

ORIGINAL RESEARCH

Compassion Satisfaction, Burnout, Secondary Traumatic Stress among Physical Therapists and Physical Therapist Assistants in Mississippi: A Cross-Sectional Study

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Keywords: Compassion Fatigue, Compassion Satisfaction, Burnout, Physical Therapist

Journal of the Mississippi State Medical Association

Vol. 65, Issue 1/2, 2024

Background

Compassionate care is an important component of quality healthcare. Compassion fatigue (CF) is common among healthcare providers. However, there are limited studies investigating components of compassion fatigue among physical therapists and physical therapist assistants.

This study investigates the prevalence of compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS) among physical therapists and physical therapist assistants in the state of Mississippi during the COVID-19 pandemic.

Methods

A cross-sectional descriptive survey approach was used to collect data from 187 licensed physical therapists and physical therapy assistants in Mississippi. The survey utilized the Professional Quality of Life (ProQOL) questionnaire to assess the participants' well-being and job satisfaction.

Results

The results showed that the mean scores of the ProQOL subscales indicated a majority of individuals experienced medium (55%) to high (44%) compassion satisfaction. Burnout scores were low (41%) to medium (59%) with no response recording a high burnout rating. A majority (99%) of participants reported medium (37%) to low (62%) secondary traumatic stress. There were some significant differences in the mean scores in relation to the participants' demographic characteristics. Age showed a significant positive association with compassion satisfaction ($\beta=2.724$, $p=0.011$) but not burnout ($\beta=-1.471$, $p=0.149$) or secondary traumatic stress ($\beta=-0.454$, $p=0.633$). The results of the study showed that respondents 55 years old or older reported the highest mean compassion satisfaction score, the lowest burnout score, and the lowest secondary traumatic stress score. Being a male is negatively associated with secondary traumatic stress ($\beta=-4.063$, $p<0.001$) but not compassion satisfaction ($\beta=-0.779$, $p=0.483$) or burnout ($\beta=-1.222$, $p=0.252$). Neither education nor care type were significant predictors for compassion satisfaction, burnout, and secondary traumatic stress. Whether respondents worked overtime appeared to be a significant predictor for secondary traumatic stress ($\beta=3.520$, $p<0.001$) but not for compassion satisfaction ($\beta=1.043$, $p=0.321$) or burnout ($\beta=1.167$, $p=0.247$).

Conclusions

The findings of this study suggest that physical therapists in Mississippi experienced both compassion satisfaction as well as burnout and secondary traumatic stress during the COVID-19 pandemic. However, the degree to which each individual experienced these were dependent on various factors and not all were statistically significant. Age, sex, and corresponding experience level of the practitioner seemed to play the biggest role. The results of this study highlight individual factors that could increase a physical therapist's or physical therapist assistant's likelihood of developing compassion fatigue.

Introduction

Compassion can be defined as the emotion that motivates an individual's desire to help someone after witnessing his or her suffering.¹ Compassionate care is critical to high-quality healthcare and is considered one of the core values by the American Physical Therapy Association.² However, the tragedy and loss commonly associated with healthcare oftentimes make compassionate care a challenging task for healthcare professionals, including physical therapists (PTs) and physical therapy assistants (PTAs). These challenges can lead to compassion fatigue, which can manifest as burnout or secondary traumatic stress.³ Compassion fatigue has two components. The first is primary and includes feelings of exhaustion, depression, frustration, and anger. Secondary compassion fatigue is a negative feeling driven by fear and work-related trauma.³ Burnout (BO) is defined as feelings of hopelessness with subsequent difficulty dealing with work and a decline in the ability to perform one's job effectively. Secondary traumatic stress (STS) is also a component of compassion fatigue. Secondary traumatic stress is described as feelings associated with exposure to other people who have experienced extremely stressful situations. Symptoms of secondary traumatic stress can be manifested as fear, sleep disturbances, and disturbing images.³ Conversely, compassion satisfaction (CS) is considered positive feelings about a person's ability to help others. Compassion satisfaction is manifested as pleasure one derives from the perception her or she is doing good work.³

According to Okoli et al., secondary traumatic stress and burnout may negatively impact patient care and productivity.⁴ In 2020, Ruiz-Fernandez et al. surveyed over 500 healthcare professionals and found compassion fatigue and burnout scores were moderate to high among both physicians and nurses.⁵ Sorenson et al. conducted a review of literature encompassing

fatigue in healthcare providers and found that PTs were not well represented.⁶ As a result, they called for further research assessing compassion fatigue in this group of healthcare professionals.

