



Full Length Research Paper

# Compassion fatigue among new graduate physical therapists

<sup>1</sup>Susan G. Klappa, <sup>2</sup>Rita Howayek, <sup>3</sup>Katherine Reed, <sup>4</sup>Bridget Scherbarth, <sup>5</sup>Scott P. Klappa

<sup>1</sup>Davenport University, 6191 Kraft Ave. SE Grand Rapids, MI 49512

<sup>2,3,4</sup>University of St. Mary, 4100 South 4<sup>th</sup> Street, Leavenworth, KS 66048

<sup>5</sup>Psychology: Clinical Counseling M.S., Rosalind Franklin University of Medicine and Science, 3333 Green Bay Road, North Chicago, IL 60064

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New graduate PTs are ready to assume their professional responsibilities and enter the field with great satisfaction. However, many are not prepared for the challenges of everyday practice leading to a state of compassion fatigue (CF). The purpose of this study was to investigate CF in new graduate physical therapists (PTs) and predict risk factors for CF among new PTs. Mixed methods used included a survey and phenomenological interviews. Participants (n=151) completed the Professional Quality of Life (ProQOL-R-IV) survey and 12 participants engaged in phenomenological interviews. The ProQOL-R-IV was used to assess the level of compassion satisfaction, burnout, and secondary traumatic stress experienced by new graduates. Struggles identified by the participants upon entering the profession included: a) personal challenges, b) professional work environment, c) coping strategies, and d) ideas for educators and new graduates. Factor analysis revealed secondary trauma and burnout were two contributing components of CF. A prediction model for CF was developed. By understanding the experience of entering the field of physical therapy, we can better anticipate the support needed for new graduates to overcome struggles. Both educational programs and human resource departments may play a role in mitigating CF among new graduate PTs.

**Key words:** Compassion fatigue, new graduates, physical therapists

## ABBREVIATIONS

Compassion Fatigue (CF)

Physical Therapists (PTs)

Professional Quality of Life (ProQOL-R-IV)

## INTRODUCTION

Many new graduate physical therapists (PTs) express fulfillment regarding their chosen profession (Jensen *et al.*, 2007) thus, exhibiting high levels of compassion satisfaction. However, many new PTs are subjected to demands and job stressors resulting in burnout and

secondary trauma. Compassion fatigue (CF), the result of burnout and secondary trauma, involves demonstrating less compassion toward those being cared for by health care professionals. As a result, new PTs often report feeling less compassionate toward their patients

\*Corresponding author. E-mail: [sueklappa@gmail.com](mailto:sueklappa@gmail.com), Phone: 651-335-9813

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due to stress of being a new health care professional. Recognizing the signs and symptoms of CF is an important strategy in supporting one's well-being and ability to provide quality patient care. Can we predict those new graduate PTs who are at risk for CF in the first five years of employment? This study investigated the level of compassion satisfaction, CF, burnout, and secondary trauma among new graduate PTs who have been in practice for 1-5 years. The data provide a model to predict who may be at risk for CF as a new PT and suggestions for how to mitigate CF.

## REVIEW OF RELEVANT LITERATURE

Current research supports the presence of CF in individuals working in service areas such as health care, however, this has not been specifically investigated for the field of physical therapy. An abundance of research has been conducted in the fields of nursing and mental health to establish support for the existence of CF (Hooper *et al.*, 2010; Lombardo *et al.*, 2011; Potter *et al.*, 2010; Sprang *et al.*, 2007; Sprang *et al.*, 2011). Research in the field of nursing has focused on CF in settings such as hospice and oncology units, where distressing patient situations exist (Abendroth *et al.*, 2014; Potter *et al.*, 2015). Abendroth *et al.* (2007) explored the relationship of CF risk in hospice nurses and their job demands. Harmful job characteristics included high patient-to-nurse ratios, working swing shifts, and inability to maintain a healthy work-life balance. Similarly, a study by Potter *et al.* (2010) researched the level of CF, compassion satisfaction, and burnout among oncology nurses in both inpatient and outpatient settings using the Professional Quality of Life (ProQOL-R-IV) of Stamm (2010). This study recommended the importance of using a standardized screening tool, such as the ProQOL R-IV, to assess the levels of CF and compassion satisfaction over a period of time.

Despite the risk of developing CF, research suggests nurses and mental health providers working with patients who have undergone traumatic experiences or have PTSD are better equipped to deal with their job stressors, thus maintain higher compassion satisfaction (Deighton *et al.*, 2007; Peterson *et al.*, 2008; Potter *et al.*, 2010; Sprang *et al.*, 2007;). Sprang *et al.* (2007) suggested these mental health professionals were less likely to possess CF and experienced compassion satisfaction due to their specialized training in trauma work. Deighton *et al.* (2007) suggest that for psychotherapist, greater numbers of years working with victims of trauma and improved self-awareness were protective against burnout, vicarious trauma, and emotional exhaustion. Furthermore, Sorenson *et al.* (2013) suggest that the honeymoon period of a new profession may provide protection against CF. The initial excitement new workers exhibited for their profession appeared to counteract a negative view of work and CF. Over time this protective mechanism diminishes, potentially leading to CF.

