

An Examination of Nursing Work Outcomes and the Experiences of Nurses of Color During

COVID-19

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**Abstract**

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COVID-19

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**Background.** The COVID-19 pandemic has underscored nursing workforce issues such as burnout and turnover, with disproportionate impacts for nurses who identify as Black, Indigenous, or other People of Color (BIPOC). Available workforce research is limited by a lack of theoretical structure for examining registered nurse (RN) job outcomes as well as inadequate representation of BIPOC RNs. The purpose of this multimethod study was to examine the impact of COVID-19 on job experiences for BIPOC RNs, to explore factors that affect their decisions to stay in or leave jobs, and to develop a useful framework to advance nursing workforce research.

**Methods. 1:** The first part of the study was a secondary analysis of data on RNs (n=3782) from the Current Population Survey (CPS). Logistic regression analysis was used to examine the influence of individual demographics, family situation, and job characteristics on negative job impacts (inability to work or look for work) due to COVID-19. **2:** The second part of the study was a phenomenological exploration of BIPOC RNs' (n=13) experiences throughout the

pandemic, with a focus on meaning in nursing and job decisions. **3:** Findings from these studies illustrated the utility of a model that facilitates the examination of holistic outcomes for RNs.

**Results. 1:** The secondary analysis of CPS data suggested that while race and gender alone were not associated with higher odds of a negative job impact due to COVID-19, other individual and family factors influenced the odds of having a negative impact. **2:** Findings from the phenomenological study revealed an overall theme of *answering the call* along with four subthemes: being consumed by COVID, COVID shining a light, dimensions of trust, and questioning ‘is it worth it?’. **3:** The proposed model, *The Dynamic Model of RN Job Outcomes*, provides structure to examine individual to systems level factors that impact RNs and is centered around the RN amidst the dynamic contexts of work and life.

**Discussion.** Results from this dissertation provide important data on the experiences of BIPOC RNs during the pandemic. Findings suggest that racism is impacting this critical workforce in subtle but important ways, echoing general employment data showing the intersection of race and sex on job loss. For most BIPOC RNs in the qualitative study, pandemic experiences were not centered on their racial identity, but they report microaggressions and incidents of overt racism that are part of their everyday experience at work and may lead to disproportionate intent to leave and turnover rates as well as affecting their wellbeing.

**Conclusion.** Together, these studies show the need for advancing the science of nursing workforce research, and for study aimed at improving the understanding of systems and contextual factors impacting RNs, and particularly BIPOC RNs, in the workplace. A critical component of future study is a focus on identifying and eliminating racist policies and systems that lead to negative outcomes in the RN workforce.

## **Dedication**

This dissertation is dedicated to nurses everywhere who have devoted their hands and hearts to care for others at great personal costs to themselves, and especially to nurses of color, who remain committed to their profession and communities despite all the obstacles society has placed in their way.

I also dedicate this work to my kids. I wish you the imagination and perseverance to make your wildest dreams a reality.

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## Chapter 1. Introduction

My career in nursing has been defined by an ongoing interest and investment in the experiences, development, and wellbeing of fellow registered nurses (RNs). As an advanced practice nurse educator, my work in clinical and academic settings highlighted for me the demands placed on RNs at multiple levels—organizational policies, unit practice and milieu, patients and families—as well as the resilience, innovation, and dedication that allowed RNs to continue working despite high levels of stress and frustration with the system. For RNs, collaboration with multidisciplinary colleagues is essential to ensure optimal patient outcomes, yet my experiences showed me that few clinicians had a robust understanding of the roles and experiences of other disciplines. Subsequently, as I entered doctoral training, I focused on interprofessional education as an avenue to improved healthcare work environments with a foundation of mutual support and respect that allowed for more meaningful interaction as well as collaboration to improve patient outcomes.

As I progressed through my doctoral coursework and began to examine the literature about nursing workplace experiences, I adjusted my focus back toward RNs. I explored the notion of nurse empowerment philosophically and conceptually, leading to a published concept analysis positing that the current use of empowerment in the literature is focused on an organizational perspective, where RNs gaining power do so at the behest of and to the benefit of the workplace.<sup>1</sup> Taking a management theory class from the business school provided insight into the discipline of organizational behavior and a wealth of literature addressing workplace issues and turnover. I set out to do a systematic review of the literature on RN turnover in the United States in the past decade, aiming to find out what we know about turnover or retention

and what strategies have been identified that mitigate those issues as well as looking at how current concepts from organizational behavior were reflected in studies of RNs.

While I embarked on the review, I did further research and reading into other types of outcomes for RNs, including a project examining available literature that addressed measures of health and wellbeing for RNs. I concluded that these issues were not well represented in the literature, particularly as they impacted RNs' abilities and desires to remain in the workforce, and added the concept of wellness to my review. During this time, I also engaged in reading, training, and dialogue about the impact of racism throughout communities and academia and began to reflect more deeply on my own views and implicit biases. When I went to the literature to see how race and racism were represented in the data on the nursing workforce, I found few studies focused on the experiences of RNs who identify as Black, Indigenous, or other People of Color, and so I also examined equity and diversity as part of my systematic review.

The results of the systematic review show that the science around nursing workforce outcomes was somewhat stagnant in both methods and concepts.<sup>2</sup> Much of what we know about RN turnover comes from localized descriptive studies that provide detailed examination of different individual and workplace features that impact RNs. The literature does not reflect current concepts in turnover from other disciplines, and overall, it lacks consistent use of theory that allows subsequent research to build on rather than replicate findings. The results of the review motivated me to think about how to improve nursing workforce science from a methodological perspective and also by incorporating concepts that would allow for a more holistic interpretation of outcomes.

The findings from the review informed my dissertation proposal and research goals. My overarching goal was to practice multiple research modalities, exploring how existing data might

be used to provide information about the RN workforce and gaining a clearer picture of the influence of context on RNs. As part of that goal, I wanted to focus on BIPOC RNs as a population who are underrepresented in existing data but who experience disparate outcomes within the nursing workforce. Finally, after identifying a shortage of theoretically based workforce data, I wanted to develop a model that encompassed the various concepts and methods that have been used to study RNs; the model also needed to follow recommendations from organizational behavior theorists to include contextual factors as part of understanding job outcomes. I wanted the model to include a more holistic view of job outcomes that would include the examination of wellbeing along with turnover and retention.

To accomplish these goals, the purpose of my multimethod dissertation was to examine the impact of COVID-19 on job experiences for BIPOC RNs and to explore factors that affect BIPOC RNs' decisions to stay in or leave jobs. The first part of the study (Chapter 2) was a secondary analysis of data on RNs (n=3782) from the Current Population Survey (CPS), a monthly nationwide survey conducted by the US Bureau for Labor Statistics that added questions about COVID-19 impacts to its questionnaire beginning in May 2020. Logistic regression analysis was used to examine the influence of individual demographics, family situation, and work settings on negative job impacts (inability to work or inability to look for work) due to COVID-19. The second part of the study (Chapter 3) was a phenomenological examination of BIPOC RNs' (n=13) experiences since the onset of COVID-19, with a focus on their perception of meaning in nursing and how they made any decisions to stay in or leave a job. Finally, findings from these studies illustrate the utility of a model developed from my systematic review (Chapter 4); the model facilitates the comprehensive examination of holistic outcomes for RNs and attends to issues of equity in the workforce, with the goal of providing

targeted areas for testing and intervention.

The papers presented in this dissertation show that I met my goals of developing a set of research skills useful to promote the science of RN job outcomes. The work presented here provides solid data that boosts our understanding of the RN workforce, illustrates the use of methods focused on equity, and provokes important questions to advance nursing workforce research.

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## **Chapter 2. The Impact of COVID-19 on Jobs for Nurses of Color**

The onset of the SARS-COV-2 (COVID-19) pandemic caused chaos across the United States (US) as businesses, schools and communities shut down and workers were instructed to stay home. For some registered nurses (RNs), these closures meant they were sent home to work remotely, some were furloughed or laid off, and others continued working in situations with increased patient loads and high exposure to COVID-19. Media portrayals of healthcare workers during this time either praised their heroism, highlighted their dangerous work conditions, or emphasized their plea for the public to stay home and protect themselves.<sup>1,2</sup> These depictions miss an important part of the experience for some RNs—that of losing a job, being unable to work due to personal or family constraints, or being unable to look for work due to limited hiring processes. The purpose of this study was to examine the initial impact of COVID-19 on job outcomes for RNs, with a particular focus on RNs who identify as Black, Indigenous, or other People of Color (BIPOC).

### **Background and Significance**

BIPOC workers make up approximately 23% of the overall US workforce<sup>3</sup> and 20% of the nursing workforce.<sup>4</sup> Prior to the pandemic, several studies showed disparate job outcomes for BIPOC RNs, including higher rates of job dissatisfaction<sup>5</sup> and greater intent to leave jobs.<sup>6</sup> Data suggested that unexplained pay disparities, lack of advancement opportunities, and insufficient representation of diverse RNs in work groups contribute to job dissatisfaction in BIPOC RNs,<sup>5,7</sup> with patients, coworkers, colleagues, and workplaces contributing to experiences of racism at work.<sup>8,9</sup> In general, the pandemic affected BIPOC workers through higher layoff rates and slower return to work.<sup>10</sup> Among RNs, changes to employment during COVID were different from those

in the general population, since not all healthcare shut down. The initial spike in RN unemployment immediately following the onset of COVID-19 was followed by an overall decline in unemployment levels, but high rates persisted for BIPOC RNs. During the first quarter of 2021 BIPOC RNs had unemployment rates over 5% compared to 1% for white RNs.<sup>11</sup> It is important to note that because BIPOC RNs are less likely to work in ambulatory settings,<sup>12</sup> they were less likely to experience initial work impacts such as furlough or job loss, which makes ongoing employment disparities more concerning.

Sex also influenced job outcomes during COVID-19. Looking at the general population of BIPOC and white workers together, women stopped working at higher rates than men despite comprising less than half of the overall workforce.<sup>13</sup> General workforce data showed that compared to the overall unemployment rate of 6.4%,<sup>14</sup> BIPOC women still had unemployment rates greater than 8% in early 2021, at which point nearly 40% of unemployed BIPOC women had been out of work for more than 6 months.<sup>15</sup> These disparities have long reaching impact for BIPOC women as gaps in work can affect employment for years to come due to loss of work skills and disrupted network connections.<sup>16</sup>

These employment disparities have been compounded by the higher levels of COVID-19 morbidity and mortality among BIPOC RNs.<sup>17-19</sup> Employment studies prior to COVID-19 suggested that BIPOC RNs were more likely to work in inpatient care and long-term-care facilities (which remained open throughout the pandemic), while white RNs held more jobs in private and ambulatory settings (where operations were limited).<sup>12,20</sup> In the early phases of the pandemic, BIPOC workers were more likely to work in settings with higher exposure to COVID,<sup>17</sup> receive assignments that exposed them to COVID,<sup>21</sup> have inadequate access to personal protective equipment,<sup>17,21</sup> and have lower testing rates after exposure.<sup>22</sup> Higher

exposure and infection led to periods out of work due to the RN's own quarantine and recovery as well as caregiving of affected family members,<sup>19</sup> all of which were likely to impact an RN's ability to return to their previous work hours and/or setting.<sup>21</sup> All types of BIPOC healthcare workers are more likely to be working in low-income jobs and may be financially unable to leave a job despite inadequate protections and high infection risks.<sup>13,17,23</sup>

While not a direct focus of this study, ongoing effects of the pandemic on the nursing workforce include high rates of intent to leave jobs due to burnout, heavy workload, and inadequate staffing.<sup>24,25</sup> One repeated national survey of RNs across all racial and ethnic identities showed rates of intent to leave a job increasing from 18% in 2020 to 23% in 2022.<sup>25,26</sup> In the most recent version of the survey, 27% of respondents who self-identified as a race or ethnicity other than 'white' indicated a definite intent to leave and an additional 29% indicated that they might leave their position within 6 months.<sup>25</sup> These findings were consistent with data prior to COVID-19 which showed disparate rates of intent to leave among BIPOC RNs,<sup>6</sup> and contribute to the overall picture of inequitable job outcomes.

The early and persistent effects of the pandemic on the BIPOC RN workforce, specifically the disparities in unemployment, exposure, and infection, highlight larger issues of racism in healthcare employment. Identifying and understanding systemic and structural racism as it impacts BIPOC RNs in the workforce are key to maintaining a just and equitable nursing work environment and providing communities with a nursing workforce that reflects their diversity. Investigating the job outcomes of BIPOC RNs throughout the pandemic is critical to identifying how structural racism continues to affect this critical workforce. This study aims to examine the impact of COVID-19 on BIPOC RNs by describing relationships between job outcomes--defined as difficulty finding a job or inability to work due to COVID-19--and other

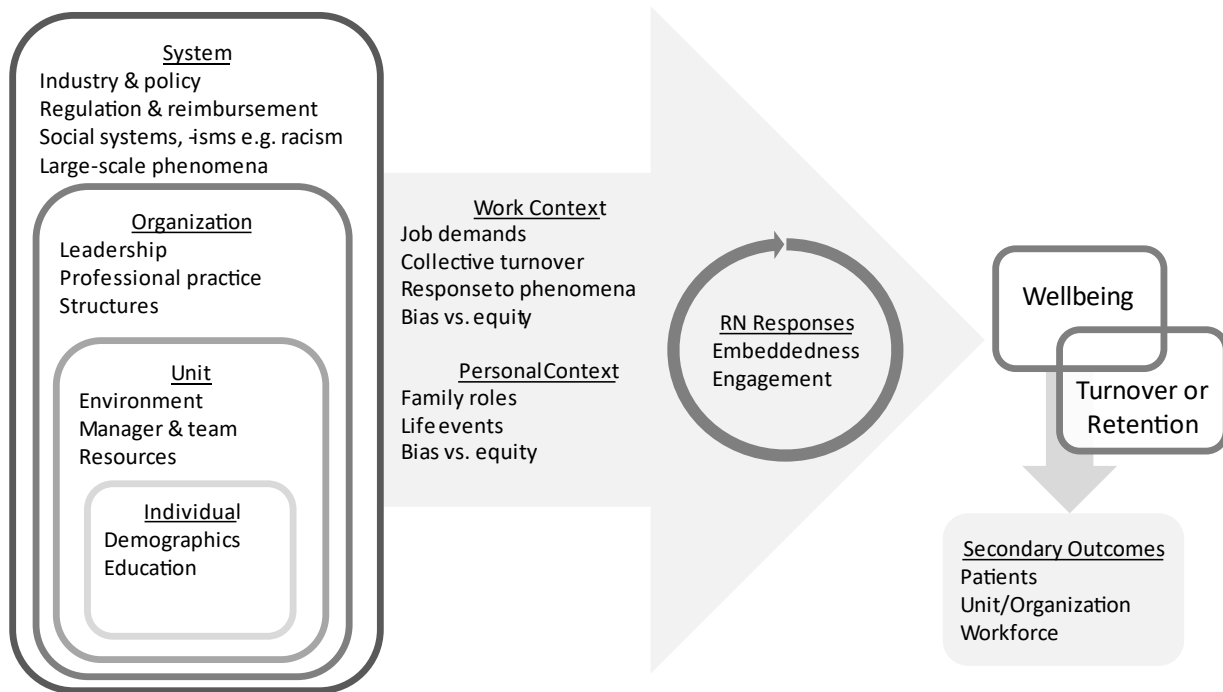
factors such as race, sex, family situation, and work setting.

**Framework**

The framework used in the study (Figure 1; see Chapter 4) shows the multiple levels of factors influencing an RN’s experiences in the workplace and their job outcomes. In the model, antecedents are grouped at individual, unit, organizational, and systems levels, leading to contexts that represent the RN’s experiences at work and home. In the midst of those contexts, the RN’s responses include concepts such as engagement, or feeling connected with work, and embeddedness, or a sense of linkage with a job, organization, or community; these concepts are encircled by an arrow representing time. The RN’s responses then lead to the dual outcomes of wellbeing and turnover or retention, providing a holistic view of RN job experiences.

