ORIGINAL RESEARCH

Spring 2020 New Graduate Employment and Workforce Issues During the Pandemic: A Secondary Analysis of New York State and National Trends

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Abstract

Background: In March 2020, the nation faced a public health crisis, COVID-19, that prompted a national response of many states issuing state-wide "lock-down" orders. This also forced nursing schools throughout the country to instantly convert to other learning options and many clinicals cancelled, moved to online or simulated experiences. Graduation that year launched nursing students into a healthcare system that was operating in emergency mode facing unprecedented admissions and deaths due to the pandemic. While hiring experienced nurses was a priority for hospital administrators in New York state, at the epicenter of the east coast infections, graduating seniors everywhere faced a different job market and workplace environment. ***Objectives:*** The purpose of this secondary analysis focused on variables related to the job search, employment opportunities, and "news" about hiring new graduates in the year of COVID-19, comparing the 2020 reported experiences with previous years and focusing on New York. Using data collected and published by the National Student Nurses Association (NSNA), this study filtered and sorted the variables related to employment, perceptions of the job market, and nursing education experiences of student members who graduated in 2020 and focused to report on New York state vs. national comparisons workforce issues and outcomes of the abrupt educational changes that occurred. ***Methods:*** The deidentified data were exported from surveys distributed via SurveyMonkey® by NSNA in the Fall/Winter following Spring 2020 graduation. The data from 2020 included a sample of 3,074 responses that were cleaned, sorted, and coded for the descriptive quantitative analysis. They were filtered to compare New York only, with national graduates' reported experiences in the job market and their confidence in their nursing practice in their new jobs. ***Results:*** The analyses demonstrated significant differences in the comparisons of several employment findings from the national sample versus those from the New York sample. New graduates from New York reported only 59% success in finding jobs, compared to the rate of national new graduates (85%). Their perceived hiring trends, as they searched for jobs, were also different for New York versus those from the national sample. Most importantly, while confidence was affected for all new graduates of 2020, the New York sample reported significantly lower confidence mean scores when compared to the national sample, with associations related to the clinical experiences that were discontinued or simulated online. ***Conclusion:*** The results of the survey yielded significant differences in the comparisons of new graduate employment success for the New York state sample compared to the national trends. The greater impact of job searching during the COVID-19 early months on New York graduates can be interpreted upon closer examination of the timeline of the disease escalation and hiring trends.

Keywords: workforce, employment trends, new graduates, nursing shortage, job market

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The nursing workforce statistics have been a function of the rise and fall of the economy with ever growing concerns about a predicted shortage of nurses on the horizon (Feeg & Mancino, 2020). Schools of nursing have been stretched to produce more graduates to meet the needs of the changing population of patients, older and sicker, in hospitals today. As the overall economy in the U.S. continued to improve since the early days of 2009, the annual survey of the National Student Nurses Association (NSNA) has reported on the nation's areas of regional concerns with the overall growth of RN employment and associated trends over the past ten years. However, in 2020, a global pandemic unfolded with day-to-day significant events that affected the U.S. in general, and New York state specifically. COVID-19 caused a national shutdown of schools of nursing. Graduates in Spring and Summer 2020 across the country faced a different healthcare job market in their search for employment (Feeg, Goberdhan & Mancino, 2021). With New York airports as the gateway to the U.S. from around the world bringing crowds of tourists arriving daily, New York city felt an unprecedented impact of the pandemic that had spread from Asia to Europe to New York.

Impact of COVID-19 on Hospitals and Schools

The emergence of the crisis in early 2020 resulted in an abrupt cessation of public based activities that prompted a national response of many states issuing state-wide "lock-down" orders, forcing nursing schools throughout the country to instantly convert to other learning options. Many clinicals were cancelled or moved to online and simulated experiences (Chappell, 2020). Nursing programs across the country cancelled, postponed or transitioned to quickly implemented online instruction. This rapidly evolving instructional landscape saw faculty having to adapt to a new mode of teaching students at a critical time, for seniors, in the months before graduation. According to a national survey, 62.7% of students reported that their clinical experiences with patients were totally discontinued and substituted with online clinicals for all (18.4%), moderate (21.8%) and significant (22.7%) amounts of time (Feeg et al., 2021) at a point when experiential learning is a critical part of the nursing curriculum (Nuuyoma & Ashipala, 2018).

Timeline in 2020

The virus spread quickly from Asia to the U.S. as the number of infected Americans in the Pacific Northwest increased and government concerns mounted. When the Northeast felt the impact of contagious travelers from Europe evidenced by positive virus cases in localized areas warranting "containment zones" (Department of Health, 2020) and a rise in emergency room admissions in New York City (NYC), it became clear that the state government needed to launch its own emergency response to prepare for a surge of intensive care unit (ICU) patients needing ventilators. Over the weeks and months that followed, New York State (NYS) policy makers attempted to predict and prepare for what was to come (Timeline, Table 1). NYS was the epicenter of the pandemic during Spring 2020 and from March - May 2020. Approximately 203,000 laboratory- confirmed COVID -19 cases were reported to the NYC Department of Health and Mental Hygiene (Department of Health, 2020).