The COVID-19 public health emergency began in January, 2020 and expired in May 2023.^{7,8} PTs faced an unprecedented challenge in providing patient care during the COVID-19 pandemic with a resultant shift in expectations and uncertainty for the future. PTs encountered significant ethical issues as contact restrictions were implemented related to the management of COVID-19. Therapists also struggled with psychological stress affecting both patients and themselves.⁹ Ditwiler, et al. outlined six themes from physical therapists across the United States pertaining to the physical therapy experience during the pandemic: uncertainty, emotions, ethical dilemmas & moral distress, the physical therapist's role, providing care & working conditions, and management & leadership influence.¹⁰ Each of these identified themes could have impacted PT and PTAs' compassion satisfaction or burnout levels. Navigating the emergence and prevalence of telerehab further strained the

therapist-patient experience. Curtz, et al. described several barriers to telerehab implementation.¹¹ Doubt arose in the necessity of physical therapy during this time, and a consequential question regarding whether outpatient physical therapy was essential in times of public emergencies was posed.¹²

Furthermore, the mental impact, both psychosocially and psychologically, of providing healthcare services during this time cannot be understated. One study surveying 98 occupational and physical therapists reported that the majority experienced a moderate to severe level of generalized anxiety disorder (GAD), defined as “excessive anxiety and worry due to events or activities that occur over a period of at least 6 months... and is generally associated with developing somatic symptoms”.⁹ It is possible these factors have impacted compassion fatigue and compassion satisfaction levels of PTs and PTAs within the state of Mississippi.

Previous research has illustrated the effects COVID-19 had on healthcare providers. Miller et al. surveyed over 1,000 respiratory therapist and found 79% reported burnout.¹³ Another study conducted among healthcare providers, found individuals who worked on COVID-specific units had higher rates of compassion fatigue and burnout compared to their counterparts.⁵ However, there is limited research assessing these factors among PTs and PTAs in the post-COVID healthcare environment.

Given the significant importance of compassionate care in the physical therapy setting as defined by the American Physical Therapy Association (APTA) and the lack of research related to this area among PTs and PTAs, this study aimed to explore the perceptions of compassion satisfaction, burnout, and secondary traumatic stress of PTs in the state of Mississippi utilizing the Professional Quality of Life Scale (ProQOL).³

Methods

Study Design

This research employed a cross-sectional descriptive survey approach (Appendix A) to explore the perceptions of licensed PTs and PTAs in the state of Mississippi who provided care to patients during the COVID-19 pandemic. The survey utilized the Professional Quality of Life (ProQOL) questionnaire to assess the participants' compassion satisfaction, burnout, and secondary traumatic stress levels. Demographic variables encompassed race, gender, age, professional background, years of experience in physical therapy, duration of employment with the current employer, whether worked overtime during COVID-19, cared for pediatric or adult patients, past COVID-19 diagnosis, and responses to Items 1–30 on the ProQOL survey. A key strength in employing the ProQOL lies in its wide recognition within the field and its established validity and reliability of the survey items.³ The scoring procedure outlined in the ProQOL manual was adhered to. Scores of Items 1, 4, 15, 17, and 29 were reversed first (1=5, 2=4, 3=3, 4=2, 5=1). Subscale totals for

compassion satisfaction (Items 3, 6, 12, 16, 18, 20, 22, 24, 27, 30), burnout (Items 1, 4, 8, 10, 15, 17, 19, 21, 26, 29) and secondary traumatic stress (Items 2, 5, 7, 9, 11, 13, 14, 23, 25, 28) were computed, and z-scores were converted to t-scores using raw score means. Cut scores were established around the 25th and 75th percentiles as recommended.

Setting and Participants

The setting of the study was the state of Mississippi. The inclusion criterion encompassed any licensed PTs and PTAs actively practicing in the state of Mississippi. Those with expired or without a license were excluded. An email distribution list from the Mississippi State Board of Physical Therapy was obtained to reach the target population. The total number of participants from the distribution list was 3637, including licensed PTs and PTAs in Mississippi.

