

EXPLORING THE MOTIVATIONS OF NURSING STUDENTS IN NEW YORK STATE

Ileana M. Carillo, EdD
Phoebe M. Massimino, PhD
Anthony J. Santella, DrPH, MCHES

Abstract: A strong nursing workforce is integral to quality healthcare. Nursing is an important aspect of healthcare outcomes and plays a critical role in patient safety. Nursing students are key to ensuring an adequate pipeline of nursing professionals. An exploratory cross-sectional online survey was conducted with a convenience sample of 158 students in nurse education programs leading to a Bachelor's Degree in New York State. The current study sought to identify the motivation to pursue a career in nursing, including a career as a Registered Nurse (RN). Personal motivators (primarily the desire to help others) ranked as the main reason for choosing the profession (60.1%). Employment motivators (including job, benefits and monetary reasons) ranked second (26.8%), and Lifestyle motivators (including hours and schedules) ranked third (13.1%). Statistical analysis revealed consistent priorities regarding primary motivators across subgroups of nursing students. Results also indicated that students who have their RN license while pursuing a Bachelor's Degree are a unique subset of students in nursing programs. Each of the following findings were significant at $p < 0.001$: Nursing students enrolled in a Bachelor's Degree program who already hold an RN license are more likely to; be over 30 years of age, attend school part-time, attend fully online classes (pre-pandemic mode), already have an Associate's Degree in Nursing and attend a public university. Understanding the motivations of students in nursing programs can inform both academia and employers to recruit and retain future nursing professionals.

Keywords: *Student Nurses, Nursing Students, Nurse Motivation, Healthcare Workforce, Nurse Recruiting*

INTRODUCTION

Nursing is an important aspect of quality healthcare outcomes for patients and plays a critical role in patient safety (Phillips et al., 2021). An adequate workforce of nurses, as well as sufficient staffing of this important resource, is necessary for quality patient care (Van den Heede et al., 2020). Identifying the motivators of nursing students can provide valuable insights to inform both healthcare institutions and academia to recruit, train, promote, and retain a pipeline of professional nurses in a diverse workforce (Cipher & Urban, 2022; Latham et al., 2020; Miers et al., 2007).

Nursing Shortage

Healthcare faces great challenges in its workforce. Rapid changes in the industry and expanding roles are increasing demand for nursing care because of a growing healthcare system and an aging population who needs more care (Cho et al., 2010; Edmonson et al., 2021). Life expectancy is increasing which, in turn, increases the need for nursing care in the general population (Institute of Medicine, 2011). At the same time, the nurse workforce is aging, resulting in retirements leading to a decreased number of nurses working in the field (Gaffney, 2022). In

fact, over one million nurses are aged 50 and over and are expected to retire within the next 10 to 15 years (Marc et al., 2019). Increased age can also create challenges for the physical demands of the job (Cleaver et al., 2022). Due to a lack of succession planning, the nursing shortage is not only in numbers, but, expertise for particular specializations is expected to be especially acute (Beitz, 2019).

Nursing shortages have been a growing concern during the past decade. Every two years, a partnership of the National Council of State Boards of Nursing (NCSBN) and the National Forum of State Nursing Workforce Centers, conduct the National Nursing Workforce Survey to obtain data on nurse supply (Smiley et al., 2021). The survey assists researchers, policy makers, and nursing education leaders to plan for decisions impacting the future of nursing. The recent 2020 survey, as well as the previous surveys in 2017, 2015 and 2013, demonstrated the increasing median age of nurses (which was 52 years of age in 2020), and the number of nurses headed for retirement. In 2020, 22.1% of nurses reported they plan to retire over the next five years (Smiley et al., 2021). Liaw et al. (2017) echo the World Health Organization's (WHO) 2015 report predicting a shortage of healthcare workers worldwide and the need

Corresponding Author: Phoebe M. Massimino, PhD, Department of Business and Economics, York College – The City University of New York, 94-20 Guy R. Brewer Blvd, Jamaica NY 11451, Email: pmassimino@york.cuny.edu; Ileana M. Carillo, EdD, Department of Health Sciences, Lehman College – The City University of New York; Anthony J. Santella, DrPH, MCHES, Department of Public Health, Marion Peckham Egan School of Nursing & Health Studies

to expand the pipeline of nurses and attract more students to the profession to meet future healthcare needs. These trends were ongoing before the COVID-19 pandemic exacerbated the current nursing shortage (Kelley et al., 2022).