Table 1

New York State COVID-19 Timeline: January – June 2020

Dates	Events
January 21st, 2020	First confirmed case of COVID-19 in the US (Center for Disease Control and Prevention, 2020).
January 30th, 2020	The W.H.O. declares a global health emergency (World Health Organization, 2020).
February 2nd, 2020	The Department of Health starts the COVID hotline (Department of Health, 2020).
March 1st, 2020	First COVID-19 case in New York State (Radulescu, 2020).
March 7th, 2020	NY State Governor A. Cuomo declares a state of emergency (Department of Health, 2020).
March 10th, 2020	NY State Governor A. Cuomo orders containment zone (New Rochelle) March 12 to 25 (Department of Health, 2020).
March 11th, 2020	NY State Governor A. Cuomo announces the closing of SUNY and CUNY from March 12th to 19th and moves to online learning following March 19th (Chappell, 2020).
March 14th, 2020	First two COVID-19 deaths in NYS (Docherty et al., 2020).
March 16th, 2020	Governors of New York, New Jersey, and Connecticut, all Democrats, formulate similar rules for closures, NYC Public Schools close (Tarrant et al., 2020).
March 20th, 2020	NY State Governor A. Cuomo signs the New York State on PAUSE executive order, closing 100% of non-essential businesses statewide (Department of Health, 2020).
March 22nd, 2020	Hospitals are ordered to cancel elective and non-critical surgeries to help expand hospital capacity (Office of the Governor of NY, 2020).
March 25th, 2020	NYS announces 40,000 healthcare workers, including retirees and students, signed up to volunteer for the state's surge healthcare force. Another 6,000 mental health professionals begin providing free online mental health services (Department of Health, 2020).

April 4th, 2020	NY State Governor A. Cuomo uses executive order to allow medical students slated to graduate to begin practicing immediately in order to help with the health care surge (Office of the Governor of NY, 2020).
April 6th, 2020	NY State Governor A. Cuomo extends NYS stay-at-home order and school closures to April 29 (Office of the Governor of NY, 2020).
April 10th, 2020	NYS records more COVID19 cases than any other country (besides U.S.) (New York has more cases than any country, 2020)
April 30th, 2020	NY State Governor A. Cuomo announces NYC subway closures from 1 a.m. to 5 a.m. during the coronavirus pandemic in order to disinfect trains and stations ("NY State Governor A. Cuomo Announces", 2020).
May 10th, 2020	In the wake of thousands of additional deaths in nursing homes added to the state death count, the state Department of Health rescinds a March 25 order requiring nursing homes to accept elderly COVID-19 patients discharged from hospitals.
June 24th, 2020	NYS requires travelers to self-quarantine for 14 days if traveling from hot spots (NPR, 2020).

Graduation that year launched nursing students into a healthcare system that was operating in emergency mode facing unprecedented admissions and deaths due to the pandemic. Nursing administrators were compelled to solve problems that were imminent and short ranged in terms of hiring. Healthcare workers were getting sick or needing to quarantine, adding to the dire staffing needs as patients mounted in hallways. Emergency hiring was set by policies in New York to waive or minimize barriers for retired nurses to come back to work. Travel nurses were recruited from distant places to fill the needed jobs for the temporary crisis. While hiring experienced nurses was a priority for hospital administrators in NYS, at the heart of the east coast infections, graduating seniors everywhere faced a different job market and workplace environment.

The Pandemic and the Workforce

How did this change impact the hiring of new graduates? How did new graduates fare when searching for employment at a time and in an environment that was in crisis and in need of nurses? As the pandemic began to taper off, hospitals began to look to filling positions with more permanent personnel, however, this took several months as the Spring 2020 graduates looked for jobs. With limited research on actual nursing workforce or education data from hospitals and schools of nursing during the peak months of the beginning of the pandemic, the need for a national survey on new nurses warranted attention. This study sought to identify and describe how new graduate nurses reported their experiences in finding employment they had hoped would naturally follow their nursing education graduation. Since prospective studies on employment and workforce were not possible, a secondary analysis of annual data collected by a national nursing student organization could provide insights into the employment and education experiences of those most impacted at the time.