**Figure 1.**

*The Dynamic Model of RN Job Outcomes*



The model represents the dynamic environments in which RNs live and work as well as emphasizing how RN responses and outcomes may change over time. The purposeful inclusion of time and context in the model follows recommendations from organizational behavior theorists to better understand the circumstances in which employees make decisions about jobs or experience other job outcomes.<sup>27,28</sup> The model is used for this study because it allows for the examination of systems factors such as policies or phenomena and personal factors such as family situation that influence job outcomes. For example, the shutdown of different healthcare settings during the pandemic occurred due to state and national policy changes, and those shutdowns then led to job outcomes such as voluntary turnover when RNs chose to leave jobs and involuntary turnover in the form of job loss due to business closure.

### **Methods**

This study was a retrospective secondary analysis of data from the Current Population Survey (CPS) examining the relationship between RN characteristics and job outcomes related to COVID-19. The CPS is a national labor force survey administered monthly by the US Census Bureau and the US Bureau of Labor Statistics. Each month, approximately 60,000 households are surveyed to gather the details of each occupants' participation in the labor force, including changing employers or looking for work. The CPS draws a probability sample using the Census Bureau's Master Address File to systematically stratify communities and identify households for sampling. Each household stays in the current sample for a 16-month period on a 4-8-4 sample scheme where they are in the survey for four months, out for eight, then back in for four before exiting the sample. The sample is framed and weighted with the goal of accurately representing the US population to provide accurate state and national estimates of key labor force statistics.<sup>29</sup> Missing data in the sample is minimal and addressed with several imputation methods. Data

from the survey are available online via the Integrated Public Use Microdata Series (IPUMS).<sup>30</sup>

The technical documentation notes that some identifying variables in the dataset are perturbed, or values shifted slightly within categories, to protect the identity of individuals.<sup>29</sup>

The CPS survey consists of more than 200 potential questions about individual demographics, household composition, and key labor force variables such as individual employment status, changes in hours or employer, occupation, and work setting. Surveys are conducted by a trained surveyor either in person or via telephone and responses are coded according to a set list of options for each variable.<sup>29,30</sup> In May of 2020, items about job experiences related to COVID-19 were added to the survey, including questions about difficulty finding a job and inability to work during the pandemic.

### **Study Methods**

This study was granted exempt status by the University of Washington Human Subjects Division. Selected variables from the CPS dataset were downloaded and saved onto a secured drive, then imported into R statistical software and filtered for the occupational code for ‘Registered Nurse’.<sup>31</sup> The study period began in May 2020 when COVID-19 variables were added to the survey and ended in December 2020, which encompasses the timeframe of heaviest initial impact on RN employment related to the pandemic.<sup>11</sup> Table 1 shows the study variables and their treatment for analysis. The dataset included multiple observations of an individual, depending on where they had entered the cycle of responses relative to the study period. To create a dataset with only one observation per RN, data was first transposed into a wide dataframe that included the static demographics for each RN and individual entries for each month of the study period for each of the outcome variables (for example, ‘May ’20/unable to work’ or ‘August ’20/decrease in hours worked’). A new variable was then constructed for each

**Table 1***Study Variables Used in the Regression Model*

<i>Original variable and definition</i>	<i>Treatment</i>
CovidUnaw: Unable to work due to COVID-19 pandemic	Collapsed together to form dichotomous ‘yes/no’ variable indicating whether either outcome was reported at any point in the study period
CovidLook: Prevented from looking for work due to the COVID-19 pandemic	
Age (continuous)	None
Sex (only available as M/F)	None
Race (categorical): Self-identified race	Collapsed into factors by single race and listed alphabetically: Asian American/ Pacific Islander (AAPI), Black, Native American/Alaska Native or Mixed (Native/Mixed), White. Those identifying as ‘mixed’ were collapsed with ‘Native’ due to small number in dataset. No participants were listed as ‘other’ or fell outside of these categories.
Education (categorical): Level of highest educational attainment (not specific to nursing)	Collapsed into factors: diploma/Associate’s, Bachelor’s, Master’s/professional degree, and doctoral degree
Marital status (categorical)	Collapsed into dichotomous ‘spouse present/no spouse present’
Youngest child (continuous): Age of youngest child in the home, including adults	Collapsed into dichotomous ‘yes/no’ indicating presence of at least 1 child less than 18 years of age in the home.
Industry (categorical): Specific work setting such as hospital, physician’s office, long term care	Collapsed into inpatient/outpatient
Work status (categorical): Indicates full time or part time work in the last week and if this was a change in routine	Collapsed into a dichotomous ‘change/no change’ indicating a decrease in work hours in the previous week
Why absent or part time last week (categorical): Reasons for a recent change in hours with a broad array of potential responses	Used categories from dataset to compare with dependent variables

outcome of interest, so that a ‘yes’ to that outcome in any month during the study became an overall ‘yes’ to that outcome. The final dataset contained the RN’s unique identifier, demographics, other personal and family characteristics, and a response to each of the outcome variables indicating whether that RN had experienced that outcome at any point in the study period.

## **Analysis**

### ***Variables***

Descriptive statistics were calculated and examined for demographic variables (Table 2). Using a basic model with individual and work characteristics influencing a job outcome, different categorizations of variables were evaluated to ensure a parsimonious yet conceptually complete model. The variable for race was tested with more and less detailed breakdowns of race and ethnicity including dichotomous representations for ‘Black’ and ‘Person of Color’, and finally collapsed into the 4 main categories in the model. The variable for age was collapsed into categories by decade or life stage, but testing showed that leaving ‘age’ as a continuous variable provided the most significant impact in the model. However, the age range in the dataset was 15-85 years, perhaps indicating that data perturbation had occurred. Survey documentation also showed that ages 80-84 were collapsed to 80, and all ages 85 and above were collapsed to 85.<sup>29</sup> Based on this information, the decision was made to drop observations with an age less than 20 years (n=8), and greater than 75 years (n=31). Twenty years represents an age at which an individual could reasonably attain a nursing license, and individuals can be considered outside of the expected working age at 76 or more years. Examination of the model before and after dropping these ages showed no significant differences but assured that the use of ‘age’ as a continuous variable was acceptable. The variable indicating an RN’s work setting was tested as

**Table 2***Selected Demographics and Characteristics of Registered Nurses in the Study*

	Full Sample		AAPI		Black		Native/Mixed		White		$\chi^2$ (df)
	n	%	n	%	n	%	n	%	n	%	
Study	3782	100	301	7.9	410	10.7	79	2.1	2992	78.3	
United States RNs <sup>a</sup> (in 1,000s)	4,156	100	316.9	7.6	279.8	6.7	213.2 <sup>b</sup>	5.1	3356.3	80.6	
<b>Age group</b>											
<31	714	18.9	44	14.6	60	14.6	14	17.7	596	19.9	29.4* (12)
31-40	1041	27.5	95	31.6	127	31.0	25	31.6	794	26.5	
41-50	870	23.0	88	29.2	102	24.9	20	25.3	660	22.1	
51-64	966	25.5	66	21.9	98	23.9	18	22.8	784	26.2	
65+	191	5.1	8	2.7	23	5.6	2	2.5	158	5.3	
<b>Sex</b>											
F	3311	87.5	234	77.7	359	87.6	63	79.7	2655	88.7	34.8** (3)
M	471	12.5	67	22.3	51	12.4	16	20.3	337	11.3	
<b>Highest educational attainment</b>											
Diploma/Associate's	1181	31.2	47	15.6	138	33.7	30	38.0	966	32.3	61.5** (9)
Bachelor's	2128	56.3	222	73.8	198	48.3	38	48.1	1670	55.8	
Master's/Professional	438	11.6	29	9.6	67	16.3	10	12.7	332	11.1	
Doctoral	35	0.9	3	1.0	7	1.7	1	1.3	24	0.8	
<b>Family situation</b>											
Spouse Present	2289	60.5	208	69.1	174	42.4	36	45.6	1871	62.5	77.9** (3)
Kids <18 yrs in home	1476	39.0	140	46.5	170	41.5	21	26.6	1145	38.3	14.0* (3)
<b>Work setting</b>											
Inpt: Hospital	2281	60.3	206	68.4	218	53.2	39	49.4	1818	60.8	49.6** (9)
Inpt: Residential	311	8.2	17	5.6	58	14.1	3	3.8	233	7.8	
Outpt: Ambulatory	1032	27.3	64	21.3	112	27.3	28	35.4	858	28.7	
Outpt: Not health industry	158	4.2	14	4.7	22	5.4	9	11.4	113	3.8	
<b>Work changes</b>											
Unable to work/look due to COVID	420	11.1	26	8.6	47	11.5	7	8.9	340	11.4	NS
Fewer work hours	843	22.3	70	23.3	81	19.8	16	20.3	680	22.6	NS
Unable to work/look OR fewer hours	1115	29.5	89	29.6	112	27.3	20	25.3	894	29.9	NS

Note. AAPI = Asian American/Pacific Islander, Inpt = inpatient, Outpt = outpatient, NS=Not significant, RN = Registered Nurse. <sup>a</sup> Data from estimates in *The 2020 Nursing Workforce Study* by RA Smiley, C Ruttinger, CM Oliveira, et. al, Journal of Nursing Regulation. 2021;12(1):S1-S96. <sup>b</sup>Includes unspecified 'other' category. \*= $p < .01$ , \*\*= $p < .001$

multiple different groupings of factors such as ‘ambulatory’, ‘long term care’, and ‘hospital’, but eventually collapsed into simply ‘inpatient’ and ‘outpatient’ with similar effects in the model.

### ***Models***

Once the final specification of variables occurred, a series of models were developed to examine the relationships between individual RN characteristics, family situations, work setting, and job outcomes related to COVID-19. Logistic regression analysis was used to assess the odds of COVID-19 impacts conditioned on the variables. Fit testing using likelihood ratio and Aikake information criterion (AIC) was performed to determine which specification best fit the data both statistically and substantively. Significance was set at  $p < .05$ . Table 3 shows a progression of models from simple (model A) to complex with multiple interactions (model D) as well as the final model. Variables such as ‘education’ and interactions were dropped from the model when they showed no significance alone or alongside other interactions, when they elevated the AIC, and when they were not central to the study question. The only exception to this process was the variable for ‘race’, which remained in the model due to its centrality to the research question. While the intersection of race and sex are significant in other literature, they did not provide any additional explanation or significance in this model and so this interaction was also dropped. The final model included age, sex, presence/absence of children in the home, presence/absence of a spouse, and work setting. The model was validated using standard procedures to examine outliers, variance, and residuals.

To compare the utility of the COVID-19 specific outcome versus other available job outcomes in the data, an identical model was developed using a dichotomous outcome indicating a decrease in work hours. Results of this model (Table 4) were quite different than the previous model, with fewer significant impacts. Examination of explanatory variables for changes in work

**Table 3***Comparison of Models of Negative Job Impacts Related to COVID-19 (N=3782)*

	model A	model B	model C	model D	Final
Intercept	-2.229	-3.225	-3.296	-4.211	-3.276
<b>Age</b>		0.015 ***	0.015 ***	0.036 **	0.015 ***
<b>Sex (F)</b>	0.196	0.158	0.185	1.227	0.160
<b>Race</b>					
AAPI	-0.284	-0.252	-0.496	-0.472	-0.260
Black	0.012	-0.076	0.146	-0.230	-.068
Native/Mixed	-0.260	-0.331	0.238	2.253 *	-.326
<b>Education</b>					
Bachelor's		-0.054		-0.057	
Master's/Professional		-0.001		-0.005	
Doctorate		0.370		0.380	
<b>Family</b>					
Kids <18		0.359 **	0.362 **	0.425 **	0.360 **
No Spouse		0.304 **	0.305 **	0.304 *	0.304 **
<b>Work (Outpt)</b>		0.387 ***	0.394 ***	0.524 ***	0.394 ***
<b>Race*Sex</b>					
AAPI F			0.289	0.181	
Black F			-0.243	-0.272	
Native/Mixed F			-0.723	-1.426	
<b>Age*Sex (F)</b>				-0.023	
<b>Race*Kids</b>					
AAPI + Kids <18				0.075	
Black + Kids <18				0.459	
Native/Mixed + Kids <18				-1.914	
<b>Race*Marital status</b>					
AAPI, No spouse				0.146	
Black, No spouse				0.271	
Native/Mixed, No spouse				-2.373 *	
<b>Inpatient*Kids</b> (Kids <18 yrs in home)				-0.284	
<b>AIC</b>	2644	2622	2622	2630	2617

Note. AAPI=Asian American/Pacific Islander, Outpt= Outpatient, RN=Registered Nurse. Category referents are white, male, spouse present, no kids <18 years, and inpatient work setting. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

hours showed an array of rationale from personal leave to family obligations, parental leave, or even limits on hours for Social Security purposes. When these variables were compared with

**Table 4***Factors Influencing a Non-COVID-19 Related Decrease in Work Hours (N=3782)*

	$\beta$		SE
Intercept	-1.793		.207
<b>Age</b>	.007	*	.003
<b>Sex (F)</b>	.278	*	.127
<b>Race</b>			
AAPI	.061		.144
Black	-.148		.133
Native/Mixed	-.092		.285
<b>Family</b>			
Kids <18	.074		.088
No Spouse	-.119		.088
<b>Work (Outpt)</b>	.090		.084

Note. AAPI=Asian American/Pacific Islander, Outpt= Outpatient, RN=Registered Nurse, SE=standard error.

Category referents are white, male, spouse present, no kids <18 years, and inpatient work setting. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

COVID-19 impacts, there was little overlap (4%) and other than ‘slack work conditions’, no single category coincided with experience of a COVID-19 job impact. The two outcomes were therefore deemed to be conceptually different, and the COVID-19-specific outcome was retained as the sole dependent variable.

## Results

The final dataset contained observations from 3,782 RNs. Sample demographics are presented in Table 2 and include a comparison of racial representation in the sample to estimates of the nursing workforce based on a recent national survey.<sup>4</sup> These comparisons show a slight overrepresentation of White and Black RNs and slight underrepresentation of Native American/Alaska Natives and mixed race RNs (Native/Mixed) in the study sample. RNs in the sample were predominantly white (78.3%) and female (87.5%) with a baccalaureate degree (56.3%). Most reported a spouse present (60.5%) and 39% had at least one child under the age of

18 in the home. Chi squared analysis showed statistically significant differences between races for age group, sex, education, family situation, and work setting. These differences were likely due in part to the large sample size as well as the small percent of the sample in the Native/Mixed group. Several differences to note were the different distributions of age groups for different racial groups, for example the 61% of AAPI RNs ages 31-50 compared to only 49% of White RNs, or the almost 20% of White RNs less than 31 years old compared to AAPI and Black RNs (14.6% each). Other notable differences were the distribution of educational attainment, particularly the higher percentage of BSN prepared RNs in the AAPI group (73.8%), and the high rates of a spouse present in AAPI (69.1%) and White RNs (62.5%) compared to Black (42.4%) and Native/Mixed RNs (45.6%). These differences in this primarily female sample highlight intersecting factors that generally contribute to disparate outcomes for female BIPOC workers.<sup>23</sup>

Most RNs in the sample worked in hospital (60.3%) or ambulatory (27.3%) care settings, while 8.2% worked in long term care or other residential facilities, and 4.2% reported work outside of the health industry such as industrial occupational health settings. In total, just over 81% of the sample of RNs worked full time and approximately 15% worked part time. Only 1.2% of respondents indicated that they had changed employers during the pandemic, while 11.1% reported being unable to work or look for work due to COVID-19 and 22.3% reported a decrease in work hours. A total of 29.5% of the sample had a COVID-19-related job impact and/or a decrease in work hours during the study period.

