1.27]
Assistant professor	0.93	[0.64,1.35]
Instructor	1.00	[0.71,1.43]
Lecturer	0.63	[0.34,1.17]
Other	0.63	[0.35,1.15]
Tenure status		
On tenure track but not tenured	0.99	[0.68,1.44]
Not tenured because institution has no tenure system	1.18	[0.88,1.59]
Not on tenure track	1.35	[0.92,1.98]
Tenured [R][b]	—	—
Teaching post-BSN programs		
Yes	0.96	[0.67,1.38]
No [R][b]	—	—

TABLE 3 (Cont.)

Predictors of High Level of Emotional Exhaustion: Logistic Regression Model[a] (*N* = 2,400)

Variable	*OR*	95% CI of *OR*
Administrative responsibilities		
⩾50%	1.73**	[1.32,2.27]
<50% [R]	—	—
Salary		
<$50,000 [R]	—	—
$50,000 to $74,999	1.15	[0.86,1.53]
$75,000 to $99,999	1.16	[0.79,1.69]
⩾$100,000	1.33	[0.78,2.27]
Unknown	1.48	[0.52,4.22]
Reported workload and Productivity		
Time spent on all work activities (hours/week)	1.02***	[1.01,1.03]
School/departmental committees served	0.97	[0.92,1.02]
Developed or significantly revised one course	0.94	[0.69,1.28]
Developed or significantly revised two or more courses	1.06	[0.77,1.43]
Converted one or more courses to online format	0.92	[0.71,1.18]
Published one or more articles in peer-reviewed journals	0.92	[0.67,1.27]
Prepared one or more grant proposals	0.93	[0.71,1.22]
Dissatisfaction with work–life		
Dissatisfaction with resources (4-point scale: 1 = *very satisfied*, 4 = *very dissatisfied*)		
Equipment and supplies for teaching	0.90	[0.77,1.05]
Travel funds for professional development	1.05	[0.94,1.18]
Office space	1.02	[0.91,1.16]
Teaching support	1.11	[0.94,1.31]
Technology support	0.96	[0.84,1.09]
Direction of department or school	1.27**	[1.09,1.48]
Dissatisfaction with aspects of work (4-point scale: 1 = *very satisfied*, 4 = *very dissatisfied*)		
Workload	1.82***	[1.55,2.13]
Salary	1.12	[0.99,1.27]
Benefits	1.09	[0.95,1.26]
Job security	0.95	[0.80,1.12]

ing a BSN (*OR* = 2.70) or MSN (*OR* = 1.91) as the highest nursing degree earned, not holding tenure in an institution that offers tenure (*OR* = 1.49); years full-time on a faculty (each additional year was associated with a 6% added likelihood of leaving); not working on an advanced nursing degree (*OR* = 1.59); being certified as an advanced practice nurse (*OR* = 1.56); reporting high emotional exhaustion (*OR* = 1.27); and dissatisfaction with availability of teaching support (*OR* = 1.19), workload (*OR* = 1.26), salary (*OR* = 1.18) and rewards for innovation on the job (*OR* = 1.16). The model was estimated, removing respondents who were within 5 years of retirement, and the results were essentially the same, except that assistant professors were slightly less likely to intend to leave.

To assess the proportion of variance explained, a linear regression model was estimated with intent to leave as a 4-point ordinal measure (not shown) and an order of entry, reflecting the same conceptualization as the model of emotional exhaustion. In this model, 11.5% of the variation in intent to leave was accounted for by age, and another 14% was explained by other domains in the model; chief among them were dissatisfaction with aspects of work–life (8.4%), job characteristics and status (4%), and reported workload and productivity (1%).

TABLE 3 (Cont.)