The purpose of this study was to investigate CF in new graduate PTs entering the workforce. Our research questions were as follows:

1. What is the initial five-year experience of new graduate PTs who enter the field?
2. What is the degree of CF, secondary trauma, and burnout experienced by these PTs in the first five years of practice?
3. Can we predict which new graduate PTs are at risk for CF based on scores for burnout and secondary trauma on the ProQOL-R-IV?
4. What strategies do new graduate PTs use to mitigate CF?

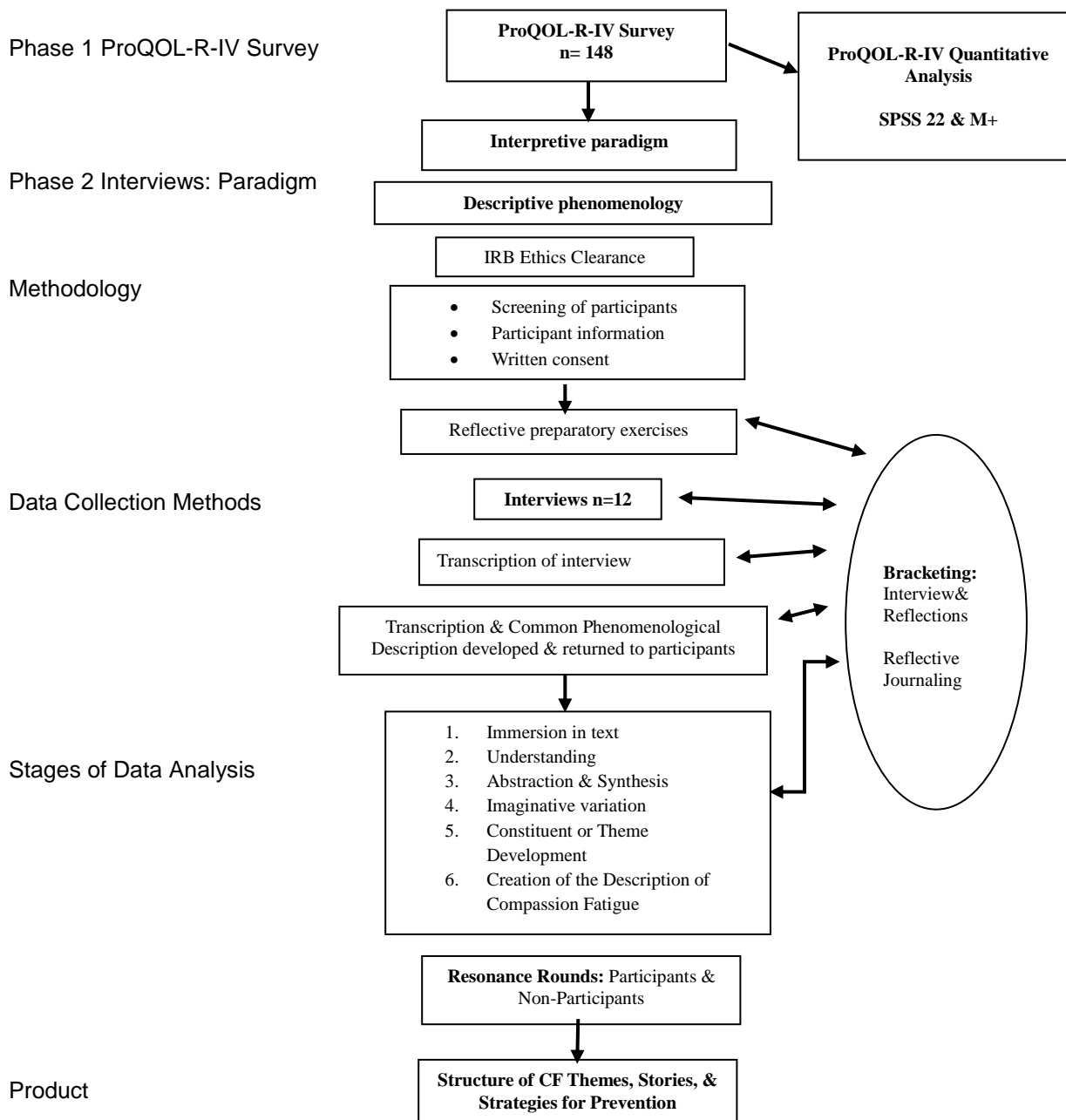
## METHODOLOGY

A mixed-methods approach utilized an electronic ProQOL-R-IV survey (Stamm, 2010) and phenomenological interviews to answer the research questions. The ProQOL-R-IV survey distributed through Qualtrics™ allowed the researchers to obtain a broad perspective of the experience of CF while the phenomenological interviews provided thick, rich descriptions of the lived experience of CF among new graduate PTs. The ProQOL-R-IV survey was active between January 29, 2014 and April 4, 2014. It examined the professional quality of life among those who completed the survey, specifically measuring compassion satisfaction, burnout, and secondary trauma. According to Stamm (2010), burnout and secondary trauma comprise CF. The survey took approximately 10-15 minutes to complete. Semi-structured descriptive phenomenology was used to provide an understanding of the lived experience of participants facing CF (Dahlberg *et al.*; van Manen, 1997). The Institutional Review Board (IRB) at the University of Saint Mary in Leavenworth, Kansas approved this study. See [Figure 1](#) for diagram describing the research methods.