Secondary Analysis

Secondary analyses of large datasets provide a mechanism for researchers to study high impact questions that would be difficult to assess prospectively. The same basic research principles that apply to primary data analysis also apply to secondary analysis, although inherent limitations must be acknowledged (Smith et al., 2011). These include accepting that the data source meets standards that are essential despite the unknowns of the source identities of the respondents. Each year, the National Student Nurses Association (NSNA), with over 60,000 members, routinely conducts an annual survey on new graduates to describe their job search and successes in joining the nursing workforce after graduation. The organization has been conducting this survey for more than 10 years, providing reports on the job market for nursing students entering the workforce (Feeg, & Mancino, 2020). Accepting the limitations of the response rate unknowns and ability to alter questions, a secondary analysis is appropriate to compare a large sample of respondents each year with prior years.

In 2020, new graduates faced a different job market searching for their first positions as newly registered nurses (RNs). Students who graduated in Spring 2020 experienced change in their final clinical experiences that were limited when nursing schools across the country closed their in-person classes and supplemented clinical placements in hospitals. Hospital experiences were no longer available, and doors were closed to most healthcare students, forcing schools to find alternative learning experiences (Chappell, 2020).

Purpose

The NSNA annual surveys provided the investigators with a rich source of secondary data to study national trends and filter to identify and describe trends specifically for new graduates from NYS after graduation. The purpose of this study was to analyze employment trends for new graduates in New York relative to the national trends and examine how the Spring of 2020 graduates faced the job market with their altered learning experiences from the early months of the pandemic. The research objectives for this secondary analysis from filtered and focused data are to:

1. Describe the general trends of new nursing graduate employment nationally in the months before and after the COVID-19 pandemic and compare New York and national trends;
2. Compare the two-year changes in hiring trends for New York and national employment of new graduates including availability of jobs and students' perceptions of hiring trends in their job search;
3. Describe how the abrupt changes caused by the pandemic impacted graduation, clinical experiences, and substituted online learning; and,
4. Report how students in New York and nationally were affected by the disrupted clinical experiences in their confidence to practice.

Methods

Design

This study was a secondary analysis of data collected by the National Student Nurses Association (NSNA) on the employment of new graduates' annual membership survey. Each year, the organization identifies members who report their graduation dates within the 6 to 9-month window around when they plan to graduate. They send the "New Graduate Employment Survey" out via email in October of each year asking about their member-graduates' successes in finding employment within the previous months. The questionnaire consists of more than 70 questions about the member-graduates' experiences in the job market along with a variety of demographic questions, their education experiences in the past, and plans for continuing education in the future. These results are reported each year in Deans Notes with a typical return of more than 3,000 to 6,000 responses.

The survey for 2020 was distributed via SurveyMonkey® to the list of members who graduated in May-June and August of 2020, with some who reported graduating in the previous Winter of 2019-2020. The survey yielded n = 3,074 cleaned responses who answered the same key questions as prior years, however, these participants experienced the unprecedented months of finishing nursing school during a pandemic. The 2020 survey captured these major changes and trends in employment compared to prior years as a snapshot of what new graduates faced in job searching during the summer of 2020. It also included questions about their unusual clinical learning experiences in their nursing programs at the height of the national emergency of COVID-19, published in the National Council of State Boards of Nursing (NCSBN) *Leader to Leader* (Feeg, Goberdhan & Mancino, 2021). These data were combined with previous results from prior years and filtered for this study to explore the national trends as a context for focusing on respondents who were from New York as they compared nationally. All the data were de-identified and this study combined variables that were parallel in their item structure to answer the research questions.

Survey Instrument and Data Collection

The NSNA members, more than 60,000, were accustomed to receiving SurveyMonkey® surveys from NSNA and the questionnaire was designed for easy online data entry. For this study, the variables of interest included a variety of demographic questions including gender, age, type of nursing program and type of nursing school, and state where the participant lives, which were sorted by regions of the country and filtered to compare respondents from New York state only. Responses were also cleaned and filtered to focus on respondents who were Associates Degree Nurses (ADN) and Baccalaureate Degree Nurses (BSN) from Public, Private and Proprietary (For-Profit) Schools.

Other survey questions included: "Are you employed as an RN?" and a variety of statements related to the participants' experience in the job market, including their perception of hiring trends of employers such as "hospitals are not hiring new graduates". Several questions asked the participant to report whether or not and how much of their clinical experiences were discontinued and to estimate how much of their clinical learning was online. One additional question was developed as a visual analog scale (VAS) in SurveyMonkey® (0 to 100): "How confident do you or did you feel in your ability to practice?" (0 to 100).

