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RESEARCH ARTICLE

Professional Quality of Life and Fear of COVID-19 Moderated by Perceived Job Market Outlook: Predicting Registered Nurse Turnover Intentions in South Florida during the COVID-19 Pandemic

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Abstract:

Background:

The nursing shortage and the aging of the nursing workforce is a growing concern for health care institutions. Understanding nurses attitudes toward turnover intentions is a crucial step to develop effective policies and maintain nurse staffing continuity.

Objective:

This research aims to study the impact of the Professional Quality of Life and Fear of COVID-19 moderated by perceived Job Market Outlook on South Florida registered nurses by predicting turnover intentions.

Methods:

From March to August, 2021, 202 registered nurses from seven South Florida counties completed the self-reporting Professional Quality of Life, Fear of COVID-19, and perceptions of Job Market Outlook surveys when predicting turnover intentions in a quantitative nonexperimental predictive correlational design research study.

Results:

Results showed that in the professional quality of life, burnout significantly predicted (p <.001) registered nurses (n=202) turnover intentions during the COVID-19 pandemic. Secondary traumatic stress, compassion satisfaction and fear of COVID-19 did not significantly predict registered nurses' turnover intentions. Hierarchical regression analysis confirmed burnout is significantly more predictive than no model of turnover intentions accounting for more variance at 15.45% (p < .001). Perceived job market outlook did not moderate between the independent variables and the dependent variable turnover intentions.

Conclusion:

This research reveals the deleterious impact of burnout in the registered nurses' professional quality of life and turnover intentions warranting the need for health care institutions and nursing leadership to collaborate on the needs of the nursing workforce on a micro and macro level.

Keywords: Professional quality of life, Fear of COVID-19, Perceived job market outlook, Registered nurses, Turnover intentions.

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1. INTRODUCTION

The demands of the healthcare system, including high expectations, time constraints, a lack of social support, and a sense of inadequate skills to address patient suffering, can lead to severe stress in healthcare providers, which affects their health and performance and impacts job satisfaction, workforce stability, retention, workplace wellness, and patient outcomes [1]. However, nurses play a critical role during emergency and disaster situations [2], and even though nurses remain committed to this role, the unprecedented pressure exerted by the COVID-19 pandemic on every country's healthcare system has presented various challenges that could affect nurses' well-being and work well-being [3].

A professional quality of life (ProQOL) has emerged as a growing interest in the healthcare literature, centered on

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concerns about professionals' compassion within a context of work characterized by pain and death [4]. From the beginning of stress research, working in social and health services has been pointed out as particularly stressful [5].

Compassion fatigue (CF) describes a work-related stress response in healthcare providers, which is considered the cost of caring and a key contributor to the loss of compassion in healthcare [1]. The most commonly used definition of CF is Figley's "secondary traumatic stress reaction resulting from helping, or desiring to help, a person suffering from traumatic events" (p. 271) [6]. Studies have revealed that burnout (BO) and secondary traumatic stress (STS) are associated with CF [7]. Burnout consists of three components: fatigue, pessimism, and loss of efficacy [8]. Additionally, it is also associated with symptoms, such as emotional exhaustion, irritability, disappointment, and indifference, which decrease both the quality of care and patient satisfaction [7, 8]. Secondary traumatic stress is the consequence of constant exposure to the suffering of others and not the result of a person's direct exposure to an accident [7]. Over the past few decades, there has been increasing concern about trauma due to higher rates of traumatic events caused by natural and man-made disasters [9]. Traumatic stress is an emerging concept introduced in the nursing literature to better understand the experiences of nurses who provide care for traumatized patients [10]. The primary symptoms of stress include disturbing thoughts, irritability, sleep problems, and fear that affect the quality of care provided to patients [11]. Unfortunately, the risk of stress and other related variables, such as CF, is high in this cohort [12], prompting nurses to leave their jobs owing to a sense of dread and helplessness [13].

Compassion satisfaction (CS) is a positive aspect of caring for others and is contrary to CF [7]. It is defined as a positive feeling of being able to relieve the confusion of others and satisfaction with the ability to perform one's job correctly [14]. Compassion satisfaction enables nurses to enjoy their work by helping others [7], whereby nurses experience an intrinsic sense of fulfillment derived from their work in caring for other people [15]. Therefore, positive emotional aspects, such as CS, must be encouraged while CF is recognized and addressed [16].