The analysis showed statistically significant impacts related to age, presence of children in the household, marital status, and work setting (Table 5). Over the baseline of 20 years, each additional year of age increased the odds of an RN experiencing a COVID-19-related job impact

**Table 5**

*Factors Influencing the Odds of Negative Job Impacts Related to COVID-19 (N=3782 RNs)*

	$\beta$	SE	$e^{\beta}$	Change in odds (%) (( $e^{\beta}$ -1)*100)
Intercept	-3.276	.282		
<b>Age</b>	0.015	0.004	1.015	1.51
<b>Sex (F)</b>	0.160	0.169	1.174	17.35
<b>Race</b>				
AAPI	-0.260	0.215	0.771	-22.89
Black	-0.068	0.168	0.934	-6.57
Native/Mixed	-0.326	0.404	0.722	-27.82
<b>Family</b>				
Kids <18	0.360	0.117	1.433	43.33 **
Spouse	0.304	0.114	1.355	35.53 **
<b>Work (Outpt)</b>	0.394	0.108	1.483	48.29 ***

*Note.* AAPI=Asian American/Pacific Islander, Outpt= Outpatient, RN=Registered Nurse, SE=standard error.

Category referents are white, male, spouse present, no kids <18 years, and inpatient work setting. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

by 1.5% ( $p < .05$ ). RNs with at least one child younger than 18 years old in the home as well as those with no spouse present also had higher odds of a job impact at 43% ( $p < .01$ ) and 36% ( $p < .01$ ) respectively. Those working in an outpatient setting had a 48% increase in the odds of COVID-related job impact ( $p < .001$ ). In this model, race did not show statistically significant influence on COVID-19-related job impacts, nor did its inclusion in the model improve overall model fit ( $\chi^2=2.23$ ,  $df=3$ ,  $p=.53$ ). Also, being female did not significantly change the odds of COVID-19 impacts either alone or in interaction with race. Despite the lack of statistical significance, the analysis gave interesting substantive results for these factors that warrant further exploration. All three groups of BIPOC RNs shared a decrease in the odds of a negative job impact based on race alone. However, when sex and family situation (presence of children, marital status) are added to the equation, the odds of a negative impact increase, particularly in those groups with lower rates of spouse presence and higher rates of children present in the

home. Assuming they are the same age and controlling for other factors, AAPI females had a 9.5% decrease in their odds of experiencing a negative job impact, Black women had a 9.6% increase, Native/Mixed race female RNs had a 15.3% decrease, and White females had a 17.3% increase in the odds of a negative COVID-19 job impact compared to White men.

### **Discussion**

Overall, this analysis showed significant job impacts for RNs related to personal, family, and work characteristics and contexts as viewed in the study framework . While statistically significant findings were limited to age, presence of a child under 18 in the home, absence of a spouse in the home, and working in an outpatient setting, the model in totality provides useful information about the influence of work- and non-work-related factors on employment. Work setting was a key predictor of a negative job outcome. In general, because healthcare work continued throughout the pandemic, RNs were more protected from COVID-19-related layoff or inability to look for work than workers in the general workforce. The influence of inpatient versus outpatient work setting in the model was expected because some inpatient settings either never closed or had only a brief period with decreased patient demand.

This analysis also showed how personal contexts such as age and family situation affect an RN's ability to work. Older RNs were more likely to experience a negative job impact, but the data did not differentiate inability to work due to worksite closure from inability to work because an individual RN deemed the risk of COVID-19 to themselves or a loved one too great to continue working. In total, 19% of the nursing workforce is estimated to be at or above retirement age and 43% are over the age of 55 years,<sup>4</sup> so RNs who were unwilling to risk exposure may have opted to leave work and attributed that decision to COVID-19 in the survey.

The presence of at least one child under the age of 18 and the absence of a spouse

significantly increased the odds of initial job impacts. It was unclear exactly how these factors played out for an individual RN in terms of choosing to leave a job (voluntary turnover) versus job loss necessitated by circumstances (involuntary turnover). For example, this dataset did not provide the detail necessary to differentiate between an RN unable to work because COVID-19 kept a child at home with no one else to provide care and an RN unable to work because their ambulatory work setting shut down during the pandemic. The explanatory variables used for other nonspecific job outcomes were not explicitly linked to the COVID-19 impact questions and therefore could not provide additional detail to this analysis.

The effects of sex were not significant in the results but could potentially play a part in job experiences for this workforce with historically unequal sex distribution (90.5% female).<sup>4</sup> General data on COVID-19 indicated that compared to fathers, mothers tended to be more affected by childcare and schooling responsibilities when schools were remote.<sup>13,23</sup> However, the nursing workforce had more job stability in the early phases of the pandemic, at least in inpatient settings, and therefore female RNs may have stayed at work if other caregivers were available to be home with children. These types of situations most likely influenced an RN's job outcomes. Although the current analysis does not provide explanatory detail, results show a need for support of working parents. The study data reflected the initial period of the pandemic, but RNs have continued to be affected by short staffing and high work demands and some parents have continued to be affected by school closures or childcare difficulties. Strategies to help support their ongoing presence in the workplace might include making shift times more flexible or collaborating with daycare providers or schools to ensure that childcare programs are available during shift hours.

In summary, characteristics associated with initial job impacts for BIPOC RNs during

COVID-19 include age, work setting, and family characteristics. These relationships as well as the non-significant yet substantively important results for race and sex spark larger questions about societal and structural norms for female BIPOC workers and how they play out in the nursing workforce. Efforts to better understand and address these issues should focus on organizational policy and systems-level factors that impact the ability of BIPOC RNs to work in a variety of healthcare settings.

### **Limitations**

Several factors limited the interpretation of these data. The first limitations involved the nature of the data itself. The large national survey does not include the detail necessary to identify the reasons an RN may have left a job during COVID-19. For example, some RNs may have left or decreased hours to reduce their exposure, but those types of reasons were not specified in the questionnaire. Additionally, the total number of survey responses decreased during the initial stages of COVID-19, which likely reduced the ability of these labor data to represent specific racial groups.<sup>32</sup> Finally, the data perturbations used to deidentify data points such as age in the CPS dataset<sup>29</sup> could have compromised the accuracy of the analysis in this sample. However, the strong and consistent sampling methods used in the survey as well as the large sample size strengthen the likelihood that the RNs in the dataset represented the national nursing workforce.

This study was not intended to identify causative factors, and was instead focused on the relationships between different variables and the outcome.<sup>33</sup> These relationships nonetheless provided information to continue examining the complex structural nature of issues related to sex and race in the workforce, so findings are useful in directing future inquiry related to RN job outcomes.

## **Implications for Future Study**

Findings from this data point toward needed research in several key areas. To better understand BIPOC RN job outcomes and decisions (and RN job decisions in general) throughout the COVID-19 era, the initial impacts represented in this study could be compared with RN job data from later months and years of the pandemic. In particular, the relationship between initial outcomes and ongoing experiences or decisions may shed light on how work history impacts a BIPOC RN's career trajectory. Models used in workforce research need to be further enhanced by concepts that allow for the examination of RNs' responses to various workplace experiences and life events and how those events influenced job decisions.

It is important to use detailed data representing actual job decisions (turnover/retention) because intent to leave is an insufficient indicator of job outcomes.<sup>34,35</sup> Transparent and overt definitions of turnover as voluntary or involuntary will be necessary to accurately understand these phenomena. Along with measures of turnover and retention, the high number of RNs declaring intent to leave necessitates an examination of what happens when RNs want to leave but are unable to do so. This analysis may help clarify the factors that hold RNs in jobs and sustain employment through challenging times. Likewise, instead of solely examining individual characteristics, job decisions need to be understood in the context of systemic issues that impact individuals; one example would be to examine how race and geographic location impact work settings available to BIPOC RNs, their family situations in those areas, and their job decisions. Altogether, there is a need to understand the context in which RNs make job decisions rather than just what causes them to form an intent to leave. As part of understanding context, evaluating the experiences and job decisions of working parents is essential to retaining them in the nursing workforce while enabling them to care for their families.

This analysis highlights the utility and limitations of using data from a continuously administered national survey as key information about RN job outcomes. Because the CPS dataset is focused on providing national workforce estimates, it contains a great amount of detail about family situation and changes to work status, including specific reasons for changes in work hours or absences that are not related to COVID-19. It also contains data points assessing if RNs are working for the same employer, which could provide one useful measure of turnover as a key job outcome. This dataset is easily accessible, making it a viable source to consider for work focused on RN job outcomes, particularly in a framework that accommodates multiple data sources.

### **Conclusion**

This study adds to the literature on RNs in COVID-19 by highlighting specific factors that influenced immediate job impacts: age, presence of children in the household, marital status, and work setting. The data adds to a growing body of literature discussing the disparate impacts of the pandemic on women and BIPOC workers. This study helps set the stage for further analysis of and response to the long-term impacts of the pandemic on the nursing workforce as well as helping organizations identify and ameliorate racist and sexist workplace policies affecting BIPOC RN employment. Finally, ensuring parity for BIPOC RNs in the workplace helps ensure equitable healthcare delivery to populations by clinicians who represent their racial diversity.

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### **Chapter 3. Answering the Call: Experiences of Nurses of Color During COVID-19**

The COVID-19 pandemic continues to bring national attention to the importance of nursing work and workforce issues such as high job demands, burnout, and turnover. A January 2022 survey of registered nurses (RNs) indicated that 23% intended to leave their job within the next 6 months, with a higher rate (27% ) among RNs who identify as Black, Indigenous, or other People of Color (BIPOC).<sup>1</sup> These issues cannot be solely attributed to the pandemic, as studies of RNs prior to COVID-19 identified relationships between workplace experiences and work outcomes such as burnout or decisions to stay in or leave a job. While existing descriptive work gives an idea of the breadth of these negative work outcomes in nursing, it does not allow for a contextual understanding of when, why, and how RNs are making decisions about their jobs. Because the correlation between intent to leave and actual turnover are not consistently strong,<sup>2,3</sup> data are needed to provide a more nuanced understanding of experiences and decision making that include the impact of concepts such as calling or meaning, which are known to influence RNs' desires to continue working despite difficult circumstances,<sup>4</sup> and how racial identity influences the context for BIPOC RNs and their decision making processes. Understanding contextual factors experienced by RNs can help guide strategies for meaningful support and retention of RNs in the workforce.

#### **Background and Significance**

The recent Future of Nursing 2020-2030 report emphasizes the essential role of RNs in promoting health equity in the US, work which is best accomplished when the nursing workforce itself reflects the racial diversity of the populations it serves.<sup>5</sup> However, during the pandemic BIPOC RNs had disproportionately higher levels of COVID-19 morbidity and mortality and

riskier work settings and assignments than their white counterparts.<sup>6-9</sup> These impacts compound the disparate rates of dissatisfaction, intent to leave a job, and turnover already experienced by BIPOC RNs.<sup>10,11</sup> One recent survey from the second year of the pandemic provided timely data from Washington state (WA) where the present study took place: RNs of all races (n=429) felt undervalued (61%), overwhelmed (67%), and exhausted (75%), with 94% reporting a serious staffing shortage in their organization.<sup>1</sup> In addition, 25% of WA RN respondents indicated an intent to leave their jobs within 6 months, primarily due to staffing and the impact of work on their health and wellbeing. Among BIPOC RNs who responded (n=78), 37% indicated an intent to leave their jobs, again citing staffing, impacts on wellbeing, and a lack of support from their employer during the pandemic.<sup>1</sup>

Other studies of BIPOC RNs tend to focus on their experiences of racism from patients, colleagues, and organizational structures.<sup>12-14</sup> Besides these studies, there is generally little data on the experiences of BIPOC RNs in the workplace, and few studies of RNs explicitly discuss racism in the healthcare work environment as it impacts RN's decisions about a job. A recent systematic review of turnover and retention among RNs in the last decade noted only 1 of 35 studies with a primary focus on BIPOC RNs.<sup>15</sup> More detailed understanding of the experiences of BIPOC RNs during COVID-19 can help identify and eliminate racism in the workplace, improving retention of BIPOC nurses in the workforce and ensuring equity in nursing. As part of understanding these experiences, using a framework such as *The Dynamic Model of RN Job Outcomes* (Chapter 4, Figure 1, p. 76) can help place work and life experiences related to racial identity as part of the context in which BIPOC RNs make decisions about their jobs.<sup>16</sup> The purpose of this study was to examine the impact of COVID-19 on BIPOC RNs. Specifically, the study explored the lived experiences of BIPOC RNs during the pandemic with an emphasis on

factors affecting their feelings about their RN job and decisions to stay in or leave a job.

## **Methods**

### **Design**

Because the goal of this qualitative study was to better understand RN's responses to a prolonged global pandemic, and in particular the meaning they associated with being a nurse during the pandemic, an interpretive or hermeneutic phenomenological approach was chosen. Beyond describing the shared phenomena, this approach allowed for a focus on the meaning of an experience for participants and also acknowledges the researcher's own understanding of the phenomena.<sup>17-19</sup>

### **Researcher**

The primary investigator and author on this study recognizes that her privilege as a white, upper-class woman includes having access to the resources needed to pursue a doctoral degree and complete this research project, and that her professional and life experiences have not included discrimination based on race. As an RN, the researcher's clinical practice took place at a county hospital where she cared for patients and families across the spectrums of race, ethnicity, religious belief, socioeconomic status, and social group. As an advanced practice nurse, she focused on activities related to supporting RNs and helping them achieve their professional goals. She brought these experiences to this study, where her background enabled her to quickly establish rapport with participants and approach interviews with an understanding of and compassion for the difficulties in nursing work. In each interview, she identified her whiteness and inability to understand the experiences of BIPOC RNs and shared the project goal of bringing forward participants' voices. She continued to engage in this personal reflexivity throughout the processes of coding, analysis, and writing.

## **Population**

This study took place in WA, where some of the first COVID-19 cases in the United States were identified in March of 2020. In the state, there are approximately 91,000 RNs, with around 57% employed in acute care settings, 12% in ambulatory care, 10% in long term care facilities, and 21% in community and other care settings.<sup>20</sup> Around 20% of Washington RNs identify as BIPOC.<sup>20</sup>

## **Sampling and Recruitment**

A purposive sampling strategy was used for the study, with an initial goal of interviewing 15 participants. In the first phase of recruitment, materials were sent to local WA professional nursing organizations associated with specific racial or ethnic groups. The goal was to recruit nurses across a variety of work settings, including those not currently employed. After slow initial recruitment, a publicly available study flyer was posted to the author's social media account and shared by the University of WA (UW) School of Nursing alumni account as well as other nurses in WA. Interested participants were directed to an online questionnaire, which assessed the eligibility criteria of licensure as an RN and practice in WA during the pandemic as well as asking about racial/ethnic identity and contact information. After reviewing responses for eligibility, the researcher contacted participants individually, providing more study information and the opportunity to schedule an interview. Out of approximately 240 respondents, 60 met eligibility criteria and received an email from the researcher. When RNs responded to the email and indicated they wished to schedule an interview (40 RNs), the researcher confirmed their WA RN license via an online verification tool. Twenty-three RNs were eligible and 15 continued with scheduling. This study qualified for exempt status by the UW Human Subjects Division; consent was obtained from participants verbally prior to their interview. Participants received a

\$50 gift card to a store of their choice after completion of the interview.

### **Data Collection and Processing**

All data were gathered, and audio/video recordings captured, via individual interview using Zoom videoconferencing and transcription software; each participant was interviewed once. A semi-structured interview guide was used that included questions focusing on RNs' experiences at work and in the community during COVID-19 and how those impacted their feelings about being an RN or the meaning they attributed to the nursing role during the pandemic (Appendix A). Participants were asked about any experiences specific to their racial/ethnic identity in the context of their RN role as well as the processes they went through when deciding to stay in or leave a job. Additional demographic information was elicited during the interview process. Interviews occurred in December 2021 or January 2022. A total of 15 participants were interviewed, with an average interview length of 37 minutes (range 25-60 minutes).