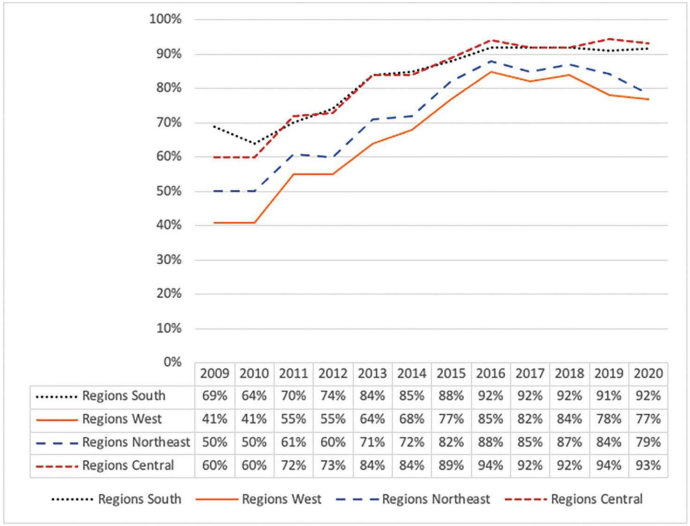
The survey was left open for 8 weeks from October to December with two reminders sent out at two weeks and 4 weeks. Each of the years in this analysis followed a similar procedure minus the questions specifically related to the 2020 pandemic year situations. The survey was closed in December and results were analyzed in SurveyMonkey® and imported into Excel and SPSS 23 for further analyses.

Sample

From the more than 40,000 surveys sent out to the graduating seniors' email addresses (many were duplicates as both school and personal email addresses were used for most participants), the final cleaned and coded sample ranged from 3,074 on the main question related to employment with other questions to as low as 2,021 due to missing responses. Upon sorting the responses filtered for New York only, the sample ranged from 210 to 137 respectively. Using prior year comparisons (Feeg & Mancino, 2020), the samples were comparable in return rate and amount of missing data, which are common in online surveys. Data from the main question about employment success were grouped by regions of the country and used to compare 2020 responses to ten previous years nationally (Figure 1). Other comparisons were made for the national data versus New York only on the 2020 results versus the previous graduation year (2019).

Figure 1

Employment Rates by Regions 2009 - 2020



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Regions South	69%	64%	70%	74%	84%	85%	88%	92%	92%	92%	91%	92%
Regions West	41%	41%	55%	55%	64%	68%	77%	85%	82%	84%	78%	77%
Regions Northeast	50%	50%	61%	60%	71%	72%	82%	88%	85%	87%	84%	79%
Regions Central	60%	60%	72%	73%	84%	84%	89%	94%	92%	92%	94%	93%

Source: Feeg, V., Goberdhan, C. & Mancino, D. (2021) Excerpts from the NSNA 2020 Annual Survey of New Graduates: Graduating Seniors in Winter 2019, Spring and Summer 2020. *Leader to Leader,* National Council of State Boards of Nursing (NCSBN), Spring 2021, pages 1-4.

Results

The results of this secondary analysis required combining several datasets in order to juxtapose the national responses with those from the New York sample for statistical descriptive and comparative analyses. Frequencies were calculated on the variables of interest on the two samples for 2019 and 2020. Data were added to the 10-year data on employment of new graduates for the general findings. The sample sizes varied by year and by variable of interest but were generally more than 3,000 for the national studies and over 200 for the New York filtered responses.

National

Research Question for Objective 1: What were the general trends nationally related to employment of new nursing graduates in the months before and after the COVID-19 pandemic that forced nurse educators to change their mode of instruction for graduating seniors?

To answer the main question related to the trends nationally related to employment of new nursing graduates in the years before the pandemic and in the 2020 class early in the pandemic, the frequencies of the single response "Are you employed as an RN?" were combined and graphed. The trend over 10 years demonstrated regional differences related to new graduates' successes in finding a job within the first 4-9 months since graduation. Students from states in the Northeast and West have always reported less success in employment than the South and Central respondents. Nationally, the employment trends of new graduates in 2020 reflected a decline to 85% from 2019 (87%), declining by 2% each year. The regional job market trend was lower in 2020 compared to 2019 in all regions, except the South. The lowest employment was experienced in the West and Northeast, reflecting areas hardest hit by surges in COVID-19 admissions. In the graduating classes of 2020, all students reported a drop in success rates of finding jobs (Northeast = 79%; West = 77%) and slightly less or stable rates (South = 92%; Central = 93%) (Figure 1).

New York Responses and Job Comparisons

Research Question for Objective 2: How did new nursing graduate employment trend in New York in 2019 and 2020 and how did that compare to the national employment over those years? What are the two-year changes in hiring trends for New York and national employment of new graduates, including availability of jobs and students' perceptions of hiring trends in their job search?

For the analyses focused on respondents from New York state, the main question related to new graduate employment combined data from the 2019 and 2020 surveys. It is first important to know that the proportion of types of schools (Associate vs. Baccalaureate) and types of programs (Public, Private, Proprietary) significantly differed for New York state compared to the national sample. A greater portion of the NY sample attained their Baccalaureate degree (84.7%) compared to 66.1% nationally, and New York respondents were less common from public and more common from private types of schools.