Motivations of Students in Nursing Programs Leading to a Bachelor's Degree

Nursing education programs are vital to maintaining an adequate workforce in terms of numbers, talent, qualifications and expertise to meet healthcare demands. Nursing programs tend to be challenging and competitive. Personal values, career perceptions and expectations, and social environments contribute to the choice of this vocation, as well as a desire to help and care for others, the opportunity to work with different people in a variety of work settings, and the positive image of nursing (Cho et al., 2010). Factors that influence students' choice of nursing careers include socio-demographic (including gender and family income), perceptions of nursing, interest in science, previous academic achievement and mother's occupation (Law & Arthur, 2003). Educational level and familial financial means are also connected to the likelihood of choosing nursing as a career (Glerean et al., 2017).

Four major themes of motivators emerged from a study of newly credentialed nurses (Banks & Bailey, 2010). These include: altruism, the influence of role models, self fulfillment, and a challenging career. Altruism is a significant influencing factor for choosing nursing as a career. Specifically, the desire for a vocation as an opportunity to help others, with some being driven by a feeling of having a higher calling to become a nurse in a spiritual sense. Being a nurse is associated with who they are, and caring for others being part of them. Role models influence the choice of nursing as a career including family members who are in the medical or nursing field (Banks & Bailey, 2010). It was also noted that exposure to nursing and hospitals through various high school programs and counselor contacts influenced the career choice to become a nurse (Katz et al., 2016).

The objective of this study was to identify factors pertinent to attracting students to the nursing profession. For students currently in nursing education programs, the research questions sought to identify; 1) the general motivation to pursue nursing as a career, and, 2) the motivation to specifically pursue becoming a Registered Nurse.

METHOD

Conceptual Framework

The conceptual framework of this study emanates from prior research on the motivation to choose a career in nursing (Banks & Bailey, 2010; Cho et al., 2010; Law & Arthur, 2003; Liaw et al., 2016; Mooney et al., 2008). The meaning of one's work is linked to personal goals and values. From a theoretical perspective, by applying Vroom's Expectancy Theory of Motivation to nurses, motivation would depend on the rewards perceived for becoming

a nurse, and how much the individual values those rewards (Gyurko, 2011).

This study sought to examine the perspective of nursing students and provide insight into what motivates individuals of varying backgrounds and characteristics to enter the nursing profession. Adding the respondents' socio-demographic information can help describe the diversity of those entering the field, and provide information for recruitment into academic programs, as well as hiring and retaining a diverse nursing workforce.

This study sought to gather information for analysis on motivation to enter the nursing profession specifically in New York State (NYS). Since RNs are licensed by the state, requirements for obtaining an RN license are consistent among the survey respondents, which should control for intervening variables as might be the case if the students surveyed were preparing for different professional requirements.

Survey Design

The survey for this descriptive study was based on nurse motivations identified in the literature. The survey was piloted with 5 nursing students, 5 practicing RNs, and 5 recent graduates of nursing programs. Written and verbal feedback were incorporated to identify gaps and increase comprehensiveness. The revised survey was then administered to a group of 30 undergraduate students enrolled in an accredited nursing program in NYS. Based on student feedback, additional refinements were made. A question about the concerns of nursing students was added as a result of the verbal feedback session. The survey was entered into the electronic software SurveyMonkey® and tested by the study team. The updated electronic survey was then re-administered to the initial group of practicing RNs to check for fluidity, coordination and sequence of questions, use and navigation, and the screen to claim the incentive gift card. The process of piloting the survey with nursing students and practicing RNs established face validity and verified the relevancy of the content.

Survey Content

Motivation questions included; 1) which most affected your original choice to pursue a career in nursing, and, 2) what most motivated your decision to pursue becoming a Registered Nurse. Other questions asked the reasons for attending their particular school, format of their educational program, and whether they are attending school full or part-time. Students were also asked the type of future nursing position they plan to obtain, intended or desired specialty, and the type of organization they intend to work for after graduation. Participants were asked about prior education, current licenses, current employment, and demographic information.