Excessive fear, alongside the social, economic consequences, can impair individuals' rational thinking behavior and may lead to mental-health suffering and challenges [17 - 20]. Evidence has shown a significant association between the COVID-19 outbreak and adverse health issues, such as stress or BO, depression, and anxiety [21 - 24]. The severity and fatality of and susceptibility to disease can create or intensify anxiety and fear among nurses, potentially affecting their health and well-being while working effectively during times of an infectious epidemic crisis [17].

2. MATERIALS AND METHODS

2.1. Study Design

It is a quantitative nonexperimental predictive correlational research aimed at studying the professional quality of life and fear of COVID-19 moderated by perceived job market outlook, predicting registered nurse turnover intentions in South Florida during the COVID-19 pandemic.

2.2. Sample

The target population was (a) active registered nurses with licenses, (b) registered nurses who are practicing, (c) full-time employees at a health care facility (> 40 hours), (d) with a registered hospital/clinic address in Broward, Collier, Hendry, Lee, Miami-Dade, Monroe or Palm Beach counties in South Florida, and (e) who have a listed email address. Registered email addresses were obtained through the Florida Department of Health-Healthcare Practitioner Portal database. Surveys were distributed *via* Qualtrics, where participants were presented with a letter of invitation and required to read the implied consent form before proceeding.

2.3. Instruments

This study utilized a self-reporting survey composed of two major sections. The first section included demographic questions (age, gender, ethnicity, county of employment, nursing degree, tenure as full-time RN, tenure with current employer, and work setting) listed in Table **1**. The Perceived Job Market Outlook survey (PJMO) is listed in Table **2**. The second section was composed of the Professional Quality of Life survey (ProQOL-5), Fear of COVID-19 survey (FCV-19), and Turnover Intention Scale (TIS-6).

Table 1. Participants' demographic characteristics (n=202).

Characteristics	N (202)	%
Age	56-65	34%
	46-55	24%
	36-45	17%
	26-35	13%
	66 or older	9%
	18-25	3%
Gender	Male	74%
	Female	23%
	Other	3%

(Table 1) contd.....

Characteristics	N (202)	%
Ethnicity	White	50%
	Hispanic or Latino	23%
	Black or African American	15%
	Asian or Pacific Islander	6%
	Other	5%
	Native American or American Indian	1%
County	Broward	29%
	Miami-Dade	27%
	Palm Beach	22%
	Collier	7%
	Other	6%
	Lee	4%
	Hendry	3%
	Monroe	2%
Degree	Bachelor's	46%
	Associates	24%
	Master's	21%
	Doctorate	9%
Tenure (RN)	>20 years	48%
	9-14 years	14.5%
	15-19 years	14.5%
	4-8 years	13.9%
	1-3 years	7.5%
	<1 year	1.7%
Tenure (with employer)	1-3 years	29%
	4-8 years	19%
	9-14 years	16%
	>20 years	15%
	<1 year	12%
	15-19 years	9%
Work Setting	Acute Care	52%
	Ambulatory Care	16%
	Other	10%
	Home Health	6%
	Academic	5%
	Hospice	3%
	Long Term Care	3%
	Psychiatry	2%
	Rehabilitation	2%

Table 2. Perceived job market outlook (n=202).

The Job Market in my Industry is Strong	There are many Job Openings in my Industry	If I Left my Job, I could Easily Find Work	I am not Comfortable Looking for a New Job during the Pandemic
Strongly Agree 51%	Strongly Agree 58%	Strongly Agree 50%	Strongly Agree 23%
Somewhat Agree 24%	Somewhat Agree 21%	Somewhat Agree 29%	Somewhat Agree 16%
Neither Agree/Disagree 13%	Neither Agree/Disagree 8%	Neither Agree/Disagree 6%	Neither Agree/Disagree 17%
Somewhat Disagree 9%	Somewhat Disagree 7%	Somewhat Disagree 8%	Somewhat Disagree 19%
Strongly Disagree 3%	Strongly Disagree 4%	Strongly Disagree 7%	Strongly Disagree 25%