Interview recordings and associated transcripts were downloaded from Zoom software and stored on a secure server apart from participant demographics and other identifying information. The researcher imported, deidentified, and corrected the automated transcripts from the interview recordings. ATLAS.ti v22 was used to manage the data.

### **Analysis**

Data analysis drew on strategies from hermeneutic phenomenology, including use of the 'hermeneutic circle' whereby data were examined both within the experience of each individual as well as in relation to the whole of the data.<sup>17</sup> One of the tenets of hermeneutic phenomenology is that analysis begins from the researcher's first encounter with the data, which in this study occurred during initial participant interviews. As the researcher then engaged with each

additional participant, she reflected on data both within the context of that individual's experiences and in light of the whole of the data gathered at that point.

Data reflection began during the interview phase and continued throughout codebook development and testing. After watching interview recordings and correcting the automated transcripts, the researcher inductively developed an initial codebook to capture the main ideas represented across the interviews. Initial codes included structural codes capturing answers to a specific question, word-based codes identifying use of a specific term such as 'vaccination', and secondary codes, which applied a concept such as 'calling' to a participant's responses. Using a random number generator, three interviews were selected to test the initial codebook. During this testing phase, code definitions were revised and additional codes were added as needed. After this initial testing and revision of the codebook, the researcher returned to the transcripts and completed coding in the order interviews were conducted. Throughout the process, several additional codes were identified using an inductive process. Once coding had been completed on all 13 transcripts, the researcher returned and reviewed each transcript again to refine existing coding and add codes according to the final codebook (Appendix B).

In the process of analysis, the researcher used a metacoding process<sup>21,22</sup> as well as within- and across-case analyses as part of the hermeneutic circle characteristic of phenomenology.<sup>23</sup> Analysis was intentionally focused on elements pertaining to the lived experience of participants during the pandemic, so participant reports of workplace experiences that occurred prior to the pandemic (e.g. burnout, job change) were only used to better understand the context in which the individual participant was living and working during the pandemic. For the metacoding approach, individual codes were examined across all transcripts, and key elements of the codes were listed. For example, the code 'calling' produced a list of quotes such as 'advocating',

‘comforting’, ‘admiring the role and the caring’, ‘love nursing’, and ‘caretaking’. In a similar approach, codes co-occurring with one another throughout the transcripts were examined and key words or concepts listed to understand the breadth of the phenomena across responses. As part of the process of examining these codes together, the researcher engaged in free writing as an intuitive way to capture critical reflection and engage in reflexivity as she compared responses across participants and with her own nursing experiences. This strategy was used to examine codes throughout the transcripts, looking for data indicating meaning or responses to the experiences encountered at work and in the community during the pandemic. Through the processes of metacoding, comparing within and across, and reflective writing, the researcher identified the main theme and sub-themes presented in the results section. Themes names either described participant responses or reflected a category of experiences shared among participants, and quotes were chosen to exemplify the core concepts or array of experiences within a theme.

### **Rigor**

Methods of achieving rigor in qualitative work vary among qualitative methodologists and texts, but center around the core issues of reliability and validity.<sup>24</sup> Because reliability, or the ability to obtain similar results from a repeated study, relies on standardized and transparent reporting of methods, the *Standards for Reporting Qualitative Research* guidelines was used to prepare and examine this research report (Appendix 3).<sup>25</sup> Validity, or the ability of the research to represent the phenomenon of interest,<sup>24</sup> was established through peer- and member-checking as well as auditing of data saturation. After initial testing of the codebook on 3 randomly chosen transcripts, two additional researchers (one experienced qualitative researcher and one doctoral student) reviewed the codebook and coding; omissions or disagreements were resolved via discussion. Member checking took place by sending study participants an overview of the

analysis as well as themes specific to their transcripts and requesting feedback on any missing or incorrect elements. The six participants who responded to the email agreed that the themes represented their own experiences and did not suggest any additions.

Data saturation, defined in this study as adequate representation of a breadth of experiences for this group of participants,<sup>26</sup> was tracked throughout the coding process by tracking the appearance of new codes or concepts. While reviewing the final 4 transcripts, the researcher did not identify any new codes and determined that saturation had been reached and additional recruitment was not necessary. As an additional step, the researcher examined the demographics of potential participants who had expressed interest in the study but had not yet been scheduled for an interview. The available participants indicated ethnicity and age that were already included in the sample; all had been licensed as an RN for less than 2 years, so the determination was made that they were not likely to provide new concepts to the study.

Other strategies for achieving rigor in the study included prolonged engagement and triangulation.<sup>24</sup> Prolonged engagement refers to a trusting relationship between researcher and participant that is typically built over time and allows for deeper dialogue as well as a richer understanding of the experience.<sup>24</sup> In this study, the researcher established rapport with participants based on her own experiences as a nurse and also by acknowledging her whiteness and stating her intention to represent their voices in the study. This rapport led participants to share their experiences openly. In addition, the researcher personally conducted the interviews and corrected transcripts prior to coding and analysis, allowing for extended contact with the raw data. These processes of trust, deep dialogue, and immersion in the data support the ability of the researcher to situate findings for participants individually and as a whole. Finally, in the process of triangulation, the researcher compared findings to publicly available data including formal and

informal reports of RN experiences during the pandemic, and concluded that experiences pertinent to the study aims had been captured in the included data.

## **Results**

Of the total 15 participants interviewed, 13 were eligible to have data included in the study; ineligible participants either had no license data in the online credential database (n=1) or had not practiced in Washington despite licensure in the state (n=1). Table 1 shows pertinent demographics. The sample skewed toward younger RNs, which was deemed acceptable for the study given the need to identify elements that retain RNs in the workforce throughout their working years. The racial diversity in the study echoes the diversity in the WA RN workforce, as does the distribution of nursing degrees and work setting. The neutral pronouns ‘they/their’ are used throughout the results to protect identities and because participants did not report any impacts, nor was the study focused on impacts, related to gender identity. All 13 participants had worked clinically at some point during the pandemic, and all but 4 had worked directly with COVID positive patients; 2 of the 4 who did not work directly with COVID patients had worked in testing or vaccination sites. All RNs worked with adult patients, and RNs who worked in academia also worked in a clinical setting with COVID-19 patients at some point during the study period.

### **Answering the Call**

The main theme of the study, *answering the call*, was drawn from participant’s descriptions of the sense of purpose they felt at the onset of the pandemic and encompasses the variety of ways they responded. The process of *answering the call* gave rise to the subthemes identified in the study: being consumed by COVID, COVID shining a light, dimensions of trust, and wondering ‘is it worth it?’. Participants reported a sense of duty to others and to themselves

**Table 1.***Participant Demographics and Job Characteristics*

	n (%)	% WA RNs <sup>a</sup>
<b>Age</b>		
<30	5 (38.5)	1.6
30-39	6 (46.2)	21.8
40-49	1 (7.7)	24.1
50-59	1 (7.7)	20.5
<b>Years in Nursing</b>		
<5	6 (46.2)	Not available
5-9	4 (30.8)	
10-15	3 (23.1)	
<b>Race/Ethnicity<sup>b</sup></b>		
AAPI	5 (38.5)	10.6
African American	2 (15.4)	2.3
Native American	3 (23.1)	0.5
Latinx	2 (15.4)	4.4
Mixed	1 (7.7)	3.1
<b>Geographic Area</b>		
Urban	10 (76.9)	Not available
Rural	3 (23.1)	
<b>Highest Nursing Degree</b>		
ADN	4 (30.8)	36.5
BSN	6 (46.2)	51.8
Master's	2 (15.4)	6.8
DNP	1 (7.7)	0.3
<b>Work Setting<sup>c</sup></b>		
Inpatient	6 (46.2)	48.7
Ambulatory	7 (53.8)	17.4
ER	2 (15.4)	7.3
Academia	3 (23.1)	1.5
<b>Work Outcomes</b>		
Changed jobs	7 (53.8)	Not available
Considered leaving nursing	6 (46.2)	
Either changed jobs OR considered leaving nursing	10 (76.9)	
Experienced burnout	9 (69.2)	

*Note* <sup>a</sup>Data from “Washington State’s 2019 Registered Nurse Workforce,” by BA Stubbs and SM Skillman, 2020. University of Washington Center for Health Workforce Studies. Available from: <https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/RNWorkforceReport.pdf>. <sup>b</sup>Categorized according to participants’ self-identified primary race or ethnicity; Washington state data lists each race/ethnicity as ‘alone’ with a separate category for 2+ races and reflects % of total including white RNs. <sup>c</sup>Study totals may be greater than 100% since some RNs indicated 2 primary work settings during COVID.

that drove their responses to the pandemic despite working in different jobs and settings.

*Answering the call* meant navigating the changing demands of the workplace along with the needs of community and family as they continued to work as an RN. As it did for most people, participants shared that the pandemic impacted every facet of their lives, causing isolation, fear, and fatigue from constant change. Along the way, RNs discussed how they drew on their individual identities and experiences as people of color as well as their sense of meaning and fulfillment in nursing to inform their next steps.

### **Consumed by COVID**

Participants described how COVID-19 initially impacted them everywhere they went, taking over their lives at work and home, and they shared their emotional and professional responses as they *answered the call*. At work, RNs stated they felt the loss of normal duties and expectations as they were “thrown in” to caring for patients with COVID-19 and noted that the change of routine was exacerbated by the nature of emerging and changing guidelines. As Nurse09 expressed, “every few hours things could be changing, or now we're doing this, now we're doing this . . . that was a pretty stressful time.” Nurse14, a newly licensed RN, called it a “baptism of fire” where planned skill growth and development were superseded by the needs of the pandemic:

“I'm looking around me and I'm . . . brand new and I don't know what to expect, and here I am helping a doctor intubate a patient . . . what is this that's happening? It was a lot.”

In these early phases of the pandemic, many RN participants *answered the call* with an attitude of persistence and “do[ing] what I can . . .” (Nurse14). But participants described that perseverance wore thin as the difficulties of the pandemic continued and they were impacted by additional stressors both in and out of the workplace. Workplace demands were exacerbated by

short staffing, as participants reported being asked to work on days off or take on extra duties.

“I feel everything falls to nursing. . . we are the ones that hold everyone up and, at the end of the day, no one holds us up, except for each other, and when we're all struggling and exhausted, what do you do?” (Nurse05)

Decisions to work more hours led to a feeling of being “engulfed” (Nurse08) or as Nurse10 expressed, “it’s like all I did was think about COVID all the time”. This sense of being consumed led many participants to question their professional choices and physical and mental wellbeing: “I feel like I was coming home from work thinking about work and being very tired. And I feel like it wasn't going to be sustainable for me” (Nurse02). Demands came from outside of the workplace as well, as described in a statement by Nurse07:

“When you're a nurse, you give yourself--like a lot of yourself--to your patients, and try to advocate for them, be there for them. But then, being in that pandemic also, you have all your friends and family at home, asking you like ‘what's this’ and ‘what's that’. So a lot of giving yourself almost 24-7, like you should know the answers . . .”

The increased demands and overwhelming nature of the pandemic, combined with a desire to *answer the call*, left most participants relating experiences of burnout or feelings of decreased meaning and fulfillment in their work. Participants shared their experiences: “at that time I was, you know, starting to feel the burnout and so that's why I left the inpatient world” (Nurse07); “I just feel like burnt out” (Nurse08); “Burnt out when we're short staffed . . . burnt out when as you're trying to make sure everything's going smooth, people are complaining” (Nurse13); and “I really had a burnout because I was working a lot of extra hours because we're very short staffed” (Nurse14). Nurse01 shared the final piece that helped them recognize their burnout:

“. . . and I think that was kind of the last checkmark . . . I didn't enjoy working as much as I used to, and I wasn't willing to go that extra mile like I normally would to close the loop on care . . . is when I realized it probably is [burnout].”

### **COVID shone a light**

In addition to being overwhelmed by the nature of the pandemic across their lives, participants talked about how their work situation influenced the ways they responded to the pandemic. When deciding how to *answer the call*, they shared how they thought about their workplaces and noticed specific elements that were illuminated by the pandemic, including issues with management, experiences of racism, peer support, and a need for skill advancement. Participants reported that relationships with management became both clearer and more important, with “tension . . . between nurses and management that . . . got worse because of COVID,” as Nurse15 stated. Nurse09 happened to be out of town when the first cases were identified:

“. . . just coming back to that environment was already pretty full of anxiety because . . . [I] didn't have a lot of trust and faith in . . . the management team. . . I know that other people felt similarly--that there was kind of an underlying mistrust already. So then going into a situation like that that was ever evolving I think made things more stressful than maybe they needed to be.”

One participant felt that the pandemic was “used as an excuse to have poor treatment” (Nurse15) from management, others felt devalued, replaceable, or not a priority in the milieu of high demands and changing guidelines. Several participants identified that seeing negative aspects of the work environment more clearly made them consider leaving their jobs, while others stated that the clarity prompted them to accelerate an existing timeline or plan for a job change. In all,

most of the participants who left their job attributed their decision to existing problems with management that were exacerbated by conditions during the pandemic.

During the pandemic, especially the early months, participants shared that experiences of racism at work stood out more sharply and affected their feelings of value and safety in their jobs. Reported incidents of racism at work ranged from patient interactions to overtime requests. Nurse02 shared that “patients see me as my ethnicity and the way I speak” and noted that working at a public testing and vaccination site during the pandemic amplified negative and racist experiences to the point where they questioned staying in the job. Several participants noticed that they were asked or expected to work extra shifts because of their racial identity but felt conflicted between a sense of being needed and being used. Participants who identified themselves as ‘white-passing’ also expressed feeling conflicting emotions as they witnessed racism that was not directed at them but still contributed to their sense of being ‘othered’ in the workplace.

Participants shared that the pandemic also highlighted positive workplace elements such as teamwork and opportunities for them to grow skills and consider the future of the profession overall. They noted that they became close with their colleagues for the first time or deepened their relationships and support practices. They explained the enhanced sense of support from their coworkers as a key strategy in helping them maintain balance and care for themselves as they continued *answering the call*. Nurse02 commented on the process:

“I feel like somehow it happens . . . that during the most difficult times people pull together. . . I mean, I knew my coworkers, but I wasn't really invested of like really being friends with them and doing all that. I'm usually kind of like a private person, but something about doing difficult work and facing barriers together, it made us all feel like

a family. And that was really good to see how during the most difficult situations, people can actually come together and like work together for one purpose and get to know each other, and you know lift each other up and things like that.”

Other participants saw opportunities to build new skills and think about the future as individuals and as a profession. Nurse08 was prompted by their experiences during COVID-19 to transition to a job on a higher acuity unit where they gained the skills they needed to care for sicker patients. Nurse 01, a clinic RN, stated that “my role became that much more important since patients . . . feel more comfortable talking about their concerns with nurses.” Others took the opportunity to move into a different setting or work with a different population where they felt they would better fulfill a sense of meaning and calling. When thinking about how COVID-19 highlighted the need for professional change, participants identified issues such as wellbeing, support, fair compensation, and genuine appreciation as key issues for the workforce. Nurse05 was prompted to think about nursing more broadly:

“I think [the pandemic] is going to shift how we engage with systems that are not working. . . . and say, ‘this didn't work for us, we are not well and we cannot work, what are you going to do to change that, how are you going to support us?’ So I think it takes kind of having things crumble a little bit and get really, really stressful and overwhelming and to the point of breaking to have things change systematically.”

Altogether, the pandemic shone a spotlight on multiple aspects of participants’ work experiences and provided an opportunity for reflection and clarity.