A total of 47 questions appeared on the survey. Questions were a combination of multiple choice, multiple answer, ranking, and fill-ins. An open-ended fill-in question for "other" appeared for cir-

cumstances where a student's preferred answer was not included in the choices provided by the multiple choice or multiple answer categories. The number of questions by category included: 3 consent and eligibility confirmation, 9 current nursing program, 4 past educational history, 5 current licensing, 7 current employment or semi-professional position, 9 future employment plans, 5 motivation, 1 concern, 3 demographic questions, and 1 free form response question asking, "Is there anything important that was not asked that you feel is important to add?"

Ethics Approval

Institutional Review Board (IRB) approval for the study was obtained from the City University of New York (CUNY)/Lehman College; CUNY University Integrated IRB Protocol and Hofstra University IRB. Informed consent appeared on the opening page of the survey, and described the participants' rights and other relevant information: "I have read the above 'Internet-Based Informed Consent.' I understand that participation is voluntary and that I may withdraw consent from this survey at any time". Agreement was required before continuing.

Selection of Subjects/Students

The target population of this study were students enrolled in a Bachelor of Science in Nursing, or a Bachelor of Science program with a major in Nursing in NYS. A convenience sample of nursing students were recruited. A survey invitation was sent to chairpersons of Departments of Nursing at institutions of higher education with accredited nursing programs leading to a Bachelor's Degree level or above. Chairpersons were asked to forward the invitation and link to their students to participate in the survey. The invitation included the purpose and length of the study, eligibility criteria, incentives, and a recruitment flier. In addition to accredited nurse education programs, student nurse professional organizations and social media websites geared toward nursing students were identified for recruitment. To be eligible for participation, participants had to be a minimum of 18 years old and be actively enrolled in an undergraduate nursing program leading to a Bachelor's Degree in NYS. Participants were eligible to receive a \$10 electronic gift card for their participation.

Data Collection

With questions based on the literature review and the pilot survey feedback from nursing students and practicing RNs, a cross-sectional, online survey was conducted to examine the categories of: demographics; education, training and licensure; career intentions; and motivations. The survey was conducted using SurveyMonkey® electronic survey software. The data collection period was March to August 2021.

Data Analysis

Survey results were downloaded into an Excel spreadsheet for analysis. Descriptive statistics includ-

ed frequencies, means, standard deviations and proportions. As appropriate, ANOVA, chi-square tests, and t-tests were conducted to assess the associations between variables of interest. Statistical significance was assessed at a minimum of $p < .05$.

RESULTS

A total of 162 participant surveys were returned. Two were eliminated because the respondents only answered one or two questions. An additional two who were not attending a nursing school in NYS were also eliminated. The analysis was conducted with the remaining 158 responses. The number of respondents and percentages were calculated and are described in the paragraphs below. Data on demographics, education, training and licensure, career intentions and motivations are depicted in Tables 1-4. Please note that not all findings from this study appear in table format.

Demographics listed in Table 1 include age, gender, race/ethnicity, country of primary education, and current employment. The mean age of respondents attending nursing programs leading to a Bachelor's Degree was 25.12 years old, with a range of 18 to 61 years of age, and a standard deviation of 7.50. Of the group, 18.5% were over 30 years old. Age 30 was chosen as a variable based on a prior study by Erickson & Grove (2007).

Licensure and Education data in Table 2 show that 18.4% of nursing students in the study already earned their RN license, 88.0% are attending full-time, and 9.5% responded they are working full-time while also attending school full-time.

The most frequent responses about Career Intentions in Table 3 were that students intended to work for a public sector organization (54.8%), and in a hospital/acute care setting (39.7%). The most frequent responses for areas of intended specialization were labor and delivery (10.1%), and pediatrics (9.1%).

For the question "What is your greatest concern regarding your choice of a nursing career?", "Physical Demands" and "Passing the State Board Exam" were nearly equal in overall importance. Results were further analyzed to determine if there were differences in "concerns" based on age, gender and ethnicity. Those over 30 years of age were most concerned about physical demands (64.3% vs. 36.6%, $p < .01$). There were no significant differences based on gender or ethnicity.

Motivation for the Original Choice to Pursue a Career in Nursing: As depicted in Table 4, the overall ranking is "Personal" #1 (desire to help others, personal experience, scientific interest), "Employment" #2 (Job, Benefits, Monetary Reasons), and "Lifestyle" #3 (Hours, Schedule). Analysis showed the average rankings for these motivations are not equal ($p < .0001$). There were no differences in motivation based on age, gender or ethnicity.