The ProQOL-5 survey is a self-report 30-item Likert-type scale [7]. It reflected if the respondents had experienced BO, STS, and CS in the last 30 days. The alpha scale reliability was BO (0.75), STS (0.81), and CS (0.88) [7]. Scoring was as follows: 1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Very Often. Each section was scored independently, and the rating scale showed the following: 22 or less was low, 23-41 was moderate, and 42 or more was high [7]. Reverse scoring was required for questions 1, 4, 15, 17, and 29 in the burnout scales [7]. For this study, the alpha scale reliability testing showed Cronbach's α for BO (0.82), STS (0.82), and CS (0.91), respectively.

The FCV-19 survey is a seven-item unidimensional scale with robust psychometric properties [17]. It is considered valid; moreover, total scores on the FCV-19 scale are comparable across both genders and all ages, which suggests that it is a useful psychometric instrument. Therefore, developing a brief and valid instrument to capture an individual's fears of COVID-19 is both timely and essential so that healthcare providers can further design programs to take care of fear [17]. The alpha scale reliability was 0.82, and test-retest reliability (intraclass correlation = 0.72) was acceptable [17]. Participants indicated their level of agreement with the statements using a five-item Likert-type scale. Answers included "strongly disagree," "disagree," "neither agree nor disagree," "agree," and strongly agree." The minimum score possible for each question was 1, and the maximum was 5. A total score was calculated by summing each item score (ranging from 7-35). The higher the score, the greater the fear of the coronavirus-19

[17]. For this study, the alpha scale reliability testing showed a Cronbach's α for FCV-19 as 0.85.

The original version of the Turnover Intention scale [25] contained 14 items and used a 5-point Likert scale for measurement [26]. In a study predicting the turnover intention of professional nurses [27], an updated version of the Turnover Intention scale included 15 items on a 5-point Likert scale [28]. A shortened six-item version of the original intention scale was later published [25]. The Turnover Intention scale-6 (TIS-6) was designed and tested with research participants (n=2429) of a South African information, communication, and technology company. The alpha scale reliability was 0.80, confirming the overall reliability [25]. Each item on the TIS-6 was ranked on a five-point Likert-type scale. A total score of 18 or higher indicated an intention to leave, and scores less than 18 indicated an intention to stay [24].

For this study, Cronbach's α for the TIS-6 instrument was 0.62, which is slightly below the acceptance level. The term anticipation means "looking forward" to a future event or state, sometimes with an affective component, such as pleasure or anxiety [29], whereas the anticipation of a difficult cognitive task correlates with negative emotions [30]. By removing Q6 on the TIS-6 instrument "How often do you look forward to another day at work?" the Cronbach's α was 0.78. Therefore, the abridged version of the TIS-6 is now labeled the Turnover Intention scale (TIS).

The PJMO survey was originally developed by asking four questions pertaining to frontline hotel employees' perception of the job market during the pandemic in the last 30 days [31]. Participants indicated their level of agreement with the statements using a five-item Likert-type scale. Answers included "strongly agree," somewhat agree," neither agree/disagree," somewhat disagree," and strongly disagree" [31].

For this study, Cronbach's α for the PJMO instrument was 0.52, which is below the level of acceptance. The original PJMO survey also yielded a low Cronbach's α of 0.620, which may be attributed to participants' perception of their comfort level [31]. Therefore, Q4, " I am not comfortable looking for a new job during the current pandemic," was removed and yielded a Cronbach's α of 0.837 [31]. By removing Q4 for this study, Cronbach's α was 0.82 and labeled as Perceived Job Market 2 (PJMO2).