Data Collection and Data Analysis

Study data were collected and managed using REDCap electronic data capture tools hosted at The University of Mississippi Medical Center.^{14,15} REDCap (Research Electronic Data Capture) is a secure, web-based software platform designed to support data capture for research studies, providing 1) an intuitive interface for validated data capture; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for data integration and interoperability with external sources.^{14,15} The questionnaire included 10 demographic questions and 30 items from the ProQOL. The survey was distributed to the participants via email by the study personnel.

The collected data were analyzed with Stata 1816 using the guidelines provided in the ProQOL Manual. Descriptive statistics, such as means, standard deviations, and frequencies, were calculated to summarize the survey responses. In order to investigate potential variances in compassion satisfaction, burnout, and secondary traumatic stress based on demographic and work-related characteristics, inferential statistical methods were conducted, including Kruskal- Wallis tests to test differences among three subgroups or more, Mann-Whitney U tests to test differences between two subgroups, and multiple regression analyses to assess the relationships between dependent and independent variables. Non-parametric methods were employed due to the small sample size of the current study and their advantages of requiring no assumptions on the data distribution.

The study received ethical approval (UMMC-IRB-2022-410) from the institutional review board (IRB) at the University of Mississippi Medical Center on 11/20/2022. Informed consent was waived by the IRB, and the return of the survey was considered the participants' consent to participate.

Results

In 2022, the total number of licensed PTs and PTAs in the state of Mississippi was 3637.

Based on the list provided by the Mississippi State Board of Physical Therapy, only 2307 therapists provided an email address. A recruitment email was sent to 2307 therapists and out of these, 194 responded to the email requesting participation, resulting in a 5.3% response rate.

After eliminating seven incomplete responses, 187 responses were included in this study.

Table 1 illustrates the participant demographic characteristics. Not all 187 participants responded to every demographic question which resulted in varied totals below. The majority of PTs and PTAs who responded to the survey were less than 35 years old (40%), with only 13% reported to be 55 years old or older. Two thirds (67%) of the respondents were females. Also, almost two thirds held PT licensures. The average years of experience was 15.32 years (SD=11.46) with the majority reported to have less than 10 years of experience in the field. The average years with current employers was 8.63 years (SD=7.42) with 68% of respondents reporting to have been with the current employer for less than 10 years. Only 36% of respondents reported to have worked overtime. The average hours worked per week was 44.85 hours (SD=10.44), with the majority reporting between 40 to 59 hours per week. All respondents provided care to patients during the Covid-19 pandemic, mainly to adult patients (75%). Approximately 70% of respondents were diagnosed with COVID-19 themselves at some point during the pandemic.

Table 2 shows the participants' degree of compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS). The mean scores for compassion satisfaction, burnout, and secondary traumatic stress were 39.79 (SD=6.77), 24.24 (SD=6.38) and 22 (SD=6.24). When categorized into low (<23), medium (23-41) and high (>42)3, 99% of respondents reported to have medium-to-high levels of compassion satisfaction, 59% reported to have medium level of burnout, and 38% reported to have medium-to-high level of secondary traumatic stress. It is noteworthy that only 1% of respondents reported to have low compassion satisfaction, none reported high burnout, and only 1% conveyed high secondary traumatic stress.

Table 3 summarizes Kruskal-Wallis test and Mann-Whitney U test results of the mean scores of compassion satisfaction, burnout, and secondary traumatic stress by subgroups of demographic characteristics. An alpha value of 0.05 (95% confidence level) was the significance threshold for the statistical tests. Significant differences were observed in compassion satisfaction among subgroups by age ($p=0.018$), and in secondary traumatic stress among subgroups by gender ($p<0.001$) and work overtime ($p=0.026$). Interestingly, the age group of respondents who were 55 years or older showed the highest

Table 1. Participants Characteristics

Table 1. Participants Characteristics		Overall (n=187)
Variables		
Age Category, %		
	< 35	74 (40%)
	35-44	44 (24%)
	45-54	41 (22%)
	>=55	24 (13%)
Gender, %		
	Male	61 (33%)
	Female	126 (67%)
Education, %		
	PT	122 (65%)
	PTA	65 (35%)
Years of Experience, mean (sd)		15.32 (11.46)
Categories, %		
	<10	72 (43%)
	10-19	33 (20%)
	20-29	38 (23%)
	>=30	24 (14%)
Years with Current Employer, mean (sd)		8.63 (7.42)
Categories, %		
	<10	65 (68%)
	>=10	30 (32%)
Work Overtime, %		
	Yes	68 (36%)
	No	119 (64%)
Work Hours, mean (sd)		44.85 (10.44)
Categories (hours), %		
	<40	6 (11%)
	40-59	39 (74%)
	>=60	8 (15%)
Provided Care to Patients during the COVID-19 pandemic, %		187 (100%)
Care Type, %		
	Adults	140 (75%)
	Pediatrics	9 (5%)
	Both	38 (20%)
Diagnosed with COVID-19, %		
	Yes	130 (70%)
	No	57 (30%)