After analyzing the overall respondents, 43 subgroups were identified using the variables of the; cur-

rent nursing program (type of school, mode of instruction, reason for choosing the school, attending full/part time), past and current education, current licensing, current employment or semi-professional position, future employment plans (expected type of healthcare institution, expected location, expected pay), and demographics (age group, gender, ethnicity). For each of the 43 subgroups, the mean score for each motivator was calculated and ranked in order of importance. A major finding is that, based on the mean scores, all 43 subgroups ranked "Personal" as #1. Thirty-nine of 43 subgroups ranked in order; "Personal" as #1, "Employment" #2, and "Lifestyle" #3. Four subgroups (those who expected their pay to be over \$110,000 per year, planned to work in private business, selected their school based on a recommendation, and selected their school based on accreditation) ranked "Personal" as #1, "Lifestyle" as #2, and "Employment" as #3.

Each of these three categories was expanded to provide further detail of sub-rankings. "Desire to Help Others" was the most important in the "Personal" motivation category; "Job Security" within the "Employment" motivation category; and "Opportunity for Advancement in the Field" within the "Lifestyle" motivation category.

Motivation to Pursue Becoming a Registered Nurse: The motivators for becoming an RN are listed here in ranked order: #1 "Inherent/Internal" Motivators (Personal Values, Altruism, Desire to Help Others), #2 "Employment" (Job, Benefits, Monetary Reasons), #3 "Personal Experience", #4 "External Motivators" (Family influence, Prestige of Nursing Profession), #5 "Lifestyle" (Hours, Schedule). Analysis showed the average rankings for these motivations are not equal ($p < .0001$). There were no differences in motivation based on age, gender or ethnicity.

For each of the 43 subgroups, the mean score for each motivator to "Pursue Becoming a Registered Nurse" was calculated and ranked in order of importance. A major finding is that, based on the means, 38 of 43 subgroups indicated "Inherent/Internal Motivators" as most important, and "Lifestyle" as least important. This consistency was observed even though the cell sizes were small within some subgroups.

Two subgroups ranked "Inherent/Internal" motivators as #1, and "Personal Experience" as least important (subgroups who expected their pay to be over \$110,000 per year, and those whose primary concern was obtaining employment). Two subgroups ranked "External Motivators" as most important, and "Lifestyle" as least important (subgroups who attend school part-time and those who selected their school based on tuition benefits). One subgroup ranked "Employment" as most important, and "Lifestyle" as least important (the subgroup who based their decision of school or program on accreditation).

Students Who Have an RN License, but do not Yet Have a Bachelor's Degree

A subgroup became apparent within the stu-

dent population. Twenty-nine, or 18.4% of the 158 respondents answered that they already hold an RN license. These RNs are attending school to complete their Bachelor's Degree. There were no differences in their responses regarding the original choice to become a nurse. For "Employment" motivation, the only significance was a weak significant relationship for salary motivation, with respondents who were not yet RNs expressing higher motivation for salary (i.e., not yet an RN 23.8% vs. RNs 7.4%, $p < .07$). There were no significant differences between any of the major categories of "Lifestyle" motivation or "Personal" motivation between students who hold an RN license and those who do not. Within the decision to become an RN, the only significant difference was for "External Motivators" (family influence and the prestige of the nursing profession) which was stronger for students already holding an RN license (22.2%) vs. students who are not yet RNs (7.9%), $p < .03$.

Students who hold RN licenses compared to students who are not yet RNs are more likely to be over 30 years of age (51.9% vs. 11.3%, $p < .001$), (mean 32.6 years of age vs. 23.5 years of age, $p < .001$); identify as white, (81.5% vs. 55.0%, $p < .02$); be employed (89.3% vs. 56.3%, $p < .001$); employed full-time if employed (76.0% vs. 11.1%, $p < .001$); and already working in a nursing role if employed (80.0% vs. 18.3%, $p < .001$). Moreover, students who already hold an RN license are more likely to attend school part-time (51.7% vs. 3.1%, $p < .001$), attend fully online classes (pre-pandemic mode) (62.1% vs. 14.7%, $p < .001$), already have an Associate's Degree in Nursing (79.3% vs. 0.8%, $p < .001$), attend a public university (72.4% vs. 28.9%, $p < .001$), and have tuition benefits from their employer (17.9% vs. 4.7%, $p < .02$). For career intentions, students who are already RNs plan to obtain their first position after graduation from an employer's website posting (46.3% vs. 23.3%, $p < .01$). Of students who are not yet RNs, 17.9% expect to obtain their first position after graduation through a school or faculty referral, vs. 2.4% for those already holding an RN license ($p < .02$).