## Recruitment of Participants

Recruitment postings were made on the American Physical Therapy Association Health Policy and Administration (HPA) listserv and the Global Health Special Interest Group listserv of the HPA section. Inclusion criteria for the study included: being a new graduate PT, graduating within the last five years, and being male or female. There were 151 participants who completed the survey. Participants were invited to an interview on CF through Skype™ or Facetime™ with the primary investigator (SK) after completing the online survey. Informed consent was obtained and interviews were scheduled for 35-55 minutes at a time convenient for both the investigator and the participant. Saturation was reached after 12 interviews.

Figure 1: Our Research Process



**Instruments/Tools**

The ProQOL-R-IV was designed to assess those in helping professions such as health care, social work, or police service and has been found to have a reliability between .84 - .90 (Stamm 2010). It is a 30-item self-report measure of the positive and negative aspects of caring. Questions on the ProQOL-R-IV survey specifically target compassion satisfaction, burnout, and secondary trauma. Professional quality of life is defined as, “the quality one feels in relation to their work as a helper” (Stamm, 2010, p. 12). Compassion satisfaction is, “the

pleasure you derive from being able to do your work well” (Stamm, 2010, p. 12). Burnout and secondary trauma, the two subscales of the ProQOL-R-IV, define CF which is the loss of pleasure one receives from caring for others (Stamm, 2010).

Phenomenological research is qualitative in nature examining the lived experiences of participants in order to derive meaning from these experiences (Dahlberg et al., 2001; Thomas et al., 2002; van Manen, 1997). In this process, the researcher attempt to set aside their own experiences and biases in order to understand trends that develop from the participants’ lived reality. Author

Figure 2: Phase 1 Participant Practice Settings

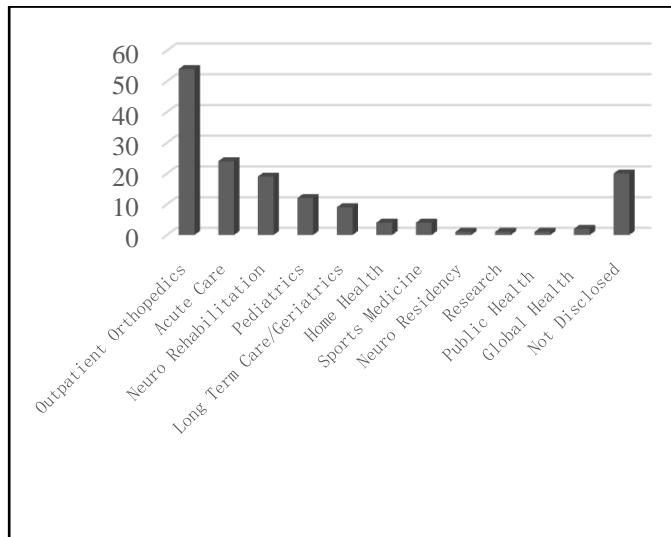


Figure 3: Number of Jobs Since Graduation

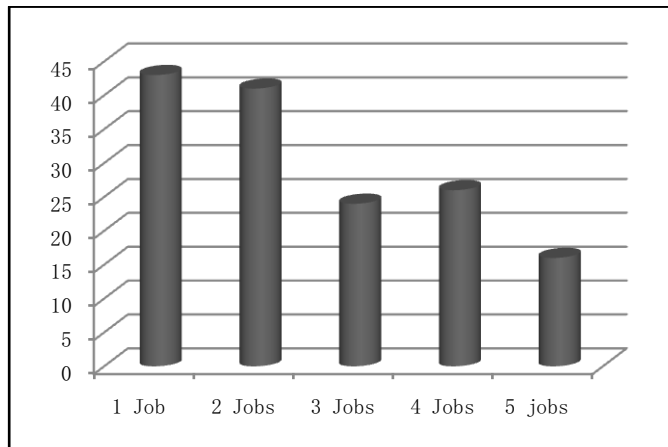
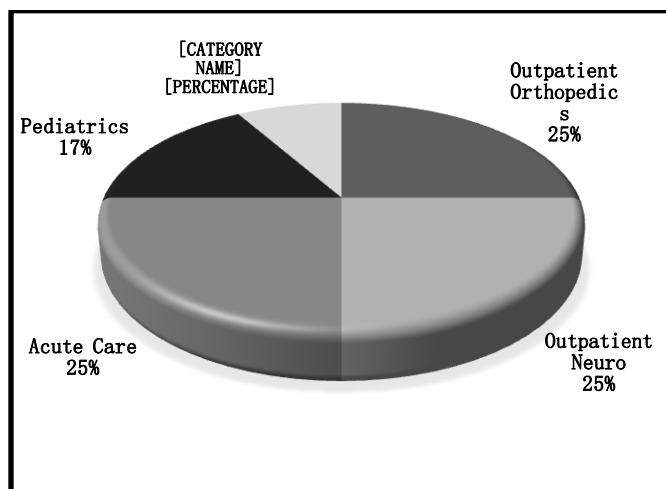