2.4. Data Analysis

A non-experimental, predictive design was used for this study. Two tests were run with multiple linear regression followed by a hierarchical regression analysis for model one (RQ1). Hierarchical regression analysis is typically used to determine whether an independent variable explains variance in a dependent variable after accounting for all other variables [32]. Model one includes the independent variables burnout (BO), secondary traumatic stress (STS), compassion satisfaction (CS), fear of COVID-19 (FCV-19), and the dependent variable turnover intention (TIS). A multiple regression analysis was conducted on model two (RQ2), which has the same independent variable and dependent variables, except adding perceived job market 2 (PJMO2) as the moderating variable. Data were analyzed using the IBM Statistical Package for the Social Sciences (SPSS) version 23. Descriptive statistics (histogram, linearity, normal p-plot, collinearity statistics, homoscedasticity, and scatterplot) determined that the independent variables (BO, STS, CS, FCV-19), dependent variable (TIS), and moderating variable (PJMO2) all met assumptions of normality. The Durbin-Watson parameters were also acceptable, indicating independence of observation. The level of significance was defined at p-value < 0.05 with a minimum required sample size of 129, as determined by G*Power 3.1.

3. RESULTS

The results of the study are based on two research questions:

RQ1: Do burnout, secondary traumatic stress, compassion satisfaction, and fear of COVID-19 predict registered nurses' turnover intention in South Florida during the COVID-19 pandemic?

After complete analysis, a total of 202 surveys collected from March 1st to August 6th, 2021, were deemed acceptable for the study. Multiple linear regression analysis for model one (Table **3**; Coefficients) indicates that the independent variable BO has a significant positive relationship with the dependent variable TIS ($p < 0.001$). Whereas the remaining independent variables of STS ($p > 0.789$), CS ($p > 0.756$), and FCV-19 ($p > 0.316$) are not statistically significant. The beta coefficient for BO is 0.407 ($p < 0.407$), meaning that for every 1 increase of BO, TIS increased by 0.407.

Table 3. Coefficients (n=202).

Model One	B	Std. Error	Beta	t	Sig
1 (Constant)	1.940	.724	.407	2.680	.008
BO	.493	.148	-.026	3.334	.001*
STS	-.031	.115	-.034	-.268	.789
CS	-.036	.116	-.081	-.312	.756
FCV19	-.078	.078		-1.005	.316

Note: (a) dependent variable: turnover intention.

A hierarchical regression analysis of research question one (Table **4**; Model Summary) shows that BO is significantly more predictive of TIS than other models as it accounts for more variance at 0.154 (15.4%) at $p < 0.001$. Model two (block 2 in SPSS) accounts for 0.162 (16.2%) of the variance when the other independent variables (STS, CS, FCV-19) are added with BO with an incremental *R2* square change of 0.008. However, this is not statistically significant at $p > 0.589$.

Table 4. Model summary (n=202).

Model	R	R Square	Adjusted R Square	Std Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.392a	0.154	0.149	0.75304	0.154	36.322	1	200	0.000*
2	0.402b	0.162	0.145	0.75507	0.008	0.642	3	197	0.589

Note: (a) predictors (constant), burnout, (b) predictors (constant), burnout, fear of COVID-19 secondary traumatic stress, compassion satisfaction, (c) dependent variable: turnover intention.

Therefore, for research question one, the alternative hypothesis H1a is supported. The alternative hypotheses for

H2a, H3a, and H4a are not supported (Table **5**).

Table 5. Hypotheses summary results of research question one (n=202).

H1a	**Burnout is a significant predictor of registered nurses' turnover intention in South Florida during the COVID-19 pandemic.**	**Supported**
H2a	Secondary traumatic stress is a significant predictor of registered nurses' turnover intention in South Florida during the COVID-19 pandemic.	Not Supported
H3a	Compassion satisfaction is a significant predictor of registered nurses' turnover intention in South Florida during the COVID-19 pandemic.	Not Supported
H4a	Fear of COVID-19 is a significant predictor of registered nurses' turnover intention in South Florida during the COVID-19 pandemic.	Not Supported

RQ:2 Do perceived job market outlook moderate burnout, secondary traumatic stress, compassion satisfaction, fear of COVID-19, and registered nurses' turnover intention in South Florida during the COVID-19 pandemic?

Table **6** (Coefficients) shows the moderating variables entered where the BO, STS, CS, and FCV-19 (independent variables) are multiplied with perceived job market outlook 2 to uncover the statistical interaction of the independent variables and the dependent variable (TIS). The results showed that the moderating variable perceived job market outlook 2 (burnout, secondary traumatic stress, compassion satisfaction, fear of COVID-19) is not statistically significant

Table 6. Coefficients (n=202).