Significant differences were not found between students who already hold an RN license compared with students who are not yet RNs with regard to; gender, country of primary education, reasons for selecting their school (with the exception of eligibility for tuition benefits from their employer), first major of college-level study, type of semi-professional position (if working in a semi-professional position), intention to work in New York State after graduation, intended type of employment setting after graduation, or intended area of specialization.

Table 1: Participant Demographics	
Age in years (N=151)	
Mean = 25.12 Range = 18 to 61 years of age Standard Deviation = 7.50	
20 or under	32 (21.2%)
21-30	91 (60.3%)
31-40	20 (13.2%)
41-50	6 (4.0%)
Over 50	2 (1.3%)
Gender (N=153)	
Female	137 (89.5%)
Male	12 (7.8%)
Transgender	3 (2.0%)
Prefer not to answer	1 (0.7%)
Race/Ethnicity (N=153)*	
White/Caucasian	98 (59.8%)
Asian	25 (15.2%)
Hispanic/Latinx	20 (12.2%)
Black/African American	12 (7.3%)
Other	9 (5.5%)
*153 students selected 164 responses, since some students selected more than one response.	
Country of primary education (N=157)	
USA	148 (94.3%)
Outside of USA	9 (5.7%)
Currently employed in any capacity (N=156)	
Not employed	59 (37.8%)
Part-Time (34 or less hours per week)	49 (31.4%)
Full-Time (35+ hours per week)	27 (17.3%)
Per Diem	18 (11.5%)
Hourly	3 (1.9%)
If employed, position held (N=96)	
Working in a non-nursing patient care role	34 (35.4%)
Working in a nursing role	33 (34.4%)
Unrelated to nursing/patient care	29 (30.2%)

Table 2. Education, Training and Licensure	
Currently hold a valid New York State Nursing license (N=158)	
Yes	34 (21.5%)
Highest level of licensure currently held (N=32)	
RN (Registered Nurse)	29 (90.6%)
LPN (Licensed Practical Nurse)	3 (9.4%)
Overall students holding RN licenses (N=158)	
RN (Registered Nurse) of total student respondents	29 (18.4%)
Educational status (N=158)	
Full-time student	139 (88.0%)
Part-time student	19 (12.0%)
Format of current Nursing program (Pre COVID-19 Restrictions) (N=158)	
Hybrid (partially online, partially in-person)	81 (51.3%)
In-Person	40 (25.3%)
Fully Online	37 (23.4%)
Type of institution currently enrolled (N=157)	
Private College or University in New York State	98 (62.4%)
Public College or University in New York State	58 (36.9%)
Technical, Trade or other specialized school	1 (0.6%)
Most influenced the choice of educational institution for the Bachelor of Science in Nursing (BSN) or Bachelor's Degree with a major in Nursing (N=157)	
Reputation	43 (27.4%)
Cost	35 (22.3%)
Geographic location/proximity to home or work	30 (19.1%)
Accreditation	15 (9.6%)
Tuition benefits provided by employer for this program/institution	11 (7.0%)
Other	23 (14.7%)
Hold an Associate's Degree in Nursing (N=158)	
Yes	24 (15.2%)
Nursing was the first major of college-level study (N=158)	
Yes	111 (70.3%)
Participation in another semi-professional position such as volunteer, internship, clinical rotation, or similar activity (N=157)	
Yes	88 (56.1%)
Semi-professional position (N=89)	
Clinical rotation	62 (69.7%)
Volunteer	18 (20.2%)
Internship	6 (6.7%)
Other	3 (3.4%)
Students working full-time and attending school full-time (N=158)	
Working full-time and attending school full-time	15 (9.5%)