### **Dimensions of trust**

Participants in the study addressed the importance of trust as they went about *answering the call* during COVID-19. Many participants shared a sense of duality in being ‘healthcare

heroes' or the most trusted profession while simultaneously having patients and the public question their advice about masking, vaccination, and COVID-19 treatment measures. Nurse08 lamented the difficulty of sharing information on social media:

“ . . . there were a lot of comments or you know opinions that would come to the forefront . . . I would just say oh, you know COVID is real, . . . people are coming sicker to the hospital, I'm seeing this firsthand. Now if you can . . . please wear your mask, this thing is contagious, and it makes people really sick. . . But there was just so much pushback and I'm . . . you know I don't mean harm! I'm a nurse, so I see the science and I'm seeing firsthand what's happening to people, and then just the pushback that I got.”

The dissonance eroded at RN's sense of meaning in their work and increased feelings of frustration and burnout. Several participants decided that as part of remaining well, they had to step back and focus their caring on patients who were receptive. After sharing a painful experience with a young adult patient who refused to be vaccinated and then died in their care, Nurse14 stated,

“ . . . there's also like an equal amount of people who show gratitude and express a lot of thanks to what we're doing and listen to what we have to say, and . . . sometimes it doesn't feel like our voices are going unheard. That it is reaching people, the community, and seeing that happen has been helpful.”

In addition to more general trust as an RN, participants shared that their racial identity influenced the sense of trust and rapport with patients or colleagues, “my other brown people” (Nurse05). Shared background or shared experience brought a great deal of meaning and purpose to the role, as participants described both a calling and a sense of fulfillment in providing quality care for people in their community. As Nurse02 expressed: “at the end of the day . . . they are

actually very grateful patients . . . made me feel more of a sense of belonging.” Participants also discussed racial identities and trust in the context of family influence. For several participants, this meant that they had pressure from family who were fearful of the pandemic as they saw it play out in their home country and had high levels of worry about the RN’s exposure at work. For others, their racial and cultural identities helped them take a broader worldview. Being grounded in their family’s history helped Nurse09 be more compassionate toward patients who were unvaccinated and advocate for compassion from their colleagues:

“I think that certainly because of where my grandparents come from and that they internally migrated and the environment in which my mom was brought up in does allow me to see stories that I think some people--not that they maybe don't want to see, but aren't aware of--stories of people and access to care and belief surrounding vaccination and things like that.”

Trust and racial identity were key factors as participants examined their jobs and made decisions about what to do next.

### **Is it worth it?**

As participants navigated these different positive and negative experiences, most of them identified a moment where they came to a crossroads and contemplated leaving a job, moving away from patient care, or leaving the profession altogether. Making those decisions was a process of balancing their sense of duty and meaning in *answering the call* with the realities of the job as it affected their lives. Almost every participant either identified calling as a key factor drawing them into nursing or mentioned a desire to advocate or help others, and brought up those elements again as important components of their decision to stay in the profession. Nurse03 shared their experience regaining a sense of meaning in a new setting after leaving a job where

they were heavily impacted by racism:

“And I kind of feel like I got that old nursing spirit back you know, and I love [it]. I grew up in a community that took care of our own. And . . . this is public health, that's what I'm doing . . . I'm educating our nurses to take care of the community here.”

Participants also shared how racial identity impacted the sense of calling and responsibility, leading some to switch jobs to care for a population that is not “wealthy white men” (Nurse07), or to stay in a difficult job to serve community needs. Nurse13 debated leaving their job but decided to stay:

“There's only like 0.3% Native American nurses. So I hope to inspire people. . . You feel more comfortable with another Native American giving you care because . . . another Native would understand me and my culture and my background . . . and you don't want to feel judged by a non-Native or a person that's not a person of color.”

For participants, different components of their racial identities impacted their decisions. RNs who were immigrants themselves, children of immigrants, and those with notable family experience with the healthcare system related their drive to stay in the profession to these identities. Nurse 04 expressed the importance of those factors in their decision to continue patient care:

“But I feel like that's what makes my job worthwhile in caring for these people; it's being able to understand them and provide the care that is important to them. Because sometimes they don't care so much about their symptom management as they do about somebody that understands them.”

Other participants expressed the importance of their nursing role as it provided opportunities to influence their racial or ethnic community with expert knowledge either directly or through

family members.

Participants identified another key element of deciding to stay in nursing was developing strategies for self-care. Each participant in the study either identified burnout or potential sources of burnout and developed strategies to remain well as part of continuing nursing work. These strategies included mental health support, being more open with colleagues and family about their experiences and needs, taking time away from work to do ‘normal’ activities, and limiting the number of extra shifts or even calls from work they would answer. Nurse02 identified the need as a profession for “taking self-care more serious, like as serious as me coming to work”.

Participants also examined their own experiences with work demands and job decisions in the broader context of the profession. While Nurse02 stated, “I have switched from seeing this as a profession to just a job now”, others spoke about a tangible difference between RNs who were focused on compensation versus the meaning in the role. As Nurse11, a newly licensed RN, put it:

“They [classmates] try to do travel nursing as soon as they can . . . you can make a lot of money and . . . there's flexibility, and then another glut of my classmates are going into family care . . . very chill very relaxing.”

While some participants could not visualize themselves ever working outside of healthcare, others said they were satisfied to make a job decision that best fit their needs at the moment and left room open to continue thinking about whether the rewards of the job and profession were worth the challenges.

## **Discussion**

During the pandemic, participants had experiences being overwhelmed by COVID-19, seeing positive and negative work situations more clearly, contemplating trust as an RN and a

person of color, and questioning their job decisions. Throughout these experiences, participants showed that their commitment to the tenets of the profession helped sustain and guide them and kept them *answering the call*. The study helps fill a gap in the literature about RN job decision-making processes and the contextual factors influencing decisions; findings may highlight areas where organizations can implement strategies to retain RNs. Even more uniquely, this data focuses on the specific experiences of BIPOC RNs which are typically underrepresented in current research. Discussion of findings is framed by *The Dynamic Model of RN Job Outcomes* (Chapter 4, Figure 1, p. 76). While not overtly used for deductive coding or analysis, examining results within the model shows how different experiences and contexts fit with RNs' responses and job outcomes.

The themes identified in the study reinforce existing data about the impact of COVID-19 on RNs. Other global and national studies reporting the experiences of RNs during the pandemic showed similar themes of duty and obligation, exhaustion, the importance of identity and calling, and a sense of being replaceable.<sup>27,28</sup> While some of the results, particularly those related to burnout, are well represented in the literature describing RN experiences during the pandemic, several components of the results merit further discussion: issues with management, experiences of racism, RNs' sense of calling, and self-care.

### **Issues with Management**

Study findings include a high rate of turnover during the pandemic among participants who were already experiencing issues with management or colleagues. The importance of work environment and supportive management are well established as antecedents to turnover and retention in the literature on RN work outcomes (Chapter 4, Figure 1, p. 76).<sup>15,29</sup> Although some participants felt a sense of support and teamwork, data suggest that many RNs felt that leaders

and managers failed to listen to their concerns, address their needs, and provide the additional resources needed to care for high acuity patients in isolation.<sup>30</sup> It is important to note that during COVID, nurse managers have also reported high rates of stress, burnout, and intent to leave jobs due to the impact of work on their wellbeing.<sup>1</sup> It is therefore essential for organizations to make leadership presence and accountabilities transparent to staff and direct resources toward supporting and educating managers. Organizations can also set an expectation of healthy work environments (HWEs) that is shared across disciplines and settings. Existing tools such as the *HWE Standards* should be utilized to evaluate and improve the workplace.<sup>31</sup> While organizations or the profession may not have any control over phenomena such as COVID-19, data from this study shows the importance of creating a supportive workplace where management and staff can respond to challenges by coming together and supporting one another.

### **Calling**

Calling continues to be an important concept in nursing, evident during the pandemic as RNs continued to show up to work despite difficulties and risks.<sup>32</sup> Calling is related to a sense of satisfaction and meaning in work, and can change over time, growing when RNs feel empowered<sup>33</sup> and diminishing when RNs feel replaceable or disrespected.<sup>4,34</sup> Calling has also been identified as an important predictor of RN work engagement, or feelings of connectedness with their work, which in turn increases retention.<sup>35,36</sup> However, acting solely on a sense of calling can mean RNs work extra shifts or take on extra duties to the detriment of their own health and wellbeing,<sup>4</sup> as played out for several participants. Some RNs may also perceive that their sense of calling creates expectations that they will do anything needed for their patients (e.g. cleaning rooms) rather than having leaders direct other organizational resources to support them when needed.<sup>28</sup> While nurturing and supporting a sense of calling through empowerment

and autonomy are important strategies for RN engagement and satisfaction,<sup>35</sup> managers and organizations need to ensure that calling is not taking the place of adequate compensation and patient care resources. These findings support the structures in the model and show that a deeper understanding of the impact of calling and engagement as RN responses to work context are vital to understanding RNs' job outcomes.

### **Experiences of Racism**

Study findings provide valuable information for understanding the array of ways that BIPOC RNs experience race and racism in the workplace. Even before COVID-19, participants in the study stated they experienced comments and interactions ranging from subtle microaggressions to overt racism from patients and colleagues. The exacerbation of some experiences during the pandemic, such as patient requests for different RNs or expectations of working overtime that participants attributed to their racial identity, point to opportunities to examine policy or practice at the unit and organizational level. For example, units can consider who decides which RN should be asked to work overtime and if there is a transparent process available or if it is vulnerable to implicit bias about work ethic in different cultures. Such changes may create a more equitable environment that better supports BIPOC RNs. At the organizational level, leaders should create policies for dealing with racism from patients and staff. For example, a zero tolerance policy can be created which provides mentally well patients a stepwise process leading to discharge from care when they engage in microaggressions or racist comments toward staff. This type of policy reinforces a commitment to anti-racism and promotes a shared responsibility for addressing racism, removing the burden from BIPOC workers alone.

The experiences shared by BIPOC RNs show how the pandemic highlighted and

exacerbated existing problems with racism at work. However, they also demonstrated the importance of calling and meaning in their work that enabled them to continue working and caring for patients despite difficult circumstances. In other words, the experiences and reflections of BIPOC RNs showed that race was not the only experience or necessarily the most important experience they had during the pandemic. They were impacted by issues common to the entire workforce—frustration with lack of knowledge about COVID in the community, fear of exposing themselves and family members to COVID, exhaustion and isolation—but the difference for BIPOC workers is that these stressors were superimposed onto the existing stressors of everyday experiences of racism. Data from other groups of workers suggest that dealing with racism can cause a phenomenon known as ‘racial battle fatigue’ and accelerate or enhance experiences of burnout.<sup>37</sup> Retaining and supporting BIPOC RNs thus requires that in addition to general support strategies, elimination of racist policies and practices should be paired with efforts to diversify workgroups and provide meaningful self care to BIPOC RNs.

### **Self-Care**

Participants in the study used the term ‘self-care’ to describe various activities and changes they made in their lives in order to deal with or prevent burnout. Self-care can ostensibly include any activities deemed by individuals to improve their wellbeing, but leaders and managers need to use caution when promoting or providing specific self-care activities. The prevailing notion of self-care may often consist of activities rooted in a white, western worldview or those requiring substantial financial investment (massage, gym membership).<sup>38,39</sup> The notion of self-care may be different for BIPOC RNs, some of whom might prefer activities rooted in traditional cultural practices.<sup>40</sup> Other data on promoting self-care among BIPOC workers suggest strategies such as providing safe spaces for staff to take a break away from

others, encouraging workplace connection with staff from their own racial or cultural identity, and identifying or providing a counselor skilled in centering race and experiences of racism as they impact worker mental health.<sup>39</sup> While these strategies help BIPOC workers cope with their everyday experiences of racism, they must be paired with efforts to eliminate the racist practices at unit, organizational and systems levels that cause racial fatigue.

Altogether, these data show the importance of examining RN wellbeing and the contextual factors and processes RNs use when weighing a decision to leave a job, organization, or the profession. Organizations and healthcare systems should ensure that any strategies directed at supporting RNs include specific elements focused on supporting BIPOC workers and eliminating racism in the workplace. Sustaining a healthy work environment, encouraging RN work engagement, eradicating racist practices and providing meaningful support will help BIPOC RNs achieve wellbeing and promote positive work outcomes.

### **Limitations**

As with any qualitative research, this study was not intended to provide data for extrapolation to a general population of RNs. Participants were self-selected and very passionate about sharing their stories, and they do not represent the totality of BIPOC RN experience during COVID. In addition, participants tended to be much younger and with fewer years of experience than the average WA RN. However, the symmetry of data provided here with research on RNs at large indicates that findings can reasonably be used to inform future work or generate ideas for local initiatives to support RNs.

### **Recommendations**

Future research needs to specifically assess the experiences and needs of BIPOC RNs in different healthcare work environments. Interventions designed at providing support and equity

in the workplace will benefit all RNs and potentially help mitigate the disparate rates of dissatisfaction and turnover among BIPOC RNs. Existing qualitative work and meta-synthesis of such work<sup>27</sup> should inform strategies for organizations and professional groups. For example, future research could explore how offering different shift lengths impacts general staffing, RN wellbeing and patient care, with the hypothesis that being adequately staffed for part of a shift is better for patients and RNs than being short staffed for the whole of it. Larger healthcare systems could examine workforce diversity and hiring practices in different settings such as ambulatory or critical care, looking for and resolving disparities in pay and advancement opportunity for BIPOC RNs. Identifying competencies for nurse managers, including anti-racist and crisis management skills, can help mitigate negative workplace impacts for both managers and staff during periods of chaos or uncertainty. Units caring for COVID-19 patients throughout the pandemic could trial various in-person or technology-based interventions to promote RN wellbeing or team cohesion. These strategies should aim to create an equitable environment where RNs, including BIPOC RNs, can process the difficult situations they have encountered during the pandemic and be provided with resources to pursue wellbeing as they remain active in the RN workforce.

### **Conclusion**

The stories of BIPOC RNs during COVID convey critical information about the interaction of factors shaping their experiences and decisions in the healthcare workplace. While they did not attribute all of their experiences to their racial identity, they noted how it impacted many facets of their work and added to the stressors felt throughout the workforce. To make meaningful changes and support BIPOC RNs in an equitable workplace, their perspectives and voices must be at the forefront of shaping organizational initiatives and research. Their stories

can be used to support other RNs as they continue to answer the call and care for their communities in times of calm or times of chaos.

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## Appendix A

### Semi-structured Interview Questions

1. What made you choose nursing as a profession?
2. Can you tell me a little bit about your work history and places of employment?
3. Describe your experience in your nursing job when the pandemic began.
4. Tell me about your experiences at home or in the community during the pandemic. Was there anything that made you think different about your nursing role?
5. What are your thoughts about holding your racial/ethnic identity along with your nursing identity during the pandemic?
6. Share with me about a time or experience that made you feel differently about your job or being a nurse. Was there anything particular that made you think about leaving your job or the profession or changed the meaning nursing has for you?
7. What is one thing you would change about being a nurse or about the profession after your experiences during the pandemic?
8. Share with me anything positive about the profession that grew from your work as a nurse during the pandemic.
9. Is there anything else you'd like to say that we haven't covered?

## Appendix B Codebook

### **PERSONAL EXPERIENCES AND THOUGHTS**

Personal life impacts	Captures comments about the impacts of COVID or work on personal life events, plans, or relationships.
Personal response to COVID	Captures an RN's personal feelings and responses to the pandemic, including anxiety, desire to help, etc.
Risk to family	RN mentions concerns with infecting family members they live with or visit
Risk to self	RN mentions concerns with getting COVID themselves
Consumed by COVID	Captures comments from RN about the presence of COVID in multiple aspects of their life, or the inability to 'escape' COVID at work or home.
Family presence/support	Captures comments from RN on presence of or support from RN's family.