Table 2

Descriptive Statistics of Respondents

	National Sample (n=3074)	NY Sample (n=210)	
	Percent (n)	Percent (n)	$\chi 2$
Types of Programs	**n = 2,958**	**n = 203**	30.0**
Associate Degree	33.9% (1,003)	15.3% (31)	
Baccalaureate Degree	66.1% (1,955)	84.7% (172)	
Types of Schools	**n = 2,950**	**n = 203**	92.2***
Public	63.0% (1,858)	30.1% (61)	
Private (not-for-profit)	18.2% (537)	37.4% (76)	
Private proprietary (for-profit)	11.1% (327)	15.8% (32)	
Don't Know	7.7% (228)	16.7% (34)	
Employment within 6 months	85.0% (2,613)	59.5% (125)	92.1***
Discontinued Clinicals	**n = 2,021**	**n = 137**	19.4**
Totally discontinued	65.2% (1,318)	82.5% (113)	
Very little patient clinicals (<10%)	12.3% (249)	9.5% (13)	
Some patient clinicals (<50%)	13.1% (264)	5.8% (8)	
Patient clinicals (>50%)	9.4% (190)	2.2% (3)	
Amount of Clinicals Online	**n =2,253**	**n = 147**	11.7*
All clinicals online (100%)	16.0% (361)	24.5% (36)	
Significant online (50-80%)	21.3% (480)	21.8% (32)	
Moderate online (10-50%)	20.8% (469)	19.7% (29)	
Little online (<10%)	13.9% (312)	10.2% (15)	
No online clinicals	17.8% (400)	19.1% (28)	
Unsure	10.3% (231)	4.8% (7)	
Graduation Delayed	**n = 2,227**	**n = 145**	216.3***
No, graduated on time	83.4% (1,858)	90.3% (131)	
Yes, graduation delayed	16.6% (369)	9.7% (14)	

* p <.05 **p <.01 ***p<.001

A descriptive comparison of the national sample showed that 85% of new graduates found employment within six months compared to 59% in New York. Comparative statistics sorting the data for New York from the national sample yielded the findings that demonstrated a statistically significant difference in the proportion of employed new graduates nationally versus New York; for the national sample, 85.0% of the respondents found jobs compared to only 59.5% of New York new graduates (2 = 92.1, p< .01) (Table 2).

The National trend for new graduate employment within 4-6 months of graduation has remained consistent for both 2019 and 2020 (86% and 85%), but the data from New York respondents reflected a drop from 2019 (70%) to 2020 (59%) (Figure 2). These data were further supported with new graduates' perceptions and experiences that employers were filling positions with experienced RNs and not hiring new graduates in NYS. The survey reflected this perception with national average in 2019 (65%), 2020 (57%) versus NY 2019 (56%) and 2020 (29%) (Figure 3). The graduates' perception of the availability of "ample jobs for new graduates" was substantially lower in several regions, but this perception was pronounced in New York (Figure 4) as were a variety of questions related to hiring "bad news" (Figure 5).

Figure 2

New York vs National New Graduate Employment 4-6 Months Post Graduation

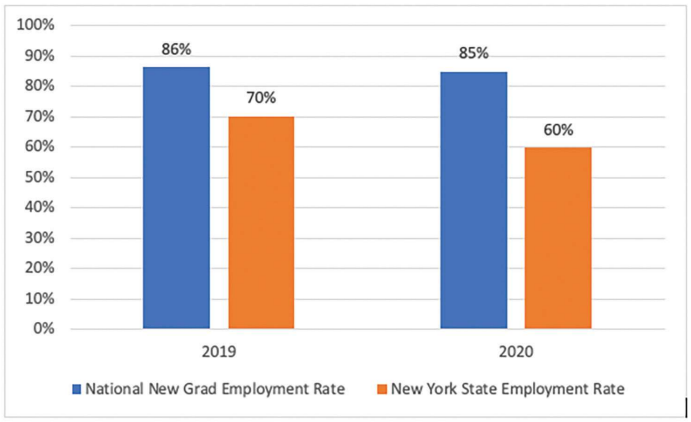


Figure 3

Employers Filling Positions with Experienced RNs and Not Hiring New Graduates: New York vs National

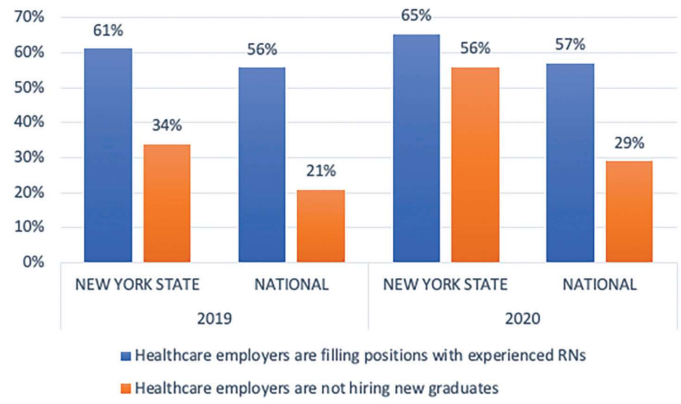


Figure 4

National vs New York New Graduate Perception in Job Search: "There are ample jobs for new graduates."