Table 3. Career Intentions	
Plan to work in New York after graduation with a Bachelor of Science in Nursing (BSN) or a Bachelor's Degree with a major in Nursing (N=155)	
Yes	144 (92.9%)
Intended primary geographic area for first position after graduation (N=156)	
Westchester/Upstate NY/Western NY	62 (39.7%)
Long Island (Nassau and Suffolk County)	35 (22.4%)
NYC (5 Boroughs)	33 (21.2%)
Outside of New York State	11 (7.1%)
Other/not sure	15 (9.6%)
Intended type of organization to work for after graduation (N=157)	
Public-sector organization (government agency, public hospital, public school, etc.)	86 (54.8%)
Doesn't matter	29 (18.5%)
Private non-profit organization (religious-based, non-profit hospital, foundation, etc.)	23 (14.6%)
Private business, company or organization	17 (10.8%)
Other	2 (1.3%)
Intended type of setting to work in after graduation (select up to three) (N=307 based on 157 respondents)	
Hospital/Acute Care	122 (39.7%)
Ambulatory/Outpatient	33 (10.7%)
Private Physician Practice (PCP, General Medicine, Internist, Family Medicine, etc.)	31 (10.1%)
Travel-Domestic	30 (9.8%)
Academic	13 (4.2%)
Travel-International	12 (3.9%)
Consultant/Nurse Researcher	11 (3.6%)
Flight/Transport	10 (3.3%)
Don't know	11 (3.6%)
Other	34 (11.1%)
Intended area of specialization (select up to 3) (N=396 based on 157 respondents)	
Labor and Delivery	40 (10.1%)
Pediatric	36 (9.1%)
Anesthesiology	30 (7.6%)
Emergency Medicine	29 (7.3%)
Travel Nurse	23 (5.8%)
Obstetrics/Gynecology	19 (4.8%)
Other	219 (55.3%)
How do you expect to obtain the first position after graduation? (select 2) (N=264 based on 157 respondents)	
Employer's website posting	71 (26.9%)
School or faculty referral	41 (15.5%)
Hire from field work/internship/clinical	37 (14.0%)
Personal referral/recommendation	29 (11.0%)
Don't know	18 (6.8%)
Current College's Career Services	15 (5.7%)
Monster, Glass Door, or other job website	15 (5.7%)

Table 3. Continued	
Other	38 (14.4%)
Full-time gross (pre-tax) annual income expected after graduation (N=156)	
\$110,000+	4 (2.6%)
\$80,000-\$109,999	64 (41.0%)
\$50,000-\$79,999	80 (51.3%)
\$20,000-\$49,999	8 (5.1%)
Concerns regarding the choice of a nursing career (N=153)	
Physical demands	63 (41.2%)
Passing the State Board Exam	62 (40.5%)
Obtaining employment	20 (13.1%)
Other	8 (5.2%)

Table 4. Motivations of Nursing Students		
Which most affected your original choice to pursue a career in Nursing? (Ranked 1=most influential, 3=least influential)	Mean and (Standard Deviation)	Chosen as most important #1
Personal (To help others, personal experience, scientific interest)	1.58 (.78)	92 (60.1%)
Employment (job, benefits, monetary reasons)	1.97 (.72)	41 (26.8%)
Lifestyle (hours, schedule)	2.44 (.72)	20 (13.1%)
Overall Average, n=153	2.00	100.0%
NOTE: Ranked Data. Friedman Two-Way Analysis of Variance by Ranks shows means are not equal at a significance level of $p < .0001$		
(Expanded Categories) Personal motivation to pursue a career in nursing (Select up to 2) (N=286 based on 153 respondents)		
Desire to help others		126 (44.1%)
Scientific/medical interest		67 (23.4%)
Positive image of nursing		31 (10.8%)
Family member in medical field		26 (9.1%)
Enjoy nursing duties		26 (9.1%)
Prestige		8 (2.8%)
Other		2 (0.7%)
(Expanded Categories) Employment motivation to pursue a career in nursing (N=153)		
Job security		67 (43.8%)
Opportunity for advancement		36 (23.5%)
Salary		32 (20.9%)
Benefits		11 (7.2%)
Other		7 (4.6%)
(Expanded Categories) Lifestyle motivation to pursue a career in nursing (Select up to 2) (N=286 based on 153 respondents)		
Opportunity for advancement in the field		53 (18.5%)
Desirable schedule/hours		47 (16.4%)
Provides flexibility for personal goals or responsibilities (such as family)		43 (15.0%)
Flexibility in duties/specialties		43 (15.0%)
Opportunity to work with others		40 (14.0%)