Predictors of High Level of Emotional Exhaustion: Logistic Regression Model[a] (*N* = 2,400)

Variable	*OR*	95% CI of *OR*
Dissatisfaction with aspects of work (Cont.) (4-point scale: 1 = *very satisfied*, 4 = *very dissatisfied*)		
Flexibility to balance work and family life	1.58***	[1.37,1.82]
Autonomy and independence	1.06	[0.90,1.25]
Relationship with school administration	1.02	[0.87,1.20]
Meaningfulness of work	1.36**	[1.14,1.63]
Relationships with students	1.15	[0.97,1.36]
Relationships with nursing colleagues	1.11	[0.95,1.31]
Rewards (5-point scale: 1 = *a lot*; 5 = *none*]		
Rewards for innovation in the job	1.01	[0.91,1.13]
Flexibility in the job	1.07	[0.94,1.22]
Visibility in the job	0.97	[0.85,1.11]
Health status		
Self-reported health (5-point scale: 1 = *excellent*, 5 = *poor*)	1.46***	[1.28,1.67]

Note. OR = *odds ratio; CI = confidence interval; ADN = associate degree in nursing; BSN = Bachelor of Science in Nursing.* N *reflects all responses included in this regression model.*
[a] *Adjusted for design effects.*
[b] *Denotes reference group.*
* p < *0.05;* ** p < *0.01;* *** p < *0.001.*

DISCUSSION

Overall job satisfaction among nurse faculty members was high (86.8% reported that they were very satisfied or somewhat satisfied), which is similar to the levels reported in surveys of faculty in other fields (National Center for Education Statistics, Institute of Education Sciences, 2004). Those aspects of work that commanded the greatest dissatisfaction (exceeding 20%) generally coalesced around working conditions (e.g., the highest levels were associated with material rewards and resources, including salary, workload, benefits, funds for travel, and technology support). The two exceptions were moderate levels of dissatisfaction with the direction of the school (27.3%) and with their relationship with school administration (23.2%).

Notably, levels of emotional exhaustion were high (39%), exceeding those reported in studies of nurses in clinical roles, which were 34% among nurses in hospitals and 37% among those working in nursing homes (McHugh et al., 2011). The rates of emotional exhaustion among nurse faculty members in the current study were also higher than those reported in a single-site study of academic medical faculty (Shanafelt et al., 2009), which established that 30.2% of faculty physicians in a department of internal medicine reported high emotional exhaustion scores. High levels of emotional exhaustion foretell stress-related problems for individual nurse faculty members and possibly suboptimal functioning in the classroom. Important to faculty retention rates, the current study findings indicate that high emotional exhaustion was independently associated with intent to leave academic nursing (**Table 4**).

The rate of intent to leave academic nursing among those faculty who were of preretirement age is alarming, given the shortage in nurse faculty supply and the implications of that shortage for meeting the nation's health care needs. Almost one third of current faculty members aged 51 to 60 years and one fifth of those 50 years or younger intend to leave academic nursing within 5 years.

Predictors of Emotional Exhaustion and Intent to Leave Academic Nursing

Although overall job satisfaction was high, those faculty members who registered dissatisfaction with specific elements of work–life were more likely to report high emotional exhaustion and an intent to leave academic nursing within 5 years. Most important among work–life predictors of emotional exhaustion were dissatisfaction with workload and flexibility to balance work and family life, followed by negative assessments of the meaningfulness of work and the direction of the department or school. With respect to intent to leave academic nursing, the contribution of aspects of work–life was approximately equal to that of proximity to retirement age, and material concerns played a prominent role; dissatisfaction with workload, salary, and availability of teaching support were significant predictors, as was emotional exhaustion. Interestingly, those nonmaterial dimensions of work–life that garnered the highest rates of dissatisfaction—the direction of the department or

TABLE 4

Predictors of Intent to Leave Academic Nursing in 5 Years: Logistic Regression Model (*N* = 2,226)