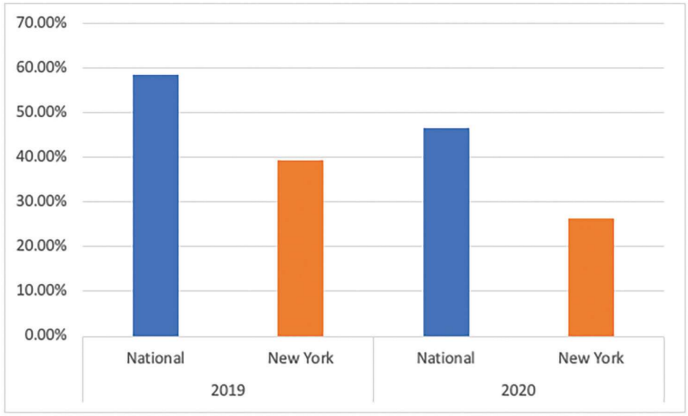
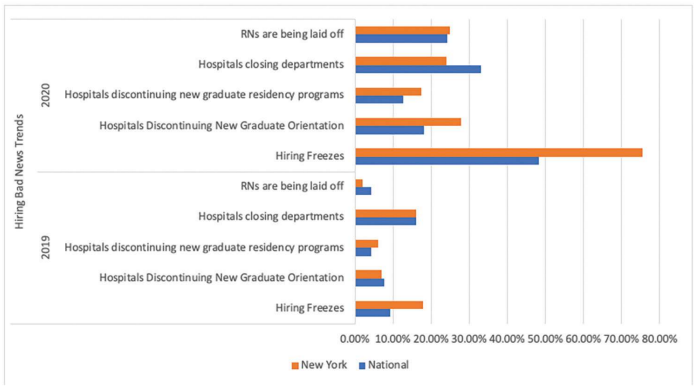


Figure 5

New York vs National Hiring "Bad News" Trends



In summary, the decrease in general employment was down (-1%) for the national sample and ten times higher (-10%) for the New York respondents. The perception of hospitals not hiring new graduates was clearly different in 2020 compared to 2019 for both with greater increases for New York (+22%) than for the national sample (+8%). The national sample respondents (32%) reported more hospitals closing departments than New York (24%), but all job seekers reported a difference in hospitals closing departments in 2020; both New York and the national respondents increased 8% and 16% respectively since 2019. In all these national versus New York comparisons, the new graduates' employment experiences were different than the national respondents based on the likelihood of the corresponding spread of the infection in the state, and especially New York city at the epicenter, where elective surgeries were cancelled, and hospital units were rapidly converted to COVID units to meet the escalating admissions.

New York Responses and Education Comparisons

Research Question for Objective 3: How were graduating nursing students impacted by abrupt changes in schools and businesses nationally and specifically in New York state, including delayed graduation, discontinued clinical experiences, and substituted clinicals with online learning?

Delays in graduation and disruption of clinicals were significantly different for New York. To look more specifically at how graduating nursing students were impacted by the abrupt changes in schools and businesses nationally and specifically in New York state, the analysis from the 2020 survey of the questions about the respondents' educational experiences yielded significant findings. These included delayed graduation, discontinued clinical experiences, and substituted clinicals with online learning that resulted from school closures that varied across the country at that time. Students from the New York sample felt the greater impact of discontinued clinical experiences than the national sample ($x2 = 19.4$, $p < .01$), the subsequent rapid increase in the amount of clinicals experiences online ($x2 = 11.7$, $p < .05$) and delayed graduation ($x2 = 216.3$, $p < .001$) (Table 2).

Research Question for Objective 4: Did the discontinuation of clinicals affect all new graduates' confidence in their ability to practice when looking for a job? How were students impacted by clinical experiences being substituted with online learning nationally and in New York specifically prior to graduation? Did the online clinicals affect the new graduates' confidence nationally and in New York?

With the impact of the early days of the pandemic being felt nationally, there were different approaches in how schools adjusted to accommodating the students' clinical requirements. According to the survey, new graduates reported cancelled or pivoting to online clinical experiences in New York and nationally at this time. However, New York students were forced to adapt quickly to different online practicum experiences, often at the end of their senior year. To examine how the abrupt changes affected graduating students' self-report of confidence in their search for employment, the comparison yielded a significant mean score difference for the national sample ($x = 62.7$) versus the New York sample ($x = 58.3$) ($t = 2.22$, $p < .05$). To compare even further the self-reported confidence related to their discontinued clinicals (>50%), there was a significant mean score difference for the national sample discontinued clinicals (>50%) versus unchanged clinicals (<50%) (62.2 versus 68.9, $p < .01$) and the New York sample discontinued clinicals versus unchanged clinicals (57.4 versus 70.3, $p < .05$) (Table 3).