Figure 4: Phase 2 Phenomenological Interview



van Manen, defines phenomenology as “the study of the lifeworld or our everyday experiences and the meanings

we construct from our experiences” (1997, p. 33). Two main assumptions in phenomenological research are: 1) humans seek meaning in their lives; and 2) multiple realities exist that are socially constructed (Dahlberg *et al.*, 2001; Thomas *et al.*, 2002; van Manen, 1997).

**Procedures**

Volunteers who accepted the invitation to participate in this study were emailed an online link that directed them to the ProQOL-R-IV through Qualtrics™ surveys. Additionally, these participants were invited to an optional interview about their specific experiences. Participants consenting to interviews were screened to confirm they were indeed new graduate PTs. Participants received an informed consent document prior to their interview. Upon return of the document, interview appointments were established.

Semi-structured interviews were conducted in face-to-face meetings online through Skype™ or Facetime™. Participants chose a pseudonym for their name. Any identifying factors such as family, workplace, or employer were kept confidential. Interviews were digitally recorded and transcribed within 24 hours of the interview so the researcher did not lose the essence of the interview. Notes were taken during the interview to help remind the researcher to probe into certain topics the participant may have mentioned earlier in the interview. The primary investigator conducted interviews utilizing the strategy of *processual consent* as established by Rosenblatt (1995). Processual consent entailed decreasing the intensity of interview questions when participants appeared distressed. Finally, participants were thanked for their participation at the end of the interview. After transcripts were completed, a copy was sent to the participant by email to check for accuracy of the content and any concerns by the participant were addressed and corrected for the final transcript to be analyzed. This member checking process provided the researchers with an accurate transcript to analyze.

**Data Analysis**

Quantitative data were analyzed by SPSS 22™ and M+ (Muthén *et al.*, 2012). Descriptive statistics for all participants are listed in Table 1. See Figures 2-4 for specific participant details for phase one and two practice settings and number of jobs during the first five years of employment.

Factor analysis was conducted to examine the internal consistency of the ProQOL-R-IV using Cronbach’s α with the responses of the participants from this study. Pearson product correlation coefficient was used to examine associations between compassion satisfaction, as well as burnout and secondary trauma as constructs of CF. Exploratory factor analysis was used to further reveal the component characteristics regarding the influence of

**Table 1:** Descriptive Statistics of Participants in Phase I Survey

<b>Phase 1: ProQOL-R-IV Area of Practice:</b>	<b>Phase 1: Numbers of Participants:</b>	
Outpatient orthopedics	54	
Acute Care	24	
Neuro Rehabilitation	19	
Pediatrics	12	
Long Term Care/Geriatrics	9	
Home Health	4	
Sports Medicine	4	
Neuro Residency	1	
Research	1	
Public Health	1	
Global Health	2	
Not Disclosed	20	
Total:	151	
<b>Sex:</b>		
Male	27	(18%)
Female	112	(74%)
Not Disclosed	12	(8%)
Total:	151	(100%)
<b>Number of Jobs Since Graduation</b>		
1 Job	43	(29%)
2 Jobs	41	(27%)
3 Jobs	24	(16%)
4 Jobs	26	(17%)
5 Jobs	16	(11%)
Total	151	(100%)
<b>Phase 2: Phenomenological Interviews: Area of Practice</b>	<b>Phase 2: Number of Participants</b>	
Outpatient orthopedics	3	
Outpatient neuro	3	
Acute Care	3	
Pediatrics	2	
SNF	1	
Total:	12	
<b>Sex:</b>		
Male	0	(0%)
Female	12	(100%)

burnout and secondary trauma on CF. Regression analysis was used to develop a prediction model for CF. The interview transcripts were analyzed using a descriptive phenomenological approach described by Giorgi (1975, 1997) and Dahlberg *et al.* (2001). This process involved a whole-parts-whole type of holistic examination of the interview texts until the constituents or themes of the experience were revealed. The research team collaborated to summarize the essence of the experience with the themes generated. This served as our vertical analysis.

Finally, a horizontal analysis across all interviews was completed to develop the common description of CF among the new graduate PTs in this study. Once this process was completed, a summary of the common description and themes of CF were sent to each participant for review serving as our first resonance round to determine whether or not our common description resonated with the experiences of the participants. This

process also helped ensure dependability, trustworthiness, and credibility across all interviews. The common description summary was shared with 10 other new graduate PTs who were not a part of this study. Comments from these 10 individuals were then used to solidify the credibility and trustworthiness of this description.