Variable	*OR*	95% CI
Age		
Within 5 years of retirement age (at 66)	6.41***	[4.77,8.62]
Not within 5 years of retirement age (at 66) [R][a]	—	—
Other individual characteristics		
Sex		
Male	1.36	[0.87,2.11]
Female [R][a]	—	—
Race and ethnicity		
White [R][a]	—	—
Not White	1.15	[0.79,1.69]
Education: Highest nursing degree		
Baccalaureate	2.70***	[1.58,4.62]
Master's	1.91***	[1.42,2.56]
Doctorate [R][a]	—	—
Other	1.96*	[1.07,3.59]
Institution characteristics		
Degree program		
ADN	1.01	[0.77,1.32]
BSN [R][a]	—	—
Research intensity		
Research	1.05	[0.74,1.52]
Nonresearch [R][a]	—	—
Locale		
Urban	1.00	[0.81,1.25]
Rural [R][a]	-	-
Job characteristics and status		
Years as full-time faculty in current institution	1.06***	[1.04,1.08]
Rank		
Full professor [R][a]	—	—
Associate professor	0.93	[0.67,1.30]
Assistant professor	0.74	[0.53,1.05]
Instructor	0.94	[0.66,1.35]
Lecturer	0.38	[0.11,1.23]
Other	0.99	[0.50,1.94]
Tenure status		
On tenure track but not tenured	1.50*	[1.08,2.08]
Not tenured because institution has no tenure system	1.26	[0.93,1.70]
Not on tenure track	1.49*	[1.02,2.16]
Tenured [R][a]	—	-
Administrative responsibilities		
⩾50%	1.11	[0.80,1.54]
<50% [R][a]	—	—
Salary		
<$50,000 [R]	—	—
$50,000 to $74,999	0.85	[0.63,1.15]
$75,000 to $99,999	0.95	[0.62,1.44]
⩾$100,000	1.00	[0.53,1.88]
Unknown	1.62	[0.56,4.70]
Currently working on a nursing degree		
Yes	0.63**	[0.47,0.84]
No [R][a]	—	—
Certified advanced practice nurse		
Yes	1.56***	[1.25,1.95]
No [R][a]	—	—
Reported workload and productivity		
Time spent on work activities (hours per week)	1.00	[0.99,1.01]
Number of school or departmental committees served	0.96	[0.89,1.03]
Developed or significantly revised one course	1.19	[0.82,1.50]
Developed or significantly revised two or more courses	0.99	[0.71,1.37]
Converted one or more courses to online format	1.17	[0.90,1.54]
Published one or more articles in peer-reviewed journals	0.91	[0.62,1.33]
Prepared for one or more grant proposals	0.90	[0.69,1.19]
Dissatisfaction with work–life		
Dissatisfaction with resources (4-point scale: 1 = *very satisfied*, 4 = *very dissatisfied*]		
Equipment and supplies for teaching	0.97	[0.84,1.13]
Travel funds for professional development	0.98	[0.88,1.10]

TABLE 4 (Cont.)

Predictors of Intent to Leave Academic Nursing in 5 Years: Logistic Regression Model (*N* = 2,226)

school and relationship with the school administration—were not significant predictors of intent to leave academic nursing. It is conceivable that such nonmaterial dimensions may be associated with intent to leave the current employer, rather than leave the field, which is a prospect that merits further research attention. Although job turnover may not directly affect the numbers of faculty members in the field, the associated disruption may affect teaching productivity.

The extent to which perceptions of burden accounted for emotional exhaustion, as well as intent to leave, is particularly worrisome. Recommendations of recent high-profile commissions, such as the Institute of Medicine's reports on the future of nursing (Institute of Medicine, 2010) and the needs of older Americans (Institute of Medicine, 2008) as well as provisions of the federal health reform legislation (Patient Protection and Affordable Care Act, 2010) call for educating more nurses and preparing them to play a broader spectrum of roles in our health care delivery system (e.g., establishing nurse-managed community health centers, providing primary care to newly insured populations, leading interprofessional collaborations). Preparing the nurse workforce with the expertise for assuming these roles will intensify the pressures on existing faculty capacity, adding to those very burdens that contribute to the current nurse faculty shortage and undermine commitment to teach. A clear need exists to address faculty workload and working conditions and to monitor faculty perspectives on those elements of work–life that are associated with emotional exhaustion and intent to leave as identified in this article. A Web interface to the data of the predictors analyzed in the current study is publicly available for individual nursing programs to compare their own faculty members with national averages. The questionnaire can be downloaded to collect similar data from faculty in individual programs. The data interface from the current study can be customized for programs of similar scope, research intensity, and other key characteristics to facilitate meaningful comparisons (http://www.evaluatinginnovationsinnursing.org/nufaqs-nurse-faculty-data-query/?intro=Yes).