mean compassion satisfaction score ($M=43.2$, $SD=7.2$), lowest burnout score ($M=21.5$, $SD=6.5$), and lowest secondary traumatic stress score ($M=21.0$, $SD=6.7$). In contrast, the age group of respondents who were younger than 35 years old reported the lowest mean compassion satisfaction score ($M=38.9$, $SD=6.0$), the highest mean burnout score ($M=25.1$, $SD=5.8$) and the highest

Table 2. Degree of compassion satisfaction, burnout and secondary traumatic stress (n=187)

Variables	Percentages	Mean (sd)	Min Max
Compassion Satisfaction		39.79 (6.77)	[17, 50]
low (<23)	2 (1%)		
medium (23-41)	102 (55%)		
high (>42)	83 (44%)		
Burnout		24.24 (6.38)	[10, 40]
low (<23)	77 (41%)		
medium (23-41)	110 (59%)		
high (>42)	0 (0%)		
Secondary Traumatic Stress		22.00 (6.24)	[12, 42]
low (<23)	116 (62%)		
medium (23-41)	70 (37%)		
high (>42)	1 (1%)		

Note: CS = compassion satisfaction; BO = burnout; SS = secondary traumatic stress; M = mean; SD = standard deviation.

mean secondary traumatic stress score ($M=22.6$, $SD=5.9$). Males and females reported similar compassion satisfaction mean scores (males: $M=39.6$, $SD=7.5$; females: $M=39.9$, $SD=6.4$) and burnout scores (males: $M=23.7$, $SD=6.6$; females: $M=24.5$, $SD=6.3$) but significantly different secondary traumatic stress scores with females being significantly higher (males: $M=23.1$, $SD=6.2$; females: $M=19.8$, $SD=5.8$). Being a PT or PTA did not yield significantly different results in compassion satisfaction, burnout, or secondary traumatic stress. Years with current employers did not yield significant differences in any of the three outcome measures. Since 100% of respondents provided care for COVID-19 patients, no comparison was warranted. Neither subgroups by care type nor by whether the respondent was diagnosed with COVID-19 before produced different outcomes in the same three outcome measures.

Backward stepwise regression was performed. Variables such as education, years of experience, years with current employer, work hours, and COVID-19 diagnosis were eliminated to identify a reduced model that best predicted compassion satisfaction, burnout, and secondary traumatic stress (Table 4). Age showed a significant positive association with compassion satisfaction ($\beta=2.724$, $p=0.011$) but not burnout ($\beta=-1.471$, $p=0.149$) or secondary traumatic stress ($\beta=-0.454$, $p=0.633$). Being a male is negatively associated with secondary traumatic stress ($\beta=-4.063$, $p<0.001$) but not compassion satisfaction ($\beta=-0.779$, $p=0.483$) or burnout ($\beta=-1.222$, $p=0.252$). Neither education nor care type were significant predictors for compassion satisfaction, burnout, and secondary traumatic stress. Whether respondents worked overtime appeared to be a significant predictor for secondary traumatic stress ($\beta=3.520$, $p<0.001$) but not for compassion satisfaction ($\beta=1.043$, $p=0.321$) or burnout ($\beta=1.167$, $p=0.247$).

Table 3. Mean Scores of CS, BO, STS According to the participant demographic characteristics (n = 187)