## RESULTS

Demographics for the 151 participants for the Phase I ProQOL-R-IV survey and the 12 participants for Phase II interviews are listed in [Table 1](#). The average time practicing as new graduates for Phase I participants was 2.6 years ± 1.36 years. Eighteen percent of participants were male and 74% were female. There were 8% who chose not to disclose this information. Twenty-nine percent of the participants were still employed at their first job at the



**Table 2:** Summary of ProQOL-R-IV Findings

Variable	Mean Score	Standard Deviation	Level Relative to Normal	Cronbach's Alpha
Secondary Trauma	40.7934	5.8296	Low	.778
Burnout	42.0636	6.4018	Average to Low	.789
Compassion Satisfaction	53.3099	10.8190	High	.896

p < .001

time of the study. Twenty-seven percent of participants reported working at their second job since graduation at the time of the survey. There were 16% of participants who had moved onto their third position and 17% had worked at four or more different positions at the time of the survey.

### ProQOL-R-IV Survey Quantitative Results

Average levels of compassion satisfaction obscured levels of secondary trauma and burnout in the participants. Cronbach's  $\alpha$  was statistically significant for each of these three variables (compassion satisfaction, burnout, and secondary trauma) with  $p < .001$  indicating that the ProQOL-R-IV tool had high internal consistency when measuring each of these constructs. See [Table 2](#) for details on mean scores for secondary trauma, burnout, and compassion satisfaction.

The participants in this study presented with high levels of compassion satisfaction ( $M = 53.3 \pm 10.8$  SD) as new graduates entering the field of physical therapy. This score on the ProQOL-R-IV for compassion satisfaction is associated with deriving professional satisfaction from work. Typically, if scores are below 40 participants may not be experiencing compassion satisfaction with their job. Instead, they may gain satisfaction outside of their professional life. It appeared our participants did find satisfaction in their work as a physical therapist based on their responses to the survey and interview responses.

The participants in this study presented with low levels of secondary trauma ( $M = 40.8 \pm 5.8$  SD), for this construct. The ProQOL-R-IV tool suggests a score above 57 is associated with distress at work. There may also be other reasons for the elevated score. While higher scores do not mean the participants have a problem, however, the participant may want to examine their feelings about work. Workers may wish to discuss this distress with a supervisor, colleague, or mental health professional. Many participants in this study were not aware of the influence of secondary trauma moving them away from high levels of compassion satisfaction toward CF.

The score for the burnout construct ( $M = 42.1 \pm 6.4$  SD) for the participants placed them at low-to-average levels of burnout. The ProQOL-R-IV tool suggests when the burnout score is less than 43, participants have positive feelings about their effectiveness at work. The

participants in this study, exhibited borderline burnout levels moving them away from satisfaction with their job. When the score is above 57, the participants may need to explore reasons for ineffectiveness in their work. This high score may also reflect a transient feeling in response to a particularly distressful day or the need for some time off. If the high score persists, it is a cause for concern. [Table 2](#) presents the summary of the ProQOL-R-IV findings for our participants.

### CORRELATIONS

The three constructs of secondary trauma, burnout, and compassion satisfaction were examined using Pearson product correlation coefficient to reveal relationships between the constructs. All three constructs were found to be associated and the correlation details are presented in [Table 3](#). A strong negative relationship was found between secondary trauma and compassion satisfaction which was significant ( $r = -0.793, p < .001$ ). This finding suggested that as levels of secondary trauma increased, the participants tended to have a decreased level of compassion satisfaction with their professional roles.

A strong positive relationship was found between secondary trauma and burnout ( $r = 0.872, p < .001$ ). This finding suggested a positive correlation between a participant's level of secondary trauma and burnout. Recall that secondary trauma and burnout together were found to be constructs of CF in the factor analysis according to Stamm (2010). Secondary trauma, induced by hearing distressful stories, tended to increase the level of CF in the new graduate PTs in this study. As burnout levels increased, levels of CF also appeared to increase.

Burnout and compassion satisfaction were negatively correlated ( $r = -0.720, p < 0.001$ ). This strong negative relationship between burnout and compassion satisfaction suggested that as burnout increased, compassion satisfaction decreased, and participants found less fulfillment in their daily work with patients.

### Factor Analysis

An exploratory factor analysis (EFA) revealed that CF is constituted from the combination of participants' burnout and secondary trauma scores on the ProQOL-R-IV. Unfortunately, with the current limited dataset, both the

**Table 3:** Correlations for the ProQOL-R-IV Constructs

	Compassion Satisfaction	Burnout	Secondary Trauma
Compassion Satisfaction Pearson Product Correlation Coefficient	1	-.720**	-.793**
• Sig. (2-tailed)		.000	.000
• N	151	151	151
Burnout Pearson Product Correlation Coefficient	-.720**	1	.872**
• Sig. (2-tailed)	.000		.000
• N	151	151	151
Secondary Trauma Pearson Product Correlation Coefficient	-.793**	.872**	1
• Sig. (2-tailed)	.000	.000	
• N	151	151	151

\*\* p< .001

burnout and secondary trauma factors composing CF could not be differentiated from each other through the EFA due to the hierarchical nature of the model postulated by Stamm (2010).