### **RACE and RACISM**

Racial/ethnic identity	Captures comments from RN about their racial or ethnic identity(ies), especially as it impacts their life, work, or other general experiences. Does not include comments about experiences of racism.
Racism in the community	Use when RN reports experiences with racism outside of the workplace, including specific stories from other friends/family/acquaintances
Racism at work	RN reports experiences with racism in the workplace from patients, colleagues, or others

### **NURSING PROFESSION**

Calling	Captures comments when the RN uses the term 'calling' or synonyms such as 'meant to be/do' to describe why they came into nursing or the meaning they attribute to their work. Also used when RN talking about loving the work they do in their nursing role.
Profession: overall	RN refers to nursing as a whole, discusses their experiences or perceptions of how COVID or other things have impacted the profession as a whole. Includes their perceptions of others who view nursing is 'just a job'. Also includes statements or experiences they have read or heard of from others that deal with the profession as a whole.
Profession: self	RN refers to their own career trajectory or aspirations and any changes related to COVID
Silver linings during COVID	Captures comments where RNs identify anything positive that came about from COVID.
Impact of racial identity on job, decision	Capture responses to the question about holding racial identity during COVID
Job decision process	Captures comments about RN's thoughts and decisions about leaving a job or the profession.
Job history	Captures comments about various positions, roles as well as what brought RN into nursing.

**AT WORK**

Workplace	
Work environment	Captures comments about the work environment in general, before and during COVID.
Work setting	Captures comments about different work settings, including the similarities/differences, challenges, or benefits the RN perceives.
Workload	Captures comments related to the workload during COVID, including job demands and staffing.
Care Quality and Outcomes	RN discusses the impact of COVID on their patient's outcomes OR the ability to deliver what they perceive as high-quality care, or the care needed by the patient. Includes the RN's perception of their ability to deliver safe patient care.
Education	RN discusses process of patient education or educating about disease process including COVID as part of RN role
Learning the role	Captures comments related to an RN's orientation and acclimation to the nursing role in general or to a new role or job during COVID. Includes desires to learn and be challenged in new roles.
Doing our best	Captures comments where RN discusses wish that patients or community would understand they are doing everything possible with limited resources.
Gratitude	Captures comments where the RN talks about patients or community members showing gratitude or appreciation for their work. Not used for feelings of value/appreciation coming from manager or colleagues--use 'feeling valued'.
Colleagues	
Feeling valued on the job	Captures comments about how the team or management make the RN feel in their job. Does not include the RN's own feelings of value, purpose, or meaning in profession overall (use 'calling').
Teamwork and support	Captures comments about coworkers and experiences working together, with/without specific use of the word "team". Includes mention of 'work family' or synonyms.
Management	Captures discussion of unit-level management
Administration	Captures comments about healthcare administration including executives or "higher ups"
Travel RNs	RN discusses travel RNs
Structures	
COVID Logistics: PPE/supplies	Captures comments where RN discusses availability of PPE and supplies.
COVID Logistics: support/training	Captures comments where RN discusses support/training/resources provided to RNs during pandemic.
COVID Logistics: transitions	Captures comments about the transition of work setting, workflows, or patient norms (e.g. being isolated in rooms).

**COMMUNITY**

Community	Captures comments about being part of the community or contributing to the community that are not related to community discourse or knowledge about COVID.
Guidelines	RN discusses guidelines or policies related to COVID at any level (organizational, local, national)
Public discourse about COVID	RN discusses knowledge basis of community, particularly as they are looking to RN for expertise or ignoring RN's expertise
Vaccination	Captures any comments about vaccination or vaccines, including administration, comments, science.

**BURNOUT & RECOVERY**

Recognizing burnout	Captures comments about the individual's process of recognizing burnout and deciding to address it.
Burnout: job	Captures discussion of how burnout impacts their work, including interactions with patients, family, and colleagues. DO not use for discussion of burnout prior to COVID.
Burnout: mental	Captures discussion of mental and emotional strain related to COVID. Do not use for discussion of burnout prior to COVID
Burnout: physical	Captures discussion of physical symptoms of burnout related to COVID. Do not use for discussion of burnout prior to COVID
Burnout: pre-COVID	Captures identification and discussion of burnout that occurred prior to COVID.
Burnout: relational	Captures comments when RN identifies relational or interpersonal symptoms of burnout related to COVID in their home life or personal relationships. Do not use for discussion of burnout prior to COVID or impacts of burnout on their interactions at work.
Mental Health	Captures RN's discussion of thinking about or accessing mental health services including counseling or therapy related to job stress or burnout.
Self-Care	Captures RN's comments about how they have handled burnout aside from mental health services.

## Appendix C

## Standards for Reporting Qualitative Research (SRQR)\*

<b>Title</b> - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	p. 28
<b>Abstract</b> - Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	p. 29
<b>Problem formulation</b> - Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	p. 30
<b>Purpose or research question</b> - Purpose of the study and specific objectives or questions	p. 31-2
<b>Qualitative approach and research paradigm</b> - Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale	p. 32-4
<b>Researcher characteristics and reflexivity</b> - Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability	p. 32
<b>Context</b> - Setting/site and salient contextual factors; rationale	p. 33
<b>Sampling strategy</b> - How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale	p. 33
<b>Ethical issues pertaining to human subjects</b> - Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	p. 34
<b>Data collection methods</b> - Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale	p. 34
<b>Data collection instruments and technologies</b> - Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	p. 34, Appendix A
<b>Units of study</b> - Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	p. 36-7
<b>Data processing</b> - Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts	p. 34-5
<b>Data analysis</b> - Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale	p. 35-6

<b>Techniques to enhance trustworthiness</b> - Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale	p. 36-7
<b>Synthesis and interpretation</b> - Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	p. 38-47
<b>Links to empirical data</b> - Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	p. 38-47
<b>Integration with prior work, implications, transferability, and contribution(s) to the field</b> - Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field	p. 47-52
<b>Limitations</b> - Trustworthiness and limitations of findings	p. 52
<b>Conflicts of interest</b> - Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	N/A
<b>Funding</b> - Sources of funding and other support; role of funders in data collection, interpretation, and reporting	N/A

*Note.* From *Standards for reporting qualitative research: a synthesis of recommendations*, by BC O'Brien, IB Harris, TJ Beckman, DA Reed, and DA Cook. *Academic Medicine*, Vol. 89, No. 9 / Sept 2014

## **Chapter 4. An Updated Model to Advance Nursing Workforce Research**

In the peri-pandemic era, issues in nursing such as burnout, exhaustion, turnover, and attrition from the profession gained national attention and led to increasing concerns about the sustainability of this vital workforce. Together, these issues represent a holistic view of outcomes for individual registered nurses (RNs) and the RN workforce as a population. To address these issues, strategies aimed at supporting and retaining the RN workforce should draw on existing data. However, little available data report the efficacy or inefficacy of various retention strategies. Instead, studies in the last 10 years have focused on describing specific features of individuals, workplaces, and organizations that lead to turnover, retention, or intentions to stay in or leave a job. While this literature provides detailed description of factors influencing RNs, the lack of a comprehensive model that considers broader contextual factors and a paucity of intervention data make it difficult to advance the science of supporting and retaining RNs. The purpose of this paper is to propose a model that allows for the comprehensive examination of holistic outcomes for RNs, with the goal of facilitating more robust examination of factors affecting RN outcomes and identifying targeted areas for intervention. The paper consists of three sections: first, a description of the current issues identified in RN workforce literature; second, a review of samples, methods, concepts, and models used to study these issues; and third, an explanation of the proposed model, including examples of its utility using recent studies.

### **Background and Significance**

There are three high stakes issues currently affecting the RN workforce: turnover, wellbeing, and equity. Turnover and related concepts describe the movement of RNs in and out

of jobs. Wellbeing includes multiple aspects of health such as physical, mental, emotional, spiritual, and professional domains. Equity refers to elimination of preventable differences in outcomes. While attention to equity is needed for many groups of RNs, including those with disabilities or diverse gender and sexual identities, this paper is focused on RNs who identify as Black, Indigenous, or other People of Color (BIPOC).

### **Turnover and Job Outcomes**

When studying the RN workforce, the main job outcome of interest has historically been turnover, or an RN leaving a job or organization, and its counterpart, retention, or keeping an RN in a job or organization. High turnover has multiple negative impacts on organizations, including financial repercussions, impacts on productivity and performance, and decreased quality of patient care. Turnover has been a priority topic due to its high financial impact on organizations, with costs of replacing an RN ranging up to 1.3 times an RN's annual salary.<sup>1</sup> One case study in high turnover reported costs of \$42,000-\$64,000 each to replace general and specialty RNs (2006 US dollars).<sup>2</sup> Turnover also negatively affects organizational performance in the areas of customer satisfaction and quality, loss of productivity in unit operations, and increased time requirements from administrators and human resources personnel.<sup>3</sup> At the unit level, high turnover rates may prompt further turnover of remaining RNs due to increased workload, loss of coworker expertise, and increased training of newcomers.<sup>2</sup> Turnover also impacts the quality of patient care and patient satisfaction,<sup>2-4</sup> with high turnover linked to patient falls,<sup>5</sup> medication errors,<sup>5</sup> and infection rates.<sup>6</sup> Despite these negative impacts of turnover, few published studies from the past decade report on interventions or solutions designed to mitigate turnover, even those which were not effective.<sup>7</sup> Data that do exist use inconsistent or ill-defined outcome definitions and measurements.<sup>7</sup> Researchers and organizations need clear, well-defined data and

published results in order to develop evidence-based strategies to retain RNs in the workplace.

### **Wellbeing**

Turnover and retention represent organization-focused outcomes that do not account for the entirety of individual RNs' experiences, nor do they give adequate information about the holistic health of this population of critical frontline workers. Even prior to the pandemic, RNs as a population of workers experienced poor health outcomes, with female RNs at greater risk for cardiovascular disease and poor health-related quality of life than other US females<sup>8</sup> and a high risk of musculoskeletal injury (lifetime prevalence 85%).<sup>9</sup> During the pandemic, RNs and other healthcare workers experienced higher exposure to COVID-19, sometimes without adequate protective equipment, and one study of healthcare workers showed that they were at least twice as likely to test positive for COVID-19 as the general population.<sup>10</sup> These physical risks, together with high reported rates of mental health symptoms such as stress and exhaustion, have contributed to high rates of RNs intending to leave (23%) or considering leaving (29%) their jobs within six months<sup>11</sup> (up from 18% and 11% respectively a year prior<sup>12</sup>). RNs thinking about leaving cite staffing issues (55%) and the negative impact of work on their own health (51%) as the primary reasons for wanting to leave.<sup>11</sup> Not only do these negative symptoms impact the RN's ability to be present and engaged in their life outside of work, but care quality and patient outcomes can be impacted as well.<sup>13,14</sup>

In the past decade, examination of turnover has been enhanced by consideration of personal job-related outcomes for RNs, including burnout, fatigue, stress, and other domains of holistic health or wellness. In studies of RN job outcomes, wellbeing was most often considered an antecedent or mediator between individual or organizational factors and the job outcome rather than an essential outcome in and of itself. With the widespread impact of the pandemic on

RNs' mental health, including increasing rates of post-traumatic stress disorder and suicide,<sup>15</sup> improving wellbeing must be considered a key outcome from a population health perspective in addition to a workforce sustainability perspective.

### **Equity**

To achieve equity within the nursing profession, attending to organizational outcomes such as turnover and individual outcomes such as wellbeing must include focus on groups of RNs experiencing poorer outcomes. Current data indicate that BIPOC RNs experience higher rates of stress and burnout as well as higher intent to leave the profession than white RNs.<sup>11,16</sup> Despite these disparate outcomes, few studies directly address the experiences of BIPOC RNs. The limited existing data show that BIPOC RNs experience both microaggressions and overt racism from patients, colleagues, and supervisors,<sup>17,18</sup> as well as other influences of systemic racism including biased processes of hiring, compensation, and promotion that favor white RNs.<sup>19,20</sup> While general work focused on supporting RNs in the workplace will help support BIPOC RNs, specific attention to systems and organizational factors is needed to ensure a lack of bias in policies and practices affecting RN employment and work, and to ensure that BIPOC RNs play key roles in developing and implementing strategies to support and retain RNs. Together, turnover, wellbeing, and equity are critical issues that must be addressed to ensure a healthy nursing workforce in the years to come.

### **Review of Existing Data**

Understanding available data about RNs requires attention to study samples and methods, key concepts, and the use of theories, models, and frameworks. Most data on RN job outcomes (including turnover, retention, and intent to stay or leave) in the past decade come from single sample studies of inpatient RNs within specific hospitals or organizations and without

meaningful comparison to a broader population of RNs.<sup>7</sup> Some studies develop or utilize national datasets such as the RN Work Project,<sup>21</sup> the Nursing Workforce Survey,<sup>22</sup> the National Sample Survey of RNs,<sup>23</sup> or the Current Population Survey (CPS) from the US Bureau of Labor Statistics.<sup>24</sup> However, because the sampling methods and survey foci differ, it is difficult to compare or integrate findings among these sources. Studies of RN turnover are primarily cross-sectional, descriptive studies, with fewer than 20% of current studies reporting results of an intervention to retain RNs or prevent turnover.<sup>7</sup> Of the limited intervention studies, primary areas of focus are new RN transition to practice and work environment.<sup>7</sup>

### **Concepts and Theory from Nursing**

Within nursing research, results from three recent systematic reviews show key concepts in RN job outcomes grouped at individual, unit, and organization levels.<sup>7,25,26</sup> Individual-level antecedents to turnover include basic demographics and education as well as measures of personal psychological traits or resources. Factors at the unit or workgroup level include job resources and demands, relationships with coworkers, and manager style or relationship. At the organizational level are elements of leadership, professional practice environment, politics, and structural or logistic elements such as academic affiliation or number of beds.

Studies of RN turnover use theory inconsistently. Some studies use theory and models to understand relationships among concepts, others name theories or models without identifying how data confirm or challenge the theory, and other published reports do not present any specific theoretical basis. Of 35 studies of RN turnover in the past decade, only 16 studies overtly used theory to examine RN job outcomes, and none of them utilized the same framework or model.<sup>7</sup> Several other systematic reviews developed helpful models for understanding the unique experiences of RNs as they influence turnover. A meta-analysis of international RN turnover

research was used to develop a model of turnover where the main antecedents were organizational tenure, role tension, job control, and leadership.<sup>26</sup> Each of these antecedents impacted turnover directly as well as through a series of mediators such as organizational commitment and job satisfaction, which were linked to turnover intent and actual turnover.

Another helpful model expanded on the Job Demands-Resources theory developed outside nursing.<sup>27</sup> A systematic review of work engagement among RNs was used to develop the Nursing Job Demands-Resources (NJD-R) model.<sup>25</sup> In this model, organizational, individual, and unit factors influence an RN's job decisions in a path that is partly mediated by work engagement. Work engagement is defined as feeling connected with one's work, which is a response to the job rather than a perception of workplace features. The NJD-R includes work engagement as an important mediator through which individual and organizational characteristics lead to job decisions. The main strength of this model is that it identifies not only the elements of structure, unit workflow, or individual traits that impact a job decision, but it also highlights the way an individual RN's responses to those factors plays a significant role in the eventual outcome. These models are primarily limited by the lack of systems and contextual factors influencing RNs, and a sole focus on turnover or retention rather than a more holistic measure that incorporates RN wellbeing as an important professional outcome and indicator of workforce participation.