Table 4. Continued		
Employment availability in geographic area		30 (10.5%)
Educational advancement opportunity		27 (9.4%)
Other		3 (1.0%)
What most motivated your decision to pursue becoming a Registered Nurse? (Ranked 1=most influential, 5=least influential)	Mean and (Standard Deviation)	Chosen as most important #1
Inherent/Internal motivators (personal values, altruism, desire to help others)	2.06 (1.20)	67 (43.8%)
Employment (job, benefits, monetary reasons)	2.67 (1.34)	38 (24.8%)
Personal experience	3.09 (1.38)	27 (17.6%)
External motivators (family influence, prestige of nursing profession)	3.17 (1.26)	16 (10.5%)
Lifestyle (hours, schedule)	4.01 (1.13)	5 (3.3%)
Overall Average, n=153	3.00	100.0%
NOTE: Ranked Data. Friedman Two-Way Analysis of Variance by Ranks shows means are not equal at a significance level of $p < .0001$		

DISCUSSION

Obtaining insights into the motivations of students who enter the nursing profession is critical to ensuring an adequate workforce of nurses in the future, as well as sufficient staffing to meet the needs of patient care. Challenges include the increasing average age of existing nurses in the field, an aging population that needs more care, and changes brought on by the COVID-19 pandemic. These factors create a greater need to examine the motivations of those entering the nursing profession. This study sought to determine these sources of motivation. The results show that the greatest motivation for students is Personal (60.1%) with the desire to help and care for others as the most frequently indicated response. These results support the prior work of Banks & Bailey (2010), Liaw et al. (2016), and Wilkes et al. (2015).

The second category of motivators involved Employment, which 26.8% of the respondents indicated was the greatest motivator, with the most important subcategory being job security. This result supports the prior work by Mooney et al. (2008) that nursing is viewed as a career that offers good job security. The third category of motivators was Lifestyle, which 13.1% of respondents indicated was the greatest motivator, with opportunity for advancement in the field being most important. This result supports the prior work by Gyurko (2011) regarding paths to mobility. Primary reasons for choice of school or program were: reputation, cost and location. Additional reasons that influenced their choice of school or program were: availability of online programs, accelerated programs, quick/instant decision, and direct admit into nursing programs.

A meaningful finding is that students in nursing programs who already have their RN license are a subgroup with distinct characteristics including typically; being an average of nine years older

than students without an RN license, having already earned an Associate's Degree, being enrolled in part-time and online programs, and attending a public university. This information can inform nursing schools in recruiting RNs who want to increase their knowledge and qualifications by completing their Bachelor's Degree. This benefits both the nurse in their career and also leads to higher levels of patient care by having a more highly educated nursing staff (White, 2017).

Recommendations

For Academia. Being aware of the reasons that students choose a career in nursing is instrumental in developing recruiting strategies (Mooney et al., 2008). The two most prominent reasons that students in this study selected their nursing school or program were reputation and cost respectively. This indicates that educational institutions offering Bachelor's Degree programs in nursing should continually improve and publicize important aspects of programs, seek to maintain costs, or look for sources of funding to offset tuition costs for students. Working with employers can be beneficial in accomplishing mutual goals. Some suggestions may be to increase the amount and number of scholarships through public and private donations (White, 2017), seek corporate donations and sponsorships, work with foundations, and seek endowments. Recruiting students who have already earned their RN license but who do not yet have a Bachelor's Degree provides opportunities to increase the enrollment of this group, and increase the qualifications of those already in the field.

Schools can partner with employers who offer tuition reimbursement to create programs that are convenient for students. From the author's professional experience in workforce development, an example is for a college to offer specific sections of courses at the employer's worksite, allowing cohorts of students to take courses with ease of registra-

tion, lack of commute, and other time and cost-saving benefits. Expanding nurse education capacity through online, telehealth and simulation programs is another possibility (Institute of Medicine, 2011). Creating relationships in the field/industry allows employers to quickly and effectively recruit prospective employees from schools. Academic programs that produce well-skilled and credentialed graduates can work with employers to provide on-the-job internships, training or experiences that benefit the student, school, employer, and ultimately the population and its health. It is recommended that educators tap into the aspirations of students and develop curricula based on helping society and patients as a way to engage and retain students in nursing programs (Wilkes et al., 2015). Liaw et al. (2016) recommend that nursing programs appeal to student's professional altruistic values.