Model	B	Std. Error	Beta	t	Sig
1 (Constant)	0.600	1.194	0.521	0.503	0.616
BO	0.630	0.175	0.089	3.598	0.000
STS	0.106	0.148	0.052	0.717	0.474
CS	0.055	0.132	0.108	0.421	0.675
PJMO2	0.087	0.080	0.052	1.079	0.282
FCV19	0 .051	0.117	-0.272	0.432	0.667
MV_BO_STS_CS_FCV19	-0.002	0.001		-1.466	0.144

Note: Dependent variable: turnover intention.

$p > 0.144$. Research question 2 showed no statistical interaction between perceived job market outlook 2 (moderating variable) and turnover intention (dependent variable).

Therefore, for research question two, the alternative hypothesis for H1a is not supported (Table **7**).

Table 7. Model two hypothesis summary results (n=202).

H1a	**Perceived job market outlook 2 moderates burnout, secondary traumatic stress, compassion satisfaction, fear of COVID-19, and registered nurses' turnover intention in South Florida during the COVID-19 pandemic.**	**Not Supported**

4. DISCUSSION

All healthcare professionals, especially nurses, are affected psychosocially due to the uncertainty and work intensity experienced during the COVID-19 pandemic [33]. This research has uncovered the impact of BO on RNs in South Florida during the COVID-19 pandemic. Research question one showed a statistically significant relationship ($p < .001$) of BO with RNs TIS. Hierarchical regression analysis further confirmed that when compared to other models, BO is more predictive of TIS and accounts for a variance of 15.4% ($p < .001$). The presence of BO is the negative half of CF, while STS is the other half of the ProQOL model [7].

It has been stated that at least 50% of caretakers across medical fields reported serious symptoms of BO, including emotional exhaustion, cynicism, and a low sense of professional accomplishment [34]. Recent studies have uncovered that the prevalence of BO among nurses in the United States ranged from 35-45% [35] and that nurses have twice the rate of depression compared to other healthcare professionals [35 - 38]. Nurses experiencing BO may also have problems with concentration and memory, which are very important in clinical units [39].

During the COVID-19 pandemic, it was seen that working for long periods in an environment with a high level of stress and uncertainty, relocating nurses' units or wards and increasing workload caused nurses to experience BO more rapidly [33]. Nurses are considered the frontline interface with patients, and they suffer more COVID-19-related fatalities than any other classification of healthcare worker [40]. Unfortunately, the incompatibility between the ideal expectations of the nursing profession and the situations encountered in real life also brings about BO [41]. With increasing demands placed on frontline nurses during the COVID-19 pandemic, there is an urgent need to address BO among nurses [42] whereby complicating the fact that turnover leads to staff shortage, affecting patients' safety and nurses' ability to meet patients' needs by providing quality care [43].

Research question two uncovered that even though respondents appeared to be optimistic about the perceived job market opportunities in South Florida, PJMO2 did not moderate between the independent variables BO, STS, CS, and FCV-19 ($p > 0.144$) and the dependent variable TIS. This is not a surprising result since there is a need for RNs in a market that is already understaffed.

Statistics prove that RN jobs are on the rise, with more than 438,000 RN jobs needed by 2026, equating to a 15% jump in employment opportunities, doubling the total of all occupations which is at 7% [44]. The average wage for RNs is $75,330, and RNs living in Florida have the third-highest employment at 183,130, with an hourly mean wage of $33.42 and an annual mean wage of $69,510 [44]. Specifically, Miami, Fort Lauderdale, and West Palm Beach are all in the top ten metropolitan areas in the United States, employing 53,900 RNs with an annual mean wage of $72,300 [44].