The finding that faculty members with advanced practice nurse certification (APRNs) were 1.5 times more likely to express an intention to leave teaching is disconcerting. The projected increase in demand for primary care services associated with implementation of the Affordable Care Act has been accompanied by growing recognition that APRNs can make a significant contribution to meeting that need. Without faculty members with APRN certification, the capacity to prepare APRNs will be severely constrained. More knowledge of the particular needs of this subgroup of faculty may be helpful to the efforts of recruiting and retaining them.

TABLE 4 (Cont.)

Predictors of Intent to Leave Academic Nursing in 5 Years: Logistic Regression Model (*N* = 2,226)

Variable	*OR*	95% CI
Dissatisfaction with resources (Cont.) (4-point scale: 1 = *very satisfied*, 4 = *very dissatisfied*]		
Office space	1.00	[0.88,1.12]
Teaching support	1.19*	[1.01,1.40]
Technology support	0.89	[0.77,1.02]
Direction of department or school	1.11	[0.96,1.27]
Dissatisfaction with work–life (4-point scale: 1 = *very satisfied*, 4 = *very dissatisfied*)		
Workload	1.26**	[1.08,1.47]
Salary	1.18*	[1.02,1.35]
Benefits	0.99	[0.85,1.15]
Job security	0.95	[0.81,1.11]
Flexibility to balance work and family life	1.11	[0.95,1290]
Autonomy and independence	1.11	[0.93,1.32]
Relationship with school administration	0.99	[0.85,1.15]
Meaningfulness of work	1.21	[0.99,1.49]
Relationships with students	1.06	[0.87,1.30]
Relationships with nursing colleagues	1.02	[0.85,1.23]
Rewards for innovation, flexibility, and visibility (5-point scale: 1 = *a lot*, 5 = *none*)		
Rewards for innovation in the job	1.16**	[1.04,1.29]
Flexibility in the job	0.90	[0.79,1.03]
Visibility in the job	1.08	[0.94,1.20]
Health status		
Emotional exhaustion		
Low or average [R][a]	—	—
High	1.27*	[1.00,1.61]
Self-reported health (5-point scale: 1 = *excellent*, 5 = *poor*)	0.96	[0.83,1.10]

Note. OR = *odds ratio; CI = confidence interval; ADN = associate degree in nursing; BSN = Bachelor of Science in Nursing.* N *reflects all responses included in this regression model.*
[a] *Denotes reference group.*
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Strategies for Change

Although strategies to increase teaching capacity are widely considered to address the faculty shortage (Joynt & Kimball, 2008), these approaches may inadvertently contribute to high rates of faculty exhaustion and may exacerbate faculty shortages. Efforts to enhance faculty capacity must take into account the likely impact on faculty workload and work–life; yet, most of these strategies have lacked systematic evaluation (Wyte-Lake, Tran, Bowman, Needleman, & Dobalian, 2013). Acknowledging the importance of generating sound evidence of the effectiveness of such approaches in addressing the faculty shortage, the Robert Wood Johnson Foundation estab-

lished a national program, Evaluating Innovations in Nursing Education, to support studies of the impact of these strategies on teaching productivity, faculty work–life, and the quality of nursing education. Evaluation researchers in collaboration with nursing programs around the country are completing controlled evaluations of innovations focused on increasing faculty teaching productivity and efficiency. These initiatives, described below, offer promise in addressing teaching capacity, without aggravating those elements of work–life associated with the negative outcomes studied in this work.