Variables	CS		BO		STS	
	mean (SD)	P value	mean (SD)	P value	mean (SD)	P value
Age Category		0.018*		0.084		0.470
< 35	38.9 (6.0)		25.1 (5.8)		22.6 (5.9)	
35-44	39.4 (7.8)		23.8 (7.2)		21.7 (6.7)	
45-54	40.5 (5.6)		24.4 (6.2)		21.7 (6.4)	
>=55	43.2 (7.2)		21.5 (6.5)		21.0 (6.7)	
Gender		0.960		0.463		<0.001***
Male	39.6 (7.5)		23.7 (6.6)		19.8 (5.8)	
Female	39.9 (6.4)		24.5 (6.3)		23.1 (6.2)	
Education		0.619		0.114		0.913
PT	39.5 (7.1)		24.8 (6.5)		22.1 (6.5)	
PTA	40.3 (6.2)		23.3 (6.0)		21.9 (5.7)	
Years of Experience		0.243		0.434		0.229
<10	39.1 (6.4)		24.8 (5.6)		22.3 (5.9)	
10-19	39.2 (8.7)		23.9 (7.4)		21.2 (6.2)	
20-29	41.0 (5.6)		23.9 (6.3)		22.7 (7.1)	
>=30	41.8 (7.2)		22.4 (6.5)		19.9 (6.0)	
Years with Current Employer		0.082		0.319		0.779
<10	39.7 (6.9)		23.9 (6.2)		21.4 (6.4)	
>=10	42.6 (5.4)		22.7 (6.9)		21.4 (7.5)	
Work Overtime		0.334		0.502		0.026*
Yes	40.5 (6.6)		24.7 (6.7)		23.6 (7.1)	
No	39.4 (6.9)		24.0 (6.2)		21.1 (5.5)	
Work Hours		0.381		0.997		0.586
<40	37.5 (6.3)		25.7 (3.7)		25.8 (6.9)	
40-59	39.7 (7.2)		25.6 (7.4)		24.6 (7.6)	
>=60	42.8 (4.7)		25.3 (6.1)		22.4 (5.7)	
Provided Care for COVID-19 Patients	39.8 (6.8)	NA	24.2 (6.4)	NA	22.0 (6.2)	NA
Care Type		0.951		0.289		0.276
Adults	39.8 (6.8)		23.8 (6.1)		21.7 (6.0)	
Pediatrics	40.8 (3.5)		25.4 (3.0)		25.3 (7.4)	
Both	39.5 (7.4)		25.5 (7.6)		22.2 (6.7)	
Diagnosed with COVID-19		0.152		0.216		0.157
Yes	39.5 (7.4)		25.5 (7.6)		22.2 (6.7)	
No	40.8 (6.5)		23.4 (6.2)		21.1 (6.1)	

Note. * $p \leq 0.05$, *** $p \leq 0.001$

Discussion

This study aimed to assess compassion satisfaction and fatigue among physical therapy professionals who worked in Mississippi during the COVID-19 pandemic. The ProQOL questionnaire included questions regarding working conditions, emotions evoked while at work, feelings of stress and trauma, and general job satisfaction.

Table 4. Beta Estimates from Multivariate Regression (Beta Estimate (95% CI), *p* value)

Variables	Beta Estimate (95% CI), <i>p</i> value		
	CS	BO	STS
Age Category			
age < 45	Reference	Reference	Reference
age ≥45	2.724 (0.638, 4.811), <i>p</i> =0.011*	-1.471 (-3.472, 0.531), <i>p</i> =0.149	-0.454 (-2.327, 1.418), <i>p</i> =0.633
Male	-0.779 (-2.964, 1.407), <i>p</i> =0.483	-1.222 (-3.318, 0.875), <i>p</i> =0.252	-4.063 (-6.024, -2.102), <i>p</i> <0.001***
Education			
PT	Reference	Reference	Reference
PTA	1.136 (-0.997, 3.269), <i>p</i> =0.295	-1.566 (-3.613, 0.480), <i>p</i> =0.133	-0.426 (-2.339, 1.488), <i>p</i> =0.661
Care Type			
Pediatrics	Reference	Reference	Reference
Adults	-1.780 (-6.416, 2.855), <i>p</i> =0.449	-0.737 (-5.184, 3.710), <i>p</i> =0.744	-2.631 (-6.791, 1.528), <i>p</i> =0.214
Both	-1.621 (-6.589, 3.347), <i>p</i> =0.520	1.014 (-3.751, 5.779), <i>p</i> =0.675	-1.648 (-6.105, 2.809), <i>p</i> =0.467
Work overtime	1.043 (-1.027, 3.113), <i>p</i> =0.321	1.167 (-0.818, 3.153), <i>p</i> =0.247	3.520 (1.663, 5.378), <i>p</i> <0.001***

Note. * $p \leq 0.05$, *** $p \leq 0.001$

The overall results of the study indicated that 99% of respondents experienced medium-to-high levels of compassion satisfaction. This indication corresponds with findings by Dwyer et al. that show health providers were able to derive a sense of value in their work despite the stresses of the COVID-19 pandemic. Compassion satisfaction levels are associated with finding value and meaning in one's work. It is important to be aware of compassion satisfaction levels among healthcare providers because high compassion satisfaction can potentially serve as a protective mechanism against burnout and CF.¹⁶