Table 3

Mean Score Comparisons – Reported Confidence to Practice by Clinicals Discontinued (National vs New York)

	Reported Confidence to Practice			
	National		**New York**	
	n (%)	***Mean (SD)***	***n (%)***	***Mean (SD)***
> 50% Clinicals Discontinued	*n = 1825 (91%)*	62.19 (23.1)	*n=165 (88%)*	57.48 (24.4)
<50% Clinicals Discontinued	*n = 190 (9%)*	68.86 (22.2)	*n=22 (12%)*	70.27 (16.0)
	Significance			
	t-test (df) *p value*	-3.80 (2,013) .000	*t-test* (df) *p value*	-3.27 (185) .018

The final analysis of how the abrupt change in clinical learning to online experiences affected the students' self-report of confidence in their search for employment, the frequency analysis was done on the national and New York samples (Table 4). It appeared that the rate of change was different in the amount of clinical learning that occurred. For example, the New York sample of "all online" was higher (17%) than the national sample (12%) and the reverse was true for "very few online" for New York (11%) compared to the national sample of "very few online" (7%). To examine the amount of online clinicals differences in the students' mean score of confidence, there was a significant difference in the national sample ($F = 5.98$, $p < .001$) but not for the New York state sample ($F = .994$, $p = NS$), although the graphic representation of these clearly show that the national and New York samples differed across the confidence related to the amount of clinicals online (Figure 6). This can only be interpreted by speculation about the distinction in the rate of moving to online clinicals for New York at a period of time when education was profoundly disrupted. Moving to online education was rapidly deployed in New York with much uncertainty among all the stakeholders and the rest of the country evolved more slowly over the same period of time.

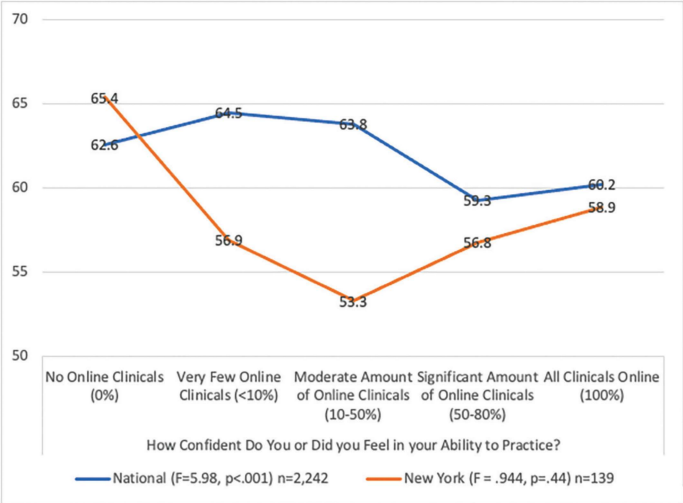
Table 4

National and New York Frequency – Estimate Amount of Clinical Education Online

Online Clinicals	National n (%)	New York n (%)
No Online Clinicals (0%)	400 (13.5%)	28 (13.8%)
Very Few Online Clinicals (<10%)	312 (10.5%)	15 (7.4%)
Moderate Online Clinicals (10-50%)	469 (15.9%)	29 (14.3%)
Significant Online Clinicals (50-80%)	480 (16.2%)	32 (15.8%)
All Online Clinicals (100%)	361 (12.2%)	36 (17.7%)

Figure 6

Confidence to Practice by Clinicals Online (National) (n = 2,242) and (New York) (n = 139): "How confident do you or did you feel in your ability to practice?" (0 to 100)



"Please estimate how much of your clinical education was online in the Spring 2020 semester as a result of COVID-19. Choose the one best answer that fits your experience."

Discussion

The results of the survey yielded significant differences in the comparisons of new graduate employment trends in the national sample compared to that of New York state. The reported findings of lower job success among New York graduates compared to their national counterparts can be interpreted upon closer examination of the hiring trends and the timeline of campus closures, when New York faced the mounting crisis.

Employment is directly associated with the conditions of the economy and the COVID-19 pandemic impact on New York yielded over $62 billion in lost revenue for New York hospitals, primarily due to patients' being fearful of going to the hospitals to seek healthcare, a temporary ban on elective procedures, closing of hospital departments, and the cost of personal protective equipment (Signs of Progress, n.d.). The temporary executive ban forced hospitals to realign staffing to meet the needs of new surges in COVID-related patient admissions. With the lifting of pauses on elective procedures, hospitals in New York still saw a reluctance by patients to return and faced continued additional expenditures for equipment and sustained financial challenges. Healthcare organization administrators began to contemplate layoffs. Statewide, the overall grim outlook of condensed and restructured departments began to have an impact on the hiring preferences of recruiters and managers.