- Collaborations among educational programs and delivery organizations designed to better align health system resources with the clinical education needs of students (dedicated education units [DEUs]). DEUs may reduce the stress on academic faculty of supervising care of patients in delivery settings in which they have little or no standing.
- Reliance on clinical simulation to make more effective use of instructional expertise and technology to improve student learning. Extensive use of clinical simulation may reduce the workload of academic faculty by delegating clinical skills evaluation to staff specialists who use clinical scenarios and high-fidelity technology to assess students' clinical competencies.
- Development of a single baccalaureate curriculum among a regional or statewide consortium of nursing education programs to make more efficient use of faculty resources and accelerate student progression. Participation in an academic consortium facilitates sharing of faculty to reduce course loads and also promotes collaboration with colleagues in developing shared course materials, thus potentially reducing preparation time for individual faculty.

Other projects supported by Evaluating Innovations in Nursing Education address strategies for increasing the supply of doctorally prepared nurses and aim to increase our understanding of students' decision making about pursuing doctoral education and faculty careers. These include:

- Implementation of policies offering incentives for graduate-prepared nurses to pursue faculty careers. These support-for-service programs may contribute to lowering faculty vacancy rates and commensurate decreases in faculty course load.
- Analyses of factors influencing career choice among current doctoral students in nursing, stages of decision making leading to a career in nursing education, and prospects of early-entry doctoral programs for increasing the capacity of nurse faculty.

Findings from these studies, which are intended to inform strategies for increasing the numbers of new faculty members, will be available in the coming months (Robert Wood Johnson Foundation, 2014).

LIMITATIONS OF THE STUDY

The cross-sectional design of the current study limits the ability to discern causal relationships. Following a panel of nurse faculty members over time would facilitate identification of those who actually leave academic nursing and would also provide more refined analyses of factors that contribute to this outcome. Predictors in the analyses were deliberately confined to variables associated with work in academic settings. Consideration of factors in other job sectors that may attract academic faculty members was beyond the purview of this study. More definitive understanding of the impact of seemingly changeable aspects of faculty work–life on teaching productivity is critical to assuring faculty capacity to educate an adequate supply of nurses to meet future health care needs.

CONCLUSION

Major contributors to burnout were dissatisfaction with workload and perceived inflexibility to balance work and family life. Intent to leave was explained, not only by age but also by several potentially modifiable aspects of work, including dissatisfaction with workload, salary, and availability of teaching support. Preparing sufficient numbers of nurses to meet future health needs will require addressing those aspects of work–life that undermine faculty teaching capacity.

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Table A
Predictors of Emotional Exhaustion: Hierarchical Linear Regression Model (Adjusted For Design Effects) (*n* = 2,400)

	Coef.	Sig.	95% Conf. Interval	
Step 1. Block "Individual Characteristics" Entered				
F = 3.25 (CI 5,258), *p* = 0.0072				
R^2 = 0.0069				
Race and ethnicity (Not white)	-2.7115	**	-4.6478	-0.7752
Sex (Male)	-2.0892		-4.6875	0.5091
Education: Highest nursing degree				
Other	1.6466		-1.6737	4.9670
Baccalaureate	-1.7869		-4.5136	0.9397
Master	-0.8989		-2.5501	0.7522
Constant	31.0183		28.4433	33.5934
Step 2. Block "Institution Characteristics" Added				
F = 2.43 (CI 8, 255), *p* = 0.0150				
R^2 = 0.0096				
Race and ethnicity (Not white)	-2.6505	**	-4.5651	-0.7358
Sex (Male)	-2.1197		-4.7157	0.4763
Education: Highest nursing degree				
Other	1.6699		-1.5996	4.9394
Baccalaureate	-1.7634		-4.4299	0.9031
Master	-0.6920		-2.2507	0.8667
Degree program (ADN)	-0.3155		-2.0390	1.4081
Research intensity (Research)	-0.4565		-2.3129	1.4000
Locale (Urban)	-1.7318	*	-3.4476	-0.0159
Constant	32.6581		29.4823	35.8338
Step 3. Block "Job Characteristics and Status" Added				
F = 2.90 (CI 23, 240), *p* = 0.0000				
R^2 = 0.0300				
Race and ethnicity (Not white)	-2.6224	**	-4.5096	-0.7352
Sex (Male)	-1.7003		-4.2191	0.8185
Education: Highest nursing degree				
Other	2.7713		-0.4869	6.0295
Baccalaureate	-0.7817		-3.5821	2.0187
Master	0.0461		-1.6378	1.7299
Degree program (ADN)	0.0778		-1.9396	2.0951
Research intensity (Research)	-0.1084		-2.0730	1.8562
Locale (Urban)	-1.7396		-3.5255	0.0464