For Healthcare Employers. The results of this study indicate that students choosing the nursing profession are primarily motivated by the desire to help others, scientific/medical interest, the positive image of nursing, an influential family member or other person in the field, and enjoying nursing duties. This information can be used to attract nurses to the field by advertising mutual goals through emphasis of the strategic plan and mission of the healthcare institution and its alignment with nursing. The importance of partnerships between the industry and academia cannot be stressed enough. Healthcare leaders can locate opportunities to interact with not only colleges, but K-12 and high school STEM (Science, Technology, Engineering and Mathematics) programs. Creating linkages throughout different systems benefits the pipeline and exposes students to different careers that can have a positive impact on influencing a student's choice to become a nurse. These programs have also been shown to increase nursing workforce diversity (Katz et al., 2016; Woods-Giscombe et al., 2020). Building capacity can be accomplished through increasing the skills of the existing workforce by advanced training, education and credentialing by working in union with academia. While the demands on healthcare are great, the investment of time and resources needs to be made in strengthening the future healthcare workforce.

For Employment, the second largest motivator, employers can offer job security, opportunity for advancement, competitive salary and benefits to attract candidates to the field (Marc et al., 2019). Another incentive approach is employer assistance in paying off existing student loans for new nursing recruits (Beitz, 2019). The current study revealed that opportunity for advancement was a motivator in more than one category. Providing a pathway for professional and academic advancement is key to recruiting employees. Employers that offer means of furthering education are more attractive to candidates seeking positions. Employee turnover incurs higher costs and the loss of staff expertise. Forming interval schedules for pay increases, longevity bonuses, and

pay increases for additional credentials/education works toward retention of existing nurses. Ensuring pathways creates ladders for higher levels of achievement and investment towards future needs.

For Lifestyle, the third largest motivator, employers can offer desirable schedules/hours, and flexibility to achieve goals such as attending school or taking care of family. Other Lifestyle motivators are having flexibility in duties and specialties, the opportunity to work with others, being able to obtain employment in different geographic areas, and the opportunity for educational and career advancement. Healthcare employers can use this information to provide flexibility in scheduling for employees to achieve goals and provide a work/life balance (Gaffney, 2022).

Limitations and Directions for Future Research

This study has limitations that can be addressed in future research. This study was exploratory in nature. Survey questions were developed by the authors based on concepts grounded in the literature as opposed to using an existing measurement tool. While several iterations of the survey incorporated review and feedback from nursing students and practicing RNs, it resides within the context of a particular segment of nursing students at a particular geographic area and time, since the catchment area was limited to NYS. Some student participants were recruited by their department chairs and faculty, others recruited by sending flyers to student associations and social media sites. Because this was a convenience sample, nursing students with strong opinions may have been more likely to respond to the survey, thus giving a more marked perception than truly exists. Students who may have left their nursing education programs during the pandemic would not be represented in the study, and conversely, other students may have entered nursing programs because of wanting to help during the pandemic. Finally, some potentially meaningful relationships may remain undetermined due to small cell sizes for some variables. Despite these limitations, the results of this study can be used to improve recruiting practices for nursing schools and healthcare employers in a variety of settings to help maintain an appropriate supply of nursing professionals.

Directions for future research can include further development of the survey instrument and using a larger sample outside of NYS to provide additional data. Extending the study to graduate students is another direction for future research. An interesting extension of this study would be to re-administer this survey at a future point in time to determine if motivations are different post-pandemic.

CONCLUSION

Nursing is an important aspect of quality healthcare outcomes and plays a critical role in patient safety. The national and global nursing shortage is expected to grow as the need for healthcare increases, and large numbers of nurses head for retire-

ment within the next decade. Attracting students to the nursing profession is key to ensuring an adequate supply of nursing professionals. This study explored the motivations of 158 students enrolled in nursing programs leading to a Bachelor's Degree. This study contributes to the existing body of literature by studying the responses and perspectives of these students. Findings can assist nursing education programs and healthcare institutions to competitively attract nurses to meet the current and future needs of the population.

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