### **Concepts and Theory from Organizational Behavior**

Key concepts and frameworks for understanding turnover also come from the field of organizational behavior. As a discipline, organizational behavior draws theoretical foundations from the fields of management and psychology, and its scholars have been studying turnover for over 100 years.<sup>4</sup> While the substance of turnover research has no frank disagreements with the

work done in nursing, the research in organizational behavior has shifted away from static measures of individuals and the workplace that are commonly used in nursing research. At the inception of turnover research, turnover was attributed to individual traits and states, including static characteristics such as education or personality or perceptions of the workplace.<sup>4,28</sup>

However, in the past several decades, the focus of turnover research has shifted to antecedents that describe employee decisions in the context of work, life outside of work, and individual responses to various experiences.<sup>28</sup> At the individual level, antecedents include job attitudes, shocks or other important experiences in the workplace, and links to work and life such as not switching jobs because an employer provides education benefits or access to childcare.<sup>4,29</sup>

Organizational factors include elements that affect work structures and reward/punishment mechanisms.<sup>4</sup> Factors at community or even systems levels are represented in concepts such as job embeddedness, discussed more fully below.

Unfolding, withdrawal, and embeddedness theories from organizational behavior provide helpful structures and concepts for understanding turnover. The unfolding theory of turnover details the processes employees go through when deciding to stay in or leave a job.<sup>30</sup> In this theory, the four main pathways to turnover included dissatisfaction, organizational changes, triggering of a preexisting plan to leave, and an extreme shock such as being asked by a supervisor to lie or act illegally.<sup>30</sup> Another framework defines withdrawal states, characterizing an employee's job status using their preferences about a job (desire to stay or to leave) and perceived control over a job decision (enthusiastic or reluctant).<sup>31</sup> The theory of job embeddedness includes three main elements: fit to a job or community, links to other people, and the perception of sacrifices incurred by a decision to leave work.<sup>28</sup> While some studies of RNs have incorporated concepts like job embeddedness, they are inconsistently used and generally

not well represented in the RN turnover literature.

In addition to these concepts and theories, specific recommendations from scholars in organizational behavior include measuring actual voluntary turnover rather than intentions, designing studies that seek to understand elements of change and time in turnover, measuring events that may serve as shocks, and closely analyzing multilevel contextual influences on workplaces and employees.<sup>32</sup> Overall, organizational behavior provides essential concepts, theories, and questions to use when assembling a new framework to advance the understanding of RN job outcomes.

### **Limitations of Current Data**

The descriptive studies making up most data about RN turnover provide solid information about factors influencing RN job decisions in specific settings (such as inpatient), but do not include updated concepts or theoretical structures that allow for deeper engagement with these workforce issues. Likewise, data have frequently focused on an RN's *intentions* to leave a job without measuring actual turnover or retention in a systematic and transparent way.<sup>7</sup> When models or frameworks are used, they often lack current concepts from multidisciplinary work on turnover and focus on static factors rather than processes or contexts in which RNs make job decisions.<sup>32</sup>

Another issue with current data is the prioritization of the presence of the RN in the job without exploring their engagement with work, so that an RN who stays in a job reluctantly and one who does so enthusiastically are counted as equal despite data showing important differences in employee performance in those situations.<sup>31,33</sup> Models typically do not include nor do they have the necessary structure to examine systems elements such as racism, regulation, or reimbursement that impact workplace experiences.<sup>14</sup> Without these elements, future research is

likely to miss critical opportunities to influence policy and practices that impact the work experiences of RNs, and cannot focus on equity as a critical influence in the workforce.

### **Proposed Model**

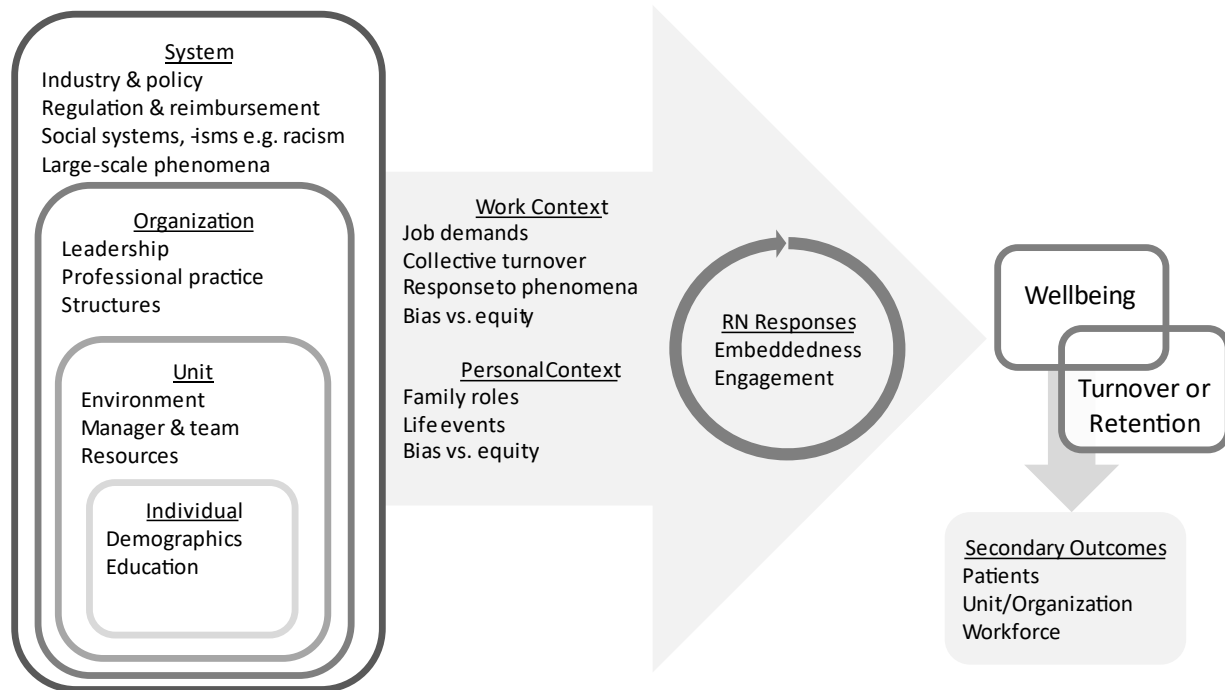
The experience of the pandemic has led to changing needs and an increased urgency to address RN job outcomes, wellbeing, and equity; this work requires current concepts and frameworks, accurate and replicable measurement of variables, and attention to situational contexts. It is imperative that research and practice are guided by a comprehensive model that allows for the inclusion of systems elements, personal and workplace contexts, and the RN's own responses to their situation. Working toward equity in the workforce requires the ability to identify and examine systems and organizational factors that benefit one group of RNs (i.e., white, heterosexual, non-disabled) over another. Using a unified model will provide meaningful data on which to base interventions aimed at supporting and retaining a diverse RN workforce. Widespread adoption of such a model can also help organizations and researchers avoid the tendency to repeat descriptive studies in similar populations without integrating new concepts, approaches, or interventions.

The proposed model, *The Dynamic Model of RN Job Outcomes (Dynamic Model; Figure 1)* builds on findings from several recent systematic reviews from within and outside of nursing and focuses on contextual factors that have previously been minimally addressed.<sup>4,7,25,33</sup> The model is designed to provide structure that accommodates the multiple data sources and concepts that have been used to describe turnover in RNs and the general workforce, assists in moving toward equity, and affords the opportunity for closer examination of RN wellbeing in the context of job decision-making. The name of the model comes from its representation of the dynamic contexts in which RNs live and work, and the term 'job outcomes' refers to the dual outcomes of

wellbeing and turnover or retention. The model shows antecedents embedded in rectangles at the left, and from those come a shaded arrow containing the categories of work and personal contexts with RN responses in the head of the arrow. The arrow points to the two linked outcomes of wellbeing and turnover or retention at the right side of the model. From those two outcomes, another shaded, unlined arrow points down to a shaded box of secondary outcomes. A more detailed narrative is available in Appendix A. Specific concepts listed in the antecedents, contexts, or responses are not intended to be an exhaustive list, but rather exemplify categories or types of elements that fit into the model.

**Figure 1.**

*The Dynamic Model of RN Job Outcomes*



*Note.* A detailed narrative of the model is available in Appendix A.

## **Antecedents**

Antecedents come from existing reviews and are grouped at the level of individual, unit/workgroup, and organization, all of which are surrounded and impacted by the current healthcare system. General categories are used to represent antecedents, for example 'structures' at the organization level represents internal policies and practices such as compensation, benefits, or advancement practices which could be further examined and defined. Including the healthcare system in this model allows for examination of the impact of regulation, reimbursement, and national/state/local healthcare policy on the various antecedents and the RN directly. The systems level also provides the opportunity to study the impacts of social issues such as systemic racism (or other -isms) and large-scale phenomena like the pandemic on RN outcomes. With respect to racism, the model refers to systemic and structural racism in the form of laws, policies, and practices or beliefs that extend the oppression of people of color. Within a racist system, organizations, units, and individuals can perpetuate racism.

## **Context**

A key feature of the model is the inclusion of the 'work' and 'personal' contexts, which follow recommendations from organizational behavior theorists to understand better the work and life circumstances in which employees make decisions about jobs.<sup>32,34</sup> These contextual factors are critical to understanding how RNs' responses to work experiences differ over time and with changes to the workplace. Because the actual work context may be rapidly changing (as was the case with COVID-19), grouping these factors with more stable individual and unit factors offers insufficient opportunity to understand how they impact an RN's job outcomes at a given point in time. Including work and personal contexts also supports the examination of experiences of race and racism, listed in the model as 'bias versus equity' as they impact

individual RNs at work and outside of work.

### **RN Responses**

The individual RN stands at the center of the model; their responses to the changing contexts of work and life directly impact their decision to stay or quit as well as their personal and professional wellbeing. RN responses represent another crucial element of context: the individual feelings that result from different experiences. In RN responses, engagement and embeddedness are established, measurable concepts from existing literature, with decreased levels of either response related to increased turnover rates.<sup>25</sup> Other concepts that can be examined as RN responses include resilience, which is not a fixed trait and can change over time and with different contextual factors or interventions.<sup>35</sup>

The circular arrow in this model represents time as an important context for RN responses and the decision-making processes RNs use. Assessing if and how RN responses change over time is an important line of study to further understanding their influence on job outcomes. Job decision-making is an important process that can result from a variety of experiences or triggers,<sup>30</sup> but there is little data in nursing research about the process for RNs. Understanding cycles of change in responses and even the frequency of RNs' job decision processes can aid in the development of strategies for supporting positive RN responses and providing additional resources at critical moments. Likewise, understanding which processes are common among RNs provides opportunities to mitigate turnover by increasing other supports. For example, if RNs are likely to respond to a manager leaving by quitting their jobs, organizations can collaborate with them to identify needed resources and supports prior to the manager's departure.

### **Outcomes**

The first outcome in the model is turnover or retention, with a focus on actual phenomena rather than job intentions as recommended by organizational behavior experts.<sup>4</sup> Any non-actualized intent to leave remains as part of the RN's individual responses and decision-making process. Focusing on the actual outcome allows us to correctly identify precursors and work to address them, even among RNs who form the intent to leave without yet acting on it. The outcome of turnover includes voluntary and involuntary turnover, allowing for examination of outcomes such as job loss due to systems or organizational changes such as business closure. Following recommendations from organizational behavior, identifying opposite outcomes of both staying and leaving better allows for integration of research on turnover and retention.<sup>28</sup>

The second outcome identified in the model is wellbeing, which includes multiple domains of health and wellness that impact an RN. In addition to these health outcomes, RNs' wellbeing in the context of both work and personal life affects their work experiences and job decisions, for example when inability to attend to the needs of their families makes it difficult to remain in the workforce.<sup>36</sup> Including wellbeing as a job outcome allows for a richer understanding of the RN and supports ongoing assessment of the impact of the global pandemic on RN health via personal and work-related demands and exposures.

The two outcomes are represented in close relationship with one another. Wellness domains are frequently viewed as antecedents of turnover, and in fact some data suggest that decreased wellbeing or burnout are associated with increased intentions to leave a job and actual turnover.<sup>37,38</sup> However, placing individual wellness only as a precursor to a job decision emphasizes an organizational point of view, namely that the most important outcome is an RN staying in a specific job. Including wellness as an outcome provides a system-level view that conveys the importance of RN wellbeing and retention in the nursing workforce more broadly.

The link between the two outcomes reflects the possibility that wellbeing and workforce retention are intertwined, and facilitates further examination of concepts such as ‘presenteeism’, when RNs come to work unwell and perpetuate their own burnout as well as affecting patient care outcomes.<sup>39</sup>

### **Distal Outcomes**

While this model primarily focuses on the factors leading to an RN’s job outcomes, some secondary effects are listed to underscore the ramifications of those outcomes. While some data suggest that clinicians experiencing burnout are more likely to make errors that impact the quality and safety of patient care,<sup>13</sup> little current research in nursing uses turnover rates as a predictor of unit-specific or organizational outcomes. One important result of turnover is the impact on patient care, which may occur due to logistics like staffing ratios and with changes to the engagement and wellbeing of RNs who remain in the workplace after colleagues leave. Other organizational impacts such as the cost of replacing RNs, decreased productivity, and unit functionality can be considered along with quality metrics like length of stay or infection rates.

### **Discussion**

The *Dynamic Model* combines evidence and theory from nursing and organizational behavior for a contextualized and situated understanding of factors driving RN job outcomes. The model pulls together key concepts such as engagement, embeddedness, and wellbeing to understand an RN’s responses to, and not just perceptions of, their work and life. This RN-centric model provides multiple opportunities to explore changes to work environments that increase an RN’s engagement with their work. The model also brings attention to the wellbeing of a population of workers who share similar experiences and exposures.

Perhaps the best utility of the *Dynamic Model* is the capacity to investigate and

understand the effects of the current global pandemic on RNs. The pandemic has influenced the healthcare environment from the macro- down to the microsystem and led to prolonged exposure to disease and stress among RNs around the world.<sup>40</sup> Initial experiences with high exposure, inadequate personal protective equipment, rapid pace of change, and conflicting messages from national leadership preceded a state of prolonged stress and increased workload. In their personal contexts, many RNs have also experienced illness and death in their families and communities. Research is needed to evaluate the impact of those contextual factors and to plan longitudinal work studying the effects of the pandemic on RNs' wellbeing and workforce outcomes; the *Dynamic Model* provides a useful framework to accommodate this type of study.