	Coef.	Sig.	95% Conf.	Interval
Rank				
Associate professor	0.1476		-1.9323	2.2275
Assistant professor	-1.0849		-3.4323	1.2625
Instructor	-0.6133		-3.1311	1.9045
Lecturer	-5.8776		-12.0454	0.2901
Other	-3.1521		-7.1742	0.8699
Tenure status				
On tenure track but not tenured	0.3332		-1.5515	2.2179
Not tenured because institution has no tenure system	0.7504		-1.0409	2.5417
Not on tenure track	1.0094		-0.9879	3.0067
Salary				
$50,000 - $74,999	0.2913		-1.5346	2.1171
$75,000 - $99,999	-0.4924		-3.0724	2.0875
$100,000 and up	-2.3888		-5.8837	1.1062
Unknown	-9.4240	***	-14.2907	-4.5573
Years as full-time faculty in current institution	0.0227		-0.0808	0.1263
Teaching post-baccalaureate programs	2.0411	*	0.1942	3.8879
Administrative responsibilities occupy 50% or more of job	3.5296	***	1.9134	5.1458
Constant	30.6834		25.7584	35.6084
Step 4. Block "Reported Workload and Productivity" Added				
F = 8.40 (CI 30, 233), p = 0.0000				
R^2 = 0.0947				
Race and ethnicity (Not white)	-2.4780	*	-4.3076	-0.6484
Sex (Male)	-0.8145		-3.3490	1.7200
Education: Highest nursing degree				
Other	2.3330		-0.8742	5.5402
Baccalaureate	-0.0685		-2.7742	2.6372
Master	0.4186		-1.272	2.1100
Degree program (ADN)	0.7927		-1.1113	2.6968
Research intensity (Research)	-0.2540		-2.1340	1.6260
Locale (Urban)	-1.3140		-2.9017	02736
Rank				
Associate professor	0.3067		-1.7032	2.3168
Assistant professor	-0.4663		-2.7245	1.7917
Instructor	-0.4625		-2.8546	1.9296
Lecturer	-4.7271		-10.2640	0.8097
Other	-3.1950		-7.1799	0.7898