Through the use of a confirmatory factor analysis (CFA), model fit was assessed at the level of CF in conjunction with compassion satisfaction. If CF is to be considered a combination of two separate factors, secondary trauma and burnout, then a three-factor structure model would be ideal. The factor analyses were calculated through MPLUS (Version 7, 2012). Using the three-factor model theorized by Stamm (2010), our data did not fit Stamm’s model. Specifically, Stamm’s three-factor model was evaluated to be a poor model of fit with  $\chi^2$  ( $df = 402, N = 148$ ) = 701.723,  $p < .001$ ; RMSEA = .076, TLI = .784, CFI = .801.

When comparing the three-factor model proposed by Stamm (2010), our more general two-factor model was found to be the stronger fit as represented by the difference in the Akaike information criterion (AIC) value. Between the three factor = 7626.159 in relation to the two factor AIC = 7218.991 our two factor model is the better fit. In regard to the two-factor model we propose, a weak to moderate strength model of fit was accounted for with  $\chi^2$  ( $df = 376, N = 148$ ) = 618.614,  $p < .001$ ; RMSEA = .071, TLI = .825, CFI = .838. It is important to note the distinction between a three-factor model and a three-factor hierarchical model in the study of taxometrics. A three-factor model would include factors that are all evaluated on the same latent level as in this study. Stamm’s three-factor hierarchical model includes factors that represent latent groups present in observable data. Hierarchical models include tests of mediation as a means of capturing the interaction present at the latent group level. When evaluating CF, specifically, the

interaction between secondary trauma and burnout, it is important to evaluate the influence of potential mediation.

### Regression Analysis

Regression analysis revealed that CF could be predicted from a participant’s burnout or secondary trauma score on the ProQOL-R-IV tool. The researchers propose identifying those at risk for CF is crucial in promoting professional satisfaction. Either burnout or secondary trauma constructs were good predictors of CF. The equations developed based on the regression analysis for CF were as follows:

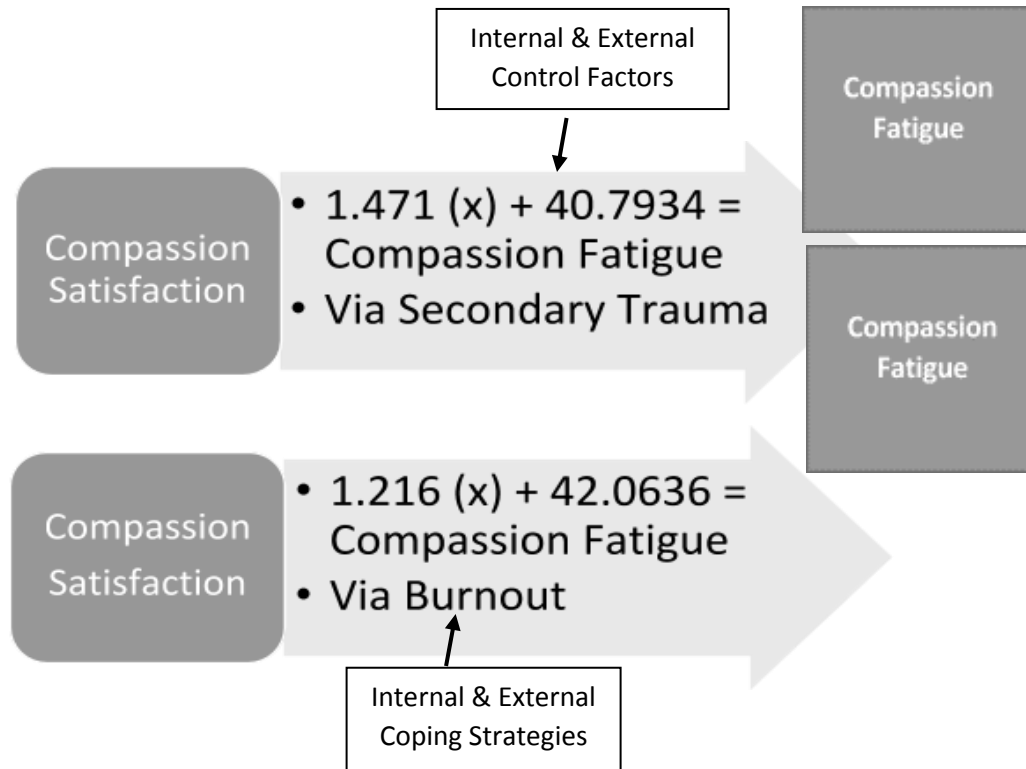
$$\text{Burnout: } 1.216 (x) + 42.0636 = \text{CF}$$

$$\text{Trauma: } 1.471 (x) + 40.7934 = \text{CF}$$

Figure 5 provides a pictorial view of the CF prediction model. If the size of the trauma and burnout factors grow too large, the constructs will progress the new graduate PTs away from compassion satisfaction toward CF. Internal and external control factors mitigate the trauma effects while internal and external coping strategies mitigate the burnout influence on compassion fatigue.