4.1. Organizational Strategies to Reduce Burnout

The Mayo Clinic developed nine evidence-based organizational strategies that health system leaders could use to assess the strengths and challenges in their organizations. These data could help in the implementation of relevant strategies to promote engagement and reduce the BO of caregivers [45]. Many ideas are considered inexpensive and

demonstrate significant impact [46], including (a) Acknowledging and assessing the problem: Staff responds to sincere discussions with health system leaders and managers that reflect a genuine commitment to solving the problem and fostering well-being; (b) Harness the power of effective leadership: The impact of toxic leadership on worker BO and well-being is proven. Effective leaders need to receive evaluative feedback about their leadership behaviors from those they lead. Health boards need to "have the courage" to make leadership changes when required; (c) Develop and implement targeted interventions: External compliance factors can increase pressure on health system leaders, managers, and practice leaders. Expectations of increased productivity, excessive documentation, and administrative burden are drivers of burnout. Factors requiring improvement must be identified in each department. Targeted interventions can then be developed and implemented to ensure maximum local impact and effectiveness; (d) Cultivate community at work: Formal and informal support is important to physicians and nurses. However, structural changes, such as the loss of dedicated space to share ideas with colleagues, have resulted in a loss of relationships and connections and eroded peer support and a sense of community. The "pause" is another strategy practiced in emergency and other clinical settings to honor the caring work for patients who die. It is a minute of stillness when clinicians pause, listen to their breathing, focus, and prepare to care for the next patient with calmness and compassion [47]. This strategy could be comforting for nurses caring for patients dying of COVID-19; (e) Use rewards and incentives wisely: Now more than ever during the COVID-19 crisis, leaders should collaborate with staff to identify ways to acknowledge and reward effort [48]. Productivity-based compensation can encourage overwork, over-servicing, and increasing BO. Greater work-life flexibility (strategy seven) has been considered a valued reward. Now flexibility is a necessity. Reward and incentives convey respect and appreciation and encourage work to fulfill organizational caring goals; (f) Align values and strengthen culture: The triple bottom line model evaluates alignment between "what we say we do" (mission, values), "what we do" (actions and culture), and "what others say we do" (*i.e*., patients, families, community stakeholders). The question is whether the values and actions are aligned to foster a healthy culture, staff well-being, optimal practice environments, and quality care delivery which requires collaborative dialogue and deliberative action to address any barriers undermining this goal; (g) Promote flexibility and work-life integration: The drivers of BO can be embedded in rigid and out-of-date policies. It is wise to promote flexible, family-friendly work environments that meet the needs of a diverse workforce [49]. Leaders need to be sincere about understanding what motivates their staff to do their best work and support work-life integration. Leaders need to promote flexibility so staff can adapt their work hours to accommodate personal obligations, provide coverage for vacation, studying, and important life or family events; (h) Provide resources to promote resilience and self-care: Leaders can work with staff to co-create essential resources to cope with work-related stress to prevent BO and promote well-being and self-care. Meditation can improve emotion regulation and resilience [50]. Staff committed to self-care and work-life integration are better prepared to care for patients and fulfill the organizational mission; (i) Facilitate and fund organizational science: Leading healthcare organizations (*i.e*., Mayo Clinic) have the added responsibility to contribute to organizational science to generate robust scientific evidence about national benchmarks and evidence-based instruments that other organizations can implement to reduce BO and promote staff-well-being and engagement.

CONCLUSION

This study provides a better understanding of which independent variables of BO, STS, CS, and FCV-19 predicted TIS in RNs in South Florida during the COVID-19 pandemic. A multiple linear regression analysis proved that BO significantly predicted RNs' TIS ($p < 0.001$). A hierarchical regression analysis confirmed that BO was statistically significant when predicting RNs' TIS (15.4% variance; $p < 0.001$) in South Florida during the COVID-19 pandemic. Furthermore, STS ($p > 0.789$), CS ($p > 0.756$), and FCV-19 ($p > 0.316$) were not statistically significant when predicting RNs' turnover intention.

This study also provides a better understanding of whether the perceived job market outlook moderates the independent variables (BO, STS, CS, and FCV-19) and the dependent variable TIS. A multiple linear regression analysis confirmed that PJMO2 was not statistically significant ($p > 0.144$) and did not moderate the independent and dependent variables when predicting RNs' TIS in South Florida during the COVID-19 pandemic.

This research confirmed that BO was a significant predictor of RNs' TIS in South Florida during the COVID-19 pandemic, warranting further research and proposals to eliminate BO in the healthcare community.