From an Employer Standpoint

Nationally, during the COVID pandemic, U.S. hospitals began recruiting nurses and doctors out of retirement. Students and new graduates who still needed to earn their licenses were expedited into the workforce. While some states were willing to employ new students for up to one or two months, they were still restricted to doing more complex nursing tasks.

From an employer hiring perspective, prior exposure to a clinical learning environment is essential as health organizations seek candidates who can adapt effectively to delivering quality and safe patient care. Employers need the guarantee that new hires can operate independently after orientation, and prior clinical experience within a health-based environment is requisite to learning how to be more autonomous on the job, while still being supervised by a preceptor to ensure that all the proper steps are taken for safe and quality care. The transition from being a nursing student to a new graduate registered nurse is a stressful and challenging process. Different post graduate residency and orientation programs have been developed to ease the stress of their first year of employment (Kaihlanen et al., 2018). Early attrition from the profession is costly in terms of healthcare expenditures, patient safety, quality of care, and lost human resources.

The results of this study emphasized an abnormal year of hiring newly minted nurses that was especially challenging in New York as compared to the rest of the country. New York faced a greater degree of economic impact and a new graduate workforce of limited or no clinical student experiences. Orientation and residency programs were shut down as hospitals shifted resources to caring for COVID patients. The data confirm the restructuring of hospital departments, and nurse recruiters began to show a preference for experienced nurses during this time. Hiring freezes were put in place and new graduate orientation programs were suspended resulting in a shift to redeployment of experienced nurses and travel nurses to fill the needed gaps in staffing. These redeployed experienced staff received on-the-unit training to accommodate the immediate needs of the organization without regard to planning for future needs.

From a New Graduate Standpoint

This study confirmed that confidence for all new graduates in 2020 was affected in their post-graduation job seeking. Understanding why the New York sample was significantly lower can be inferred through associations relating to amount and type of exposure of clinical experiences and the hiring preferences of nursing recruiters during this period.

While innovative strategies were implemented to optimize simulation learning, graduating seniors faced uncertainty about graduation, looming NCLEX preparation, and a different job market than their predecessors. Their learning had been impacted by the abrupt changes in schools, online learning rather than real clinical experiences, and a career that now carried with it personal danger caring for complex patients with COVID. This study clearly pointed out the unprecedented impact that New York state schools of nursing, students and employers experienced throughout the year.

During the first 6 months of transition, the newly hired nurse's focus is egocentric and concerned with assimilation into the workplace and learning the roles they had anticipated. In general, orientation programs should be small and consistent with preceptors leading through the transition (Schmitt & Schiffman, 2019). Given the well documented trail of normal

transition that new nurses struggle with as they reach the ability to give independent patient care, it seems reasonable to assume that nursing recruiters were reluctant to hire new graduates into practice during the height of the COVID-19 pandemic. Health systems were heavily impacted and therefore resources that would have been focused on supporting new graduates were now being redirected to other areas. According to the 2020 NSNA survey, hospitals closing and realigning to meet the needs of the surge in hospitalizations showed a 16% increase closing of units within the hospital and a 39% increase in hiring freezes of new graduates (Feeg et al, 2021).

What was even more difficult for the class of 2020 in New York and nationally was the realization that without robust orientation in that transition period, new nurses had already lost months of experiential learning as they switched to online clinical learning or discontinued practicum experiences in their nursing education programs. This study clearly identifies the impact of that alternate learning on the new job seekers' confidence in their own ability to practice. This was also differentially experienced by the respondents from New York, the epicenter of COVID-19, as compared to the national graduates of 2020.

Limitations

As with all secondary analysis, the results of this study are limited by the general issues of using questions designed for a different purpose and a sample of participants who are not directly recruited. Cleaning and coding data often results in losing some information based on missing responses. Even with the advantage of analyzing a large data source from a national sample, the findings are limited to new graduates who were members of NSNA and do not reflect all graduating nursing students.

Conclusion

Although the entire country was impacted by the COVID-19 pandemic, nursing graduates from New York were particularly hard hit by the rapid escalation of the spread of the virus and the surge of critically sick patients at hospitals throughout the state. New York City hospitals faced dire situations of needing beds, experienced personnel, and equipment in the months of March to June that resulted in changing priorities away from students, at the time when senior students were in their final stages of preparing to graduate. Today, as the pandemic has waned, employers and new graduates are recovering from having experienced one of the nation's most hard-hit states in the early months of the national crisis. Although the future looks better, it may still take time to return to "normal" for the new graduates of 2020 and for employers seeking to hire the new 2021 nursing graduates.

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