Regarding burnout, 59% of respondents reported medium levels, and 38% reported medium-to-high levels of secondary traumatic stress. Surprisingly, only 1% of respondents reported low compassion satisfaction and high secondary traumatic stress, with none reporting high burnout. The survey was conducted from December 2022-February 2023, which was three months before CDC declared the end of COVID-19 public health emergency.⁸ It is reasonable to consider that the elapsed time since the most serious impacts of the COVID-19 pandemic may have influenced these results. The respondent may not clearly recall many of the activities or stresses encountered during and immediately after the pandemic. On the other hand, the respondents may clearly remember the challenges during the pandemic and the changes in processes required to maintain safety during patient care.

The results of the study showed that respondents 55 years old or older reported the highest mean compassion satisfaction score, the lowest burnout score, and the lowest secondary traumatic stress score. In comparison, respondents younger than 35 years of age reported the lowest mean compassion satisfaction score, the highest mean burnout score, and the highest mean secondary traumatic stress score. Additionally, those with the most experience reported the highest compassion satisfaction, as well as the lowest burnout and secondary traumatic stress scores. These results indicated that older, more

experienced therapists may have handled the challenges of the pandemic better than their younger, less experienced counterparts. This indication may be due to a multitude of factors including the degree of maturity of the practitioner or the number of years in healthcare. The older practitioner may have developed strategies to effectively handle personal and professional stress during their years in the healthcare environment. Older therapists with more experience have encountered a multitude of challenges and may have learned to approach stressful situations differently than less experienced therapists. Generational differences may have also contributed to the differences between older therapists and younger therapists. Patel and Bartholomew, in a study investigating job demands on burnout among physical therapy providers, found that age was not associated with burnout.¹⁷

Both PTs and PTAs provided direct patient care during the pandemic, dealt with similar issues, and observed COVID-19 restrictions. However, the level of responsibility varied between the two. In addition to standard patient care responsibilities, PTs hold additional responsibilities due to the supervisory management of PTAs. However, this distinction did not result in differences in compassion satisfaction, burnout, or secondary traumatic stress between PTs and PTAs. These results indicate that both categories of practitioners experienced similar challenges during the pandemic. One might expect an increase in hours worked to correlate with increased burnout. However, overtime work was not a significant predictor for burnout or compassion satisfaction, but it did serve as predictor of secondary traumatic stress. Since secondary traumatic stress is associated with negative feelings after exposure to people who have experienced stressful situations,³ it is possible the relation between secondary traumatic stress and overtime is a result of increased exposure to these difficult situations.

The limitations of this study include the low response rate of 5.3%, the length of time between the pandemic and the survey, and the reliance on self-report data through a survey. All these factors may have introduced response biases. In addition, the generalizability of the findings is limited and applicable only to the licensed PTs and PTAs in Mississippi. In an effort to gain a deeper understanding of how compassion satisfaction, burnout, and secondary traumatic stress are affecting healthcare providers in Mississippi, it could be beneficial to conduct a series of qualitative studies involving PT and PTAs as well as other healthcare workers. It could also be useful to expand these studies to include participants in other states.

Conclusion

The results of the study indicated that PTs and PTAs in Mississippi experienced some degree of compassion satisfaction, burnout, and secondary traumatic stress during the COVID-19 pandemic. The degree to which these areas were experienced depended on a variety of factors including the age and experience level of the practitioner, but there was no delineation between the

two categories of practitioners. Practitioners younger than 35 years old showed a statistically significant difference in compassion satisfaction (lower) compared to those 35 years or older.

Being a male and individuals who worked overtime had a positive association with secondary traumatic stress but not with burnout. Limitations of this study included the small sample size, the timing of the survey, and the use of self-report data. Future research would benefit from recruiting a large sample size of PTs and PTAs, and exploring other objective methods of measuring compassion satisfaction, burnout, and secondary traumatic stress.

Submitted: August 31, 2023 CDT, Accepted: January 01, 2024 CDT

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Appendix A

Link to survey instrument: <https://redcap.umc.edu/surveys/?s=8K9Y3MJL7C7RRM7P>

A yes response must be selected for question number one to in order to view the full survey.