IMPLICATIONS

This is the first known research study designed specifically to examine the professional quality of life (ProQOL), fear of COVID-19 (FCV-19), perceived job market outlook (PJMO), and registered nurses' (RN) turnover intentions (TIS) in South Florida during the COVID-19 pandemic. It has been observed that the COVID-19 pandemic accelerated many negative repercussions of uncertainty and inadequate support [51].

The objective is to further prepare the medical community, in this case, RNs, for future calamities, such as a pandemic, and reduce CF (BO and STS), particularly BO, and turnover intentions in the nursing community, which continues to be an area of concern, whereby COVID-19 seems to exacerbate the problem further, as evident from the continued pandemic outbreak in South Florida in 2021.

Data analysis illustrates that creative solutions and collaborative healthcare efforts are necessary for optimizing patient care [52]. Interprofessional teams need to lean on one another emotionally and professionally in dealing with deep stress and uncertainty in practice, while intraprofessional collaboration is fundamental when implementing new ideas to reduce nurses' fatigue and BO in the clinical setting [52]. For example, during COVID-19, nurses reached out through social media to political and nursing leaders to advocate for change, thus using more technology to identify and manage COVID-19

[53]. Nurses critiqued the quality of information available during the global pandemic, reflecting the scientific uncertainty that characterized its early stages. Nurses emphasized the need to distinguish between misleading information versus emerging scientific evidence to inform the public health response. Furthermore, nurses used Twitter and other social media platforms to voice their pride in their profession and advocate for greater recognition of their role in responding to public health emergencies [54].

LIMITATIONS

This research focused on the registered nurses in all disciplines in and outside the hospital of the seven counties in South Florida. However, the research did not elaborate on the differences or similarities between these disciplines. For example, in an intensive care unit, a nurse's professional quality of life may have been different from the professional quality of life of a registered nurse in an acute care office.

This research only focused on registered nurses and not on other healthcare workers. This narrow approach answered the registered nurses' question in South Florida, but it cannot be generalized to other healthcare workers, including physicians.

There is a "geographical bias" in this research. The professional quality of life for registered nurses in South Florida cannot be generalized to registered nurses in other parts of the state or the United States.

Finally, this research was conducted from March to August 2021, in the "post-vaccination" period of the COVID-19 pandemic. It is certainly possible that if this research had been conducted a year earlier, in 2020, during the "pre-vaccination period," results could have been different and altered the outcome of the study when considering personal protective equipment and other protective resources, communication, disease knowledge, and protocols, *etc*. The timing of this research may have impacted the other independent variables (secondary traumatic stress, compassion fatigue, and fear of COVID-19) in predicting the dependent variable (turnover intention).

DEDICATION

The authors would like to dedicate this research to registered nurses and all other healthcare workers for their commitment, dedication, and loyalty toward their patients, particularly during the COVID-19 pandemic. The authors are hopeful that this research will benefit nurses' practice and the healthcare community not only today but also in the future.

LIST OF ABBREVIATIONS

ProQOL	=	Professional quality of life
CF	=	Compassion fatigue
BO	=	Burnout
STS	=	Secondary traumatic stress
TIS	=	Turnover Intention scale
SPSS	=	Statistical Package for the Social Sciences
FCV-19	=	Fear of COVID-19

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This research was conducted after obtaining the approval of the Institutional Review Board at Saint Leo University on February 2nd, 2021. A letter of introduction was given to each participant outlining the purpose of the research along with an implied consent form from Saint Leo University. Permission to use the Professional Quality of Life Survey (ProQOL-5) was implied as long as the (a) author is credited, along with the Center for Victims of Torture, (b) no changes are made other than creating or using a translation or replacing "helper" with a more specific term such as "nurse," and (c) it is not sold. The authors of the Fear of COVID-19 (FCV-19) survey stated that permission is not necessary since it is in the public domain. Permission to utilize the Turnover Intention Survey (TIS-6) and the Perceived Job Market Outlook Survey (PJMO) was obtained from Dr. Roodt and Dr. Dempsey, respectively.

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from all participants.

AVAILABILITY OF DATA AND MATERIALS

The data and supportive information are available within the article.

FUNDING

None.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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