We found that 62.7% of the variance in CF could be explained by both the burnout and secondary trauma constructs. When examining the construct of secondary trauma alone, we found secondary trauma accounted for 62.6% of the variance in CF. If the burnout construct was used alone to predict CF, our data suggested that 51.6% of the variance in CF was explained by the burnout construct. When adding secondary trauma to the model, it explained only 11.4% more of the variance for a total of 62.7% of the variance in CF being explained by both burnout and secondary trauma. Secondary trauma by itself appeared to explain more of the variance in CF than burnout alone.

Figure 5: Compassion Fatigue Prediction Model



Within the secondary trauma construct, 21% of the variance in the secondary trauma score was explained by internal and external control factors. Exploratory factor analysis revealed that the first six questions in the trauma category on the ProQOL-R-IV were measures of external control factors an individual feels about their work environment. Factor analysis revealed the last four questions as the internal control factors or coping strategies participants possess when dealing with secondary trauma. External and internal control factors dealt with the perceptions of the participants' abilities to control the environment through internal personal control strategies versus external control of the situation.

Within the burnout construct, there were both external and internal coping strategies that explained 24% of the variance in the burnout score. External coping strategies dealt with feeling trapped by one's job, overwhelmed by the caseload, and bogged down by the system. Internal coping strategies included the ability to have a positive outlook, feel happy, and feel rested by not losing sleep. In essence, participants were able to utilize personal coping strategies or utilize opportunities within their work environment to mitigate the level of burnout.

**Qualitative Results**

After analyzing the 12 interviews, themes of professional life among new graduate PTs were identified and organized. A total of four main themes emerged which included: 1) factors contributing to CF; 2) personal coping

strategies; 3) professional work environment challenges; and 4) advice for educators and new graduates. Additional ideas for physical therapy education to produce better clinically prepared PTs include: 1) providing lessons on life-work balance; 2) understanding limitations; and 3) seeking a mentor. These themes and exemplars are listed in Table 4.

Struggles identified by participants through interviews highlighted challenges that were unexpected and surprising to the participants. Factors contributing to CF included: feelings of burnout, pressure to meet productivity goals, and general stressors of being new graduate PTs. Personal coping strategies to prevent CF consisted of: maintaining good work-life balance, exercising, and establishing a support system. The theme of professional work environment described how work stressors moved the participants toward CF. Key factors in mitigating work challenges and maintaining compassion satisfaction included: having a strong support system of colleagues, access to a chaplain, health incentives at work, improved inter-professional communication, and flexible work schedules. The external resonance round included feedback on themes by new graduate PTs who did not participate in this study for comment and evaluation to determine if our findings resonated with these individuals. Comments from individuals in the external resonance round did indeed resonate with our participants. Comments from the external resonance round are listed in Table 5.



**Table 4:** Qualitative Data Interview Examples

<b>Factors Contributing to CF</b>
I just almost ran out of compassion. We had a ton of patients and I was just fatigued before I could take my two days off where you can hardly catch up with anything. It's like that work-life balance. (Angela, p. 3)
We all get burned out at times but I think that the people I work with are very good at knowing when we need to step back from patients time to time and go on let off some steam and come back the next day refreshed. (Lynn, p. 9)
It is a big burden to have someone's entire life in your hands... but I think that so far it is just important to confide in other people because if not that's how you get to the point of being overwhelmed. (Hazel, p. 9)
<b>Personal Coping Strategies</b>
Well I luckily have a very good support system at home. (Art Van DeLay, p. 5)
And so now I exercise and run regularly or even if it's just biking it helps. And I will play team sports. (Christine, p. 5)
So if there's something really heavy that I'm dealing with, I often journal or I write which is a good way for me to deal with it. (Christine, p. 11)
I try to do things outside of work that help fill up my tank of being able to give to other people. And so are the things I enjoy doing like playing piano or cooking or going for a run. Things like that. (Jessica, p. 6)
<b>Professional Work Environment</b>
I also had a mentor who kept me in check and helped me understand and dialogue with me to be sure I wasn't getting influenced negatively. (Christine, p. 7)
There's a year plan [through my work] for health where you go online and track your activities and you get exercise points for exercise incentive. But there is also a counselor you can talk to or access a couple of times a year without charge or they do 15 minute free massage every year. Yeah, you get a free health plan too so you get all your preventative care is covered and the co-pay is free as well. (Lynn, p. 6)
There is a chaplain who is very involved with us and if there is something that happened, they will send an e-mail to all employees, "I'm here, whatever you need. You're more than welcome to come to me. I'm happy to help you." (Sara, p. 12)
I have these incredibly supportive co-workers. We're like a little family. And our environment is conducive for learning and teaching. (Jessica, p. 4)
<b>Advice for Educators and New Graduates</b>
I think that students need to know they have to take time for themselves. You need to have something outside of work to look forward to, too. (Kirstin, p. 6)
You can't fix everybody and that's okay... it's not necessarily your specific responsibility to go and fix everybody. (Jessica, p. 9)
I would say if at all possible find somebody who [has] some experience in the setting that you are in to help with the transition rather than going in and you're the only person there. (Kristin, p. 6)