	Coef.	Sig.	95% Conf.	Interval
Tenure status				
On tenure track but not tenured	-0.1133		-1.9756	1.7489
Not tenured because institution has no tenure system	0.5204		-1.1873	2.2282
Not on tenure track	0.6969		-1.2746	2.6685
Salary				
$50,000 - $74,999	0.5893		-1.023	2.2810
$75,000 - $99,999	-0.5575		-2.9583	1.8431
$100,000 and up	-2.5135		-5.8225	0.7953
Unknown	-8.5214	**	-13.3914	-3.6515
Years as full-time faculty in current institution	0.0346		-0.0652	0.1345
Teaching post-baccalaureate programs	0.9967		-0.7912	2.7847
Administrative responsibilities occupy 50% or more of job	2.9671	**	1.2645	4.6697
Time spent on all work activities (hours/week)	0.3170	***	0.2538	0.3803
Number of school or departmental committees served	0.0727		-0.2353	0.3808
Developed or significantly revised one course	1.0574		-0.4636	2.5786
Developed or significantly revised two or more courses	2.1093	**	0.3785	3.8402
Converted one or more courses to online format	0.1318		-1.1738	1.4374
Published one or more articles in peer-reviewed journals	-0.6295		-2.4387	1.1797
Prepared for one or more grant proposals	-0.5590		-1.9470	0.8289
Constant	13.1398		7.1476	19.1320
Step 5. Block "Dissatisfaction with Work-life" Added				
F = 43.74 (CI 49, 214), p = 0.0000				
R^2 = 0.3845				
Race and ethnicity (Not white)	-1.7850	*	-3.2932	-0.2768
Sex (Male)	-0.8636		-2.9687	1.2414
Education: Highest nursing degree				
Other	3.6644	**	0.9664	6.3624
Baccalaureate	1.2894		-1.2452	3.8242
Master	1.3109		-0.1858	2.8076
Degree program (ADN)	-0.6427		-1.9093	0.6238
Research intensity (Research)	0.7878		-0.5764	2.1521
Locale (Urban)	-1.2408	*	-2.3436	-0.1381

	Coef.	Sig.	95% Conf. Interval	
Rank				
Associate professor	-0.1702		-1.7345	1.3940
Assistant professor	-0.5124		-2.2441	1.2192
Instructor	0.1737		-1.5600	1.9075
Lecturer	-4.6855	**	-8.146	-1.2245
Other	-2.5802		-5.7042	0.5438
Tenure status				
On tenure track but not tenured	-0.0998		-1.7894	1.5898
Not tenured because institution has no tenure system	0.3463		-1.0168	1.7095
Not on tenure track	1.2247		-0.5349	2.9845
Salary				
$50,000 - $74,999	0.3539		-0.9210	1.6289
$75,000 - $99,999	0.5931		-1.3124	2.4987
$100,000 and up	0.0247		-2.7365	2.7860
Unknown	-2.7188		-7.1406	1.7026
Years as full-time faculty in current institution	0.0432		-0.0372	0.1237
Teaching post-baccalaureate programs	-0.3642		-1.8406	1.1121
Administrative responsibilities occupy 50% or more of job	2.7170	***	1.3612	4.0729
Time spent on all work activities (hours/week)	0.1205	***	0.0687	0.1724
Number of school or departmental committees served	-0.0552		-0.3080	0.1975
Developed or significantly revised one course	-0.2169		-1.5301	1.0961
Developed or significantly revised two or more courses	0.4076		-1.0010	1.8163
Converted one or more courses to online format	-0.2855		-1.358	0.7871
Published one or more articles in peer-reviewed journals	-0.7078		-2.1048	0.6891
Prepared for one or more grant proposals	-0.0747		-1.2559	1.1065
Dissatisfaction with resources				
Equipment and supplies for teaching	-0.5962		-1.2687	0.0761
Travel funds for professional development	0.2225		-0.3196	0.7647
Office space	0.4720		-0.0698	1.0139
Teaching support	0.6550		-0.1009	1.4110
Technology support	-0.3198		-0.9103	0.2706
Direction of department or school	0.6564		-0.0944	1.4073
Dissatisfaction with aspects of work				
Workload	3.8865	***	3.1274	4.6456
Salary	0.3224		-0.2509	0.8957
Benefits	0.5760		-0.0927	1.2447
Job security	-0.4399		-1.2481	0.3683
Flexibility to balance work and family life	2.9249	***	2.1883	3.6615
Autonomy and independence	0.3432		-0.3833	1.0699
Relationship with school administration	0.5571		-0.2207	1.3350
Meaningfulness of work	2.2763	***	1.4494	3.1032