Several recent publications reinforce the structure and concepts presented in the proposed model. The *Systems Model of Clinician Well-Being* (see Appendix B) was developed by a National Academies on Science, Engineering, and Medicine task force.<sup>14</sup> The model relied on an extensive review of the multidisciplinary literature on clinician outcomes to create a model useful for guiding organizational and systemic work to prevent burnout and promote well-being. The model parallels the *Dynamic Model* in its inclusion of context, individual mediating factors that impact clinician wellbeing, and systems level antecedents that highlight the impact of the healthcare industry, regulation, and societal values on clinician outcomes.<sup>14</sup> Also recently released, the *Future of Nursing 2020-2030* report identifies the need for evidence-based strategies to attend to nurse wellbeing as well as addressing differences in compensation and barriers to practice that potentially impact an RN's response to specific work contexts.<sup>41</sup> The report calls for RNs to be at the forefront of initiatives to ensure health equity in the nation, which requires attention to equity within the profession. These critical needs are represented in the systems and organizational antecedents of the *Dynamic Model* as well as in the context and

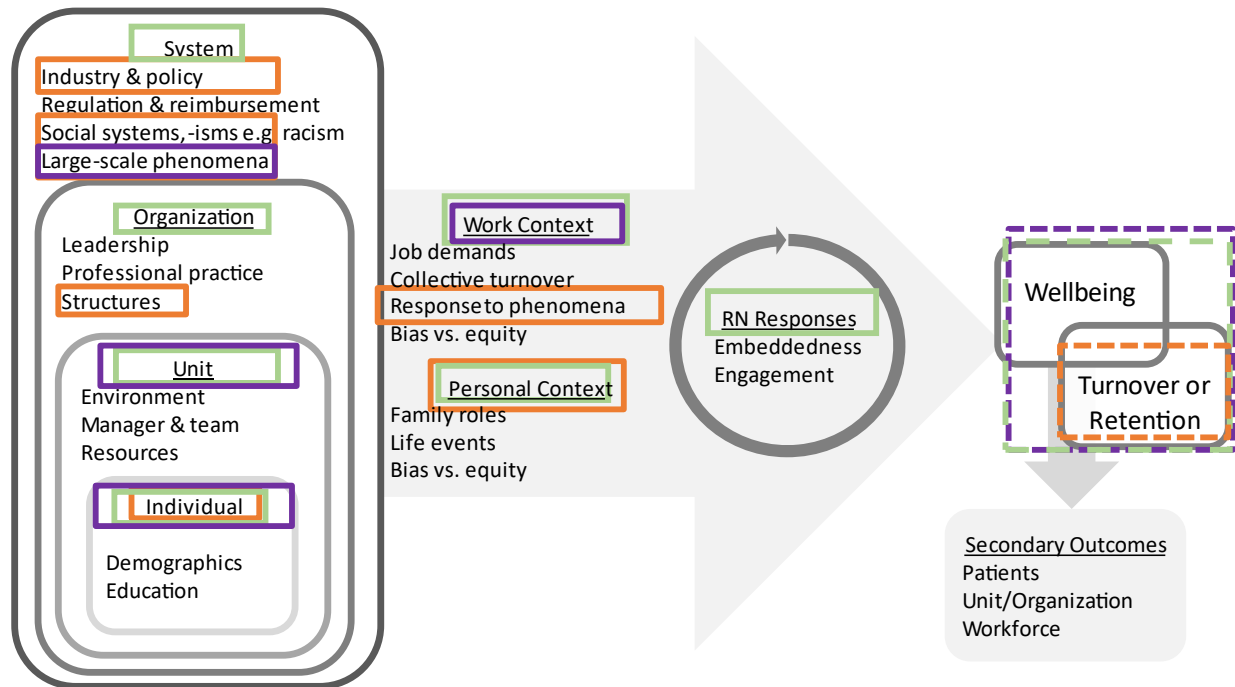
outcomes. Both the *Clinician Well-Being* and the *Future of Nursing* reports strengthen the timeliness, foundation, and applicability of the proposed model.

**Applicability**

Examples from current research show how the *Dynamic Model* can accommodate diverse types of data and concepts currently used in nursing workforce research. Several examples come from recent studies of BIPOC RN experiences during COVID (Figure 2, narrative available in Appendix C). The first study was a secondary analysis of CPS data examining the association of factors at multiple levels with specific job outcomes of RNs during COVID.<sup>42</sup> Next, a qualitative

**Figure 2**

*Recent Studies Showing the Utility of the Dynamic Model of RN Job Outcomes*



*Note.* Study concepts from a secondary analysis of a national dataset (orange),<sup>42</sup> a qualitative study (green),<sup>43</sup> and a large national survey (purple).<sup>44</sup> Outline of a category indicates that multiple concepts within that category were covered in the study.

study of BIPOC RNs focused on how the pandemic changed their sense of meaning in their work and showed the processes they used to make decisions about a job.<sup>43</sup> The third study examined the impact of caring for COVID-19 patients on RN job outcomes and perceptions of care.<sup>44</sup>

While these studies display its descriptive capabilities, the model also serves as a foundation for planning intervention studies. One example of a study using the model would be the development of an organization-wide ‘training team’ that deployed to units experiencing high turnover (‘unit’ and ‘work context’ categories). The team would help train incoming staff, decreasing the training burden on the RNs remaining on the unit. Outcome measures would be RN’s perceptions of their workload and support as well as measures of wellbeing (stress or burnout) and unit retention rates (collective turnover).

Looking at these different studies within the model show its utility for accommodating multiple study designs and complex factors and context that shape RN experiences. Use of the model can help progress research on RN turnover beyond similar descriptive studies and toward a focus on intervention as well as a more nuanced understanding of the experiences of RNs and their processes of being well and deciding to stay in the workforce.

### **Limitations**

While this model and similar evidence-based frameworks share key features and provide space to explore different concepts and contexts, there is much within the *Dynamic Model* needing evaluation or confirmation. It is difficult to capture the nuances affecting a person’s life, health, and job decisions in one model, particularly when examining the influences of racism and other societal biases. As with any new model, this one provides questions and opportunities to refine knowledge rather than providing answers. While future research may provide data that alter the model, it is likely that the structure of the model—an individual RN situated amid work

and family contexts—will remain relevant. Finally, while the model can provide information about factors influencing RNs, the urgent needs of the RN workforce also require study focused on developing and testing interventions needed to help RNs remain engaged, embedded, well, and working. The model can help provide direction for such research, and results should be examined within the model to identify or confirm relationships between antecedents, contexts, responses, and outcomes.

### **Conclusion**

Research around nursing job outcomes has become stagnant in its concepts and methods; an updated and comprehensive model is essential to advancing study of the nursing workforce. The proposed model weaves current theory and recommendations from organizational behavior with findings from nursing research, and its structure provides opportunities for exploring and understanding conceptual relationships more deeply. Widespread impacts to the RN workforce have created a need for transparent strategies and clear data, with a focus not just on the good of organizations, but on health and equity for individual RNs and the sustainability of a diverse nursing workforce.

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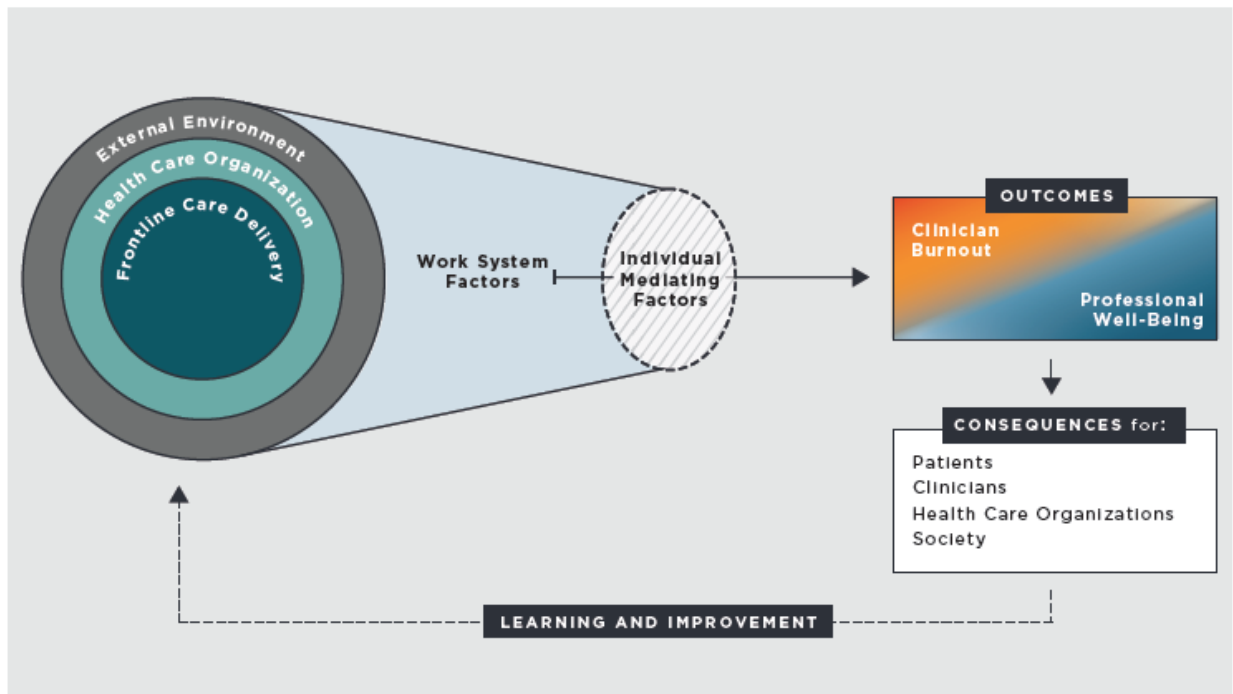
## Appendix A

### Narrative Guide to the *Dynamic Model of RN Job Outcomes*

*The Dynamic Model of RN Job Outcomes* shows a large set of embedded rectangles at the left, with individual level antecedents as the smallest rectangle located in increasing sizes of rectangles representing unit-, organization-, and systems-level factors that impact RN job outcomes. While not exhaustive, antecedents are listed for each of the different levels: demographics and education (individual); environment, manager and team, and resources (unit); leadership, professional practice, and structures (organization); and industry and policy, regulation and reimbursements, social systems and -isms, and large-scale phenomena (system). Coming out of that set of rectangles is a shaded, unbordered arrow. The body of the arrow includes the categories of work and personal contexts: work context includes job demands, collective turnover, response to phenomena, and bias versus equity; personal contexts includes family roles, life events, and bias versus equity. At the head of the arrow is a circular arrow with RN responses of embeddedness and engagement inside. The arrow points to two linked rectangles at the right side of the model, showing the outcomes of wellbeing and turnover or retention. From those two outcomes, another shaded, unlined arrow points down to a shaded box of secondary outcomes including patients, unit or organization, and workforce.

## Appendix B

### The Systems Model of Clinician Wellbeing



*Note.* From “Taking action against clinician burnout: a systems approach to professional well-being,” by the National Academies of Sciences Engineering and Medicine, 2019, Washington, DC: The National Academies Press.

## Appendix C

### Narrative Guide to Figure 2 Showing Examples of Model Use

In this model, several studies are represented as colored outlines overlaying the *Dynamic Model*. Outline of a category such as ‘individual’ or ‘work context’ indicates that multiple concepts within that category were covered in the study. The first study is represented in orange boxes. The boxes outline system-level factors of ‘industry and policy’ and ‘social systems’, ‘structures’ within the organization level, and individual factors. Both personal context and ‘response to phenomena’ within the work context are outlined along with the outcome of ‘turnover or retention’.

The second study (green) is a qualitative study of BIPOC RN experiences during COVID-19. All four levels of antecedents are outlined, as are both work and personal contexts, RN responses, and the dual outcomes of wellbeing and turnover/retention.

The third study, represented in purple, highlights individual and unit level factors as well as ‘large scale phenomena’ in the system factors. Work context is outlined as are both outcomes of wellbeing and turnover/retention.

## Chapter 5. Conclusion

The COVID-19 pandemic has heightened the urgency of addressing nursing workforce issues. However, the extant literature provides neither tested approaches nor a strong theoretical foundation to support specific strategies aimed at support and retention of the workforce.

Workforce research also lacks sufficient data specific to the population of registered nurses (RNs) who identify as Black, Indigenous, or other People of Color (BIPOC) and their workplace experiences and needs.

The three papers in this dissertation begin to fill several of these gaps and can serve as exemplars of how different methods fit together to create a more comprehensive picture of job experiences and outcomes for RNs. The first study highlighted specific factors that influenced immediate job impacts for RNs, reinforcing general labor data showing the disparate impacts of the pandemic on women and BIPOC workers. This study helps set the stage for further analysis of and response to the long-term impacts of the pandemic on the nursing workforce as well as spurring organizations to identify and ameliorate racist and sexist workplace policies affecting BIPOC RN employment. This secondary analysis also shows how a large ongoing national sample survey can be used to explore factors affecting the nursing workforce, with potential to explore longitudinal outcomes and look in greater detail at personal and family characteristics that affects RNs.

Rather than just understanding RN experiences, data from the second study create a richer, more nuanced picture of RNs in the context of both work and life. In particular, data show how RNs evaluated a variety of factors when weighing a decision to leave a job, organization, or the profession. Study findings also provide valuable information for understanding the various

ways racism impacts BIPOC RNs in the workplace. The phenomenological approach in this study is useful for further research attempting to understand how other factors impact RNs' perceptions of and responses to various work and personal contexts, and how those responses affect both job decisions and wellbeing.

Finally, *The Dynamic Model of RN Job Outcomes* provides a practical framework for integrating diverse data sources to create a comprehensive understanding of RN job outcomes. Building on data, concepts, and theory from organizational behavior as well as nursing, the model promotes the advancement of workforce research and a move to study diverse work settings along with development and testing of strategies to support RNs.

### **Directions for Future Study**

Findings from this dissertation can help advance nursing workforce research in several key areas. The experiences of RNs in the workforce during the pandemic are unique, and the contexts and responses to that situation need to be examined within a comprehensive and holistic model. Rather than just identifying RN job outcomes and decisions throughout the COVID-19 era, studies should examine the relationship between initial outcomes and ongoing experiences or subsequent job decisions to shed light on how work history impacts an RN's career trajectory. Given the current high number of RNs declaring intent to leave, an examination of what happens when RNs want to leave but are unable to do so can help identify the factors that hold RNs in jobs and sustain employment through challenging times while also assessing how an RN's desire to leave a job impacts the work unit and patient outcomes. RN job decisions also need to be placed in the context of systemic issues that impact their personal and family lives. Recognizing the contexts in which RNs live and work leads to an improved grasp of the processes they use to make decisions about a job. As part of understanding context, examining the experiences and job

decisions of working parents is essential to retaining them in the nursing workforce while enabling them to care for their families.

Nursing workforce science needs greater breadth and depth of work addressing equity. Uncovering experiences of racism within and outside of the workplace are critical to a thorough understanding of BIPOC RN job outcomes. Future research needs to specifically assess the experiences and needs of BIPOC RNs in different healthcare work environments. Interventions designed at providing support and equity in the workplace will benefit all RNs and potentially help mitigate the disparate rates of dissatisfaction and turnover among BIPOC RNs. Existing qualitative work and meta-synthesis of such work should inform the development and delivery of those strategies. For example, future research could examine the impact of scheduling practices on the ability of BIPOC RNs to apply for jobs in an outpatient setting. Workplaces could trial a program offering supports for parents such as links to nearby childcare or flexible shift lengths, assessing work engagement and retention over time. Other strategies should aim to create an environment where RNs can process the difficult situations they have encountered during the pandemic and have the opportunity to be well as they continue being active participants in the RN workforce.

### **Research trajectory**

Together, these studies provide a foundation for a research trajectory focused on examining RN workforce outcomes from a systems perspective and identifying ways to increase transparency and transferability of RN workforce research. While RNs of all races are affected by these issues, a focus on BIPOC RN representation and participation in this work may help mitigate the disparate outcomes they experience. Examples of research topics include the following:

- Within a specific locale (e.g. Washington state), what retention strategies have RN employers utilized, what types of data are collected, and what sources do they use to identify retention strategies? Have these strategies focused on BIPOC RNs, and if so, what were those outcomes?
- What community and organizational practices and characteristics affect the viability or desirability of a workplace for BIPOC RNs?
- What are the processes through which healthcare regulation and reimbursement practices affect RNs and other clinicians? What are the distal impacts to patient care?
- How does clinician satisfaction with the care they give compare to patient satisfaction and patient outcomes? How should that data inform reimbursement practices centered around value, which includes patient satisfaction scores? How do those practices impact the workplace and job outcomes for RNs and other clinicians?

### **Implications for Nursing Science**

Nursing science has a strong focus on the promotion of an individual's wellbeing within their environments, which can extend from cellular processes to social systems. In the same way that nurse researchers have examined individuals and populations with specific diseases or health conditions, it is critical to examine the nursing workforce as a population at risk of poor health outcomes. The work is even more important when considering the societal sequelae of having an inadequate supply of RNs and particularly a lack of RNs representing marginalized populations.

The RN workforce has historically experienced high turnover rates, and the experience of working during a pandemic will likely exacerbate issues driving turnover in the years to come. To improve outcomes for BIPOC RNs and RNs of all races, healthcare employers and researchers share responsibility to ensure that research focuses on holistic support of RNs and

recognition and elimination or mitigation of any systems factors driving negative outcomes. A stable and healthy RN workforce is vital to meeting the healthcare needs of diverse populations and leading the nation toward health equity.