## DISCUSSION

This study examined the experiences of new graduate PTs as they entered their professional lives through both quantitative and qualitative methods. The quantitative data demonstrated high levels of compassion satisfaction among the new graduate PTs who participated in this study compared to normative data in the literature. Qualitative data also supported this finding.

Concerning secondary trauma, the results for our participants on the ProQOL-R-IV were considered to be

in the low level category. Yet, upon further examination, the values for the new graduate PTs in this study were twice the value found in most helping professions (Potter *et al.*, 2010; Lombardo *et al.*, 2011; Hooper *et al.*, 2010; Sorenson *et al.*, 2013; Sprang *et al.*, 2007; Sprang *et al.*, 2011). Qualitative interview data suggested that many new graduate PTs were affected by the traumatic stories of their patients.

With regard to burnout, the participants in this study demonstrated average to low levels of burnout. When compared to other helping professions, new graduate PTs again had twice as many points in this category of

**Table 5:** Comments from External Resonance Rounds**Second Resonance Round: Comments from New Graduate PTs not a Part of this Study**

Wow! This description is great. I wish I had understood what this CF was when I first started out my job as a PT. It would have helped me be more intentional with my coping strategies. I might have made better choices for coping. (Personal communication, June 2, 2014)

Hmm . . . this description of CF and how to avoid it pretty much matches my experience. I tried some of the things mentioned but it would have been nice to have a few more ideas on what to do when feeling burnt out. (Personal communication, June 9, 2014)

Well, I think you all have described this concept very well. They don't teach us much about the stress of being a new grad and how to cope with real life issues in school. Even clinical experiences don't cover this unspoken topic. (Personal communication, June 23, 2014)

Yes, you have described the challenges of being a new grad quite well. I don't think people want to talk about how disillusioned they can be after starting what they think is their dream job. You have opened up the opportunity to talk about the challenges of being a new grad and how to deal with the stress of it all. (Personal communication, July 3, 2014)

I don't think any new grad wants to ever mention the fact that they are becoming burned out or disillusioned about their chosen field. We are driven to go to school, study hard, do well in school and clinicals but then when faced with the real world, we become stressed out and God forbid that we would question the end point of it all if it doesn't fit our expectations. Well done. Your findings are helpful to me and I am sure to others as well. (Personal communication, July 9, 2014)

Yes, I think you have captured it well. (Personal communication, July 13, 2014)

Thanks. Your description is nicely described. I think many of us do fall into better coping strategies but not necessarily on purpose. It is good to know what has worked for others. (Personal communication, July 15, 2014)

Sounds good to me. I can identify. (Personal communication, July 16, 2014)

Look like a good explanation of what new grads feel. (Personal communication, July 20, 2014)

I can relate to your themes. They are good. (Personal communication, July 24, 2014)

burnout compared with low levels of more seasoned health care workers (Potter *et al.*, 2010; Lombardo *et al.*, 2011; Hooper *et al.*, 2010; Sorenson *et al.*, 2013; Sprang *et al.*, 2007; Sprang *et al.*, 2011). The qualitative data in this study provided a more nuanced view of the experience of new graduate PTs transitioning into their professional roles. Many participants described how the burnout they experienced was frustrating to them. Consequently, the participants did seek out strategies to diminish their burnout. Some strategies were more helpful than others.

Participants in this study reported having good strategies in place for helping them cope with the stressors of becoming new PTs. These strategies encouraged attributes of resilience and hardiness. Resilience refers to the ability to maintain healthy functioning after exposure to a potential trauma (Bonanno *et al.*, 2005). Assisting resilient individuals in processing traumatic events may in fact undermine their overall function by forcing them to confront the avoided trauma (Bonanno *et al.*, 2005). This situation may explain why some new graduate PTs in this present study struggled more with CF despite having support resources available to them. Twenty-nine percent of our participants reported

remaining in their initial position despite difficulties demonstrating a strategy of resilience.

Hardiness refers to the personality construct describing individuals who seek meaning in life, believe that they can control their own surroundings or outcome of events, and believe that life experiences bring growth and knowledge (Maddi, 2005). Hardy individuals have less fear with difficult situations and tend to have more coping skills and social support (Florian *et al.*, 1995). Based on the ProQOL-R-IV, it appeared 71% of the participants in this study exhibited hardiness. These participants