	Coef.	Sig.	95% Conf.	Interval
Relationships with students	0.8723		-0.0162	1.7609
Relationships with nursing colleagues	0.6115		-0.1776	1.4007
Rewards				
Rewards for innovation in the job	0.0618		-0.4161	0.5398
Flexibility in the job	0.5998	*	0.0339	1.1657
Visibility in the job	0.3164		-0.2846	0.9175
Constant	-5.1628		-9.9869	-0.3386
Step 6. Block "Health Status" Added				
F = 45.11 (CI 50, 213), p = 0.0000				
R^2 = 0.4004				
Race and ethnicity (Not white)	-1.9961	**	-3.695	-0.5226
Sex (Male)	-0.8542		-2.9074	1.1989
Education: Highest nursing degree				
Other	3.7669	**	1.2269	6.3068
Baccalaureate	1.1952		-1.3049	3.6954
Master	1.1661		-0.2976	2.6299
Degree program (ADN)	-0.6867		-1.9104	0.5370
Research intensity (Research)	0.7132		-0.6463	2.0728
Locale (Urban)	-1.1328	*	-2.2292	-0.0364
Rank				
Associate professor	-0.1082		-1.6636	1.4471
Assistant professor	-0.4080		-2.1239	1.3077
Instructor	0.2287		-1.4756	1.9332
Lecturer	-4.5330	*	-8.1088	-0.9572
Other	-2.1709		-5.2059	0.8640
Tenure status				
On tenure track but not tenured	-0.0209		-1.6758	1.6339
Not tenured because institution has no tenure system	0.4148		-0.9123	1.7421
Not on tenure track	1.3608		-0.3940	3.1157
Salary				
$50,000 - $74,999	0.2716		-1.0129	1.5563
$75,000 - $99,999	0.7489		-1.1628	2.6608
$100,000 and up	0.0660		-2.6519	2.7839
Unknown	-2.4797		-6.8420	1.8826
Years as full-time faculty in current institution	0.0481		-0.0308	0.1270
Teaching post-baccalaureate programs	-0.2028		-1.6323	1.2267
Administrative responsibilities occupy 50% or more of job	2.5757	***	1.2311	3.9204
Time spent on all work activities (hours/week)	0.1214	***	0.0698	0.1729
Number of school or departmental committees served	-0.0320		-0.2843	0.201
Developed or significantly revised one course	-0.2607		-1.5654	1.0440

	Coef.	Sig.	95% Conf. Interval	
Developed or significantly revised two or more courses	0.2406		-1.1416	16229
Converted one or more courses to online format	-0.3393		-1.3849	0.7062
Published one or more articles in peer-reviewed journals	-0.4343		-1.8079	0.9391
Prepared for one or more grant proposals	-0.0832		-1.2505	1.0840
Dissatisfaction with resources				
Equipment and supplies for teaching	-0.5500		-1.200	0.0999
Travel funds for professional development	0.2181		-0.3250	0.7612
Office space	0.3974		-0.1366	0.9316
Teaching support	0.6575		-0.0941	1.4091
Technology support	-0.3400		-0.9253	0.2451
Direction of department or school	0.8307	*	0.0935	1.5679
Dissatisfaction with aspects of work				
Workload	3.7850	***	3.0389	4.5310
Salary	0.2864		-0.2792	0.8522
Benefits	0.4984		-0.1703	1.1672
Job security	-0.6924		-1.4847	0.0999
Flexibility to balance work and family life	2.7879	***	2.0545	3.5213
Autonomy and independence	0.2596		-0.4591	0.9784
Relationship with school administration	0.5563		-0.2067	1.3192
Meaningfulness of work	2.2907	***	1.4842	3.0972
Relationships with students	0.7684		-0.1179	1.6547
Relationships with nursing colleagues	0.5694		-0.2097	1.3305
Rewards				
Rewards for innovation in the job	0.0717		-0.3965	0.5400
Flexibility in the job	0.5410		-0.0103	1.0923
Visibility in the job	0.3352		-0.2632	0.9337
Self-reported health	2.3193	***	1.7049	2.9338
Constant	-8.2391		-13.1666	-3.3117

Note. CI = confidence interval; Coef = coefficient; Sig = significance; Conf. = confidence; ADN = associate degree in nursing. *N* reflects all responses included in this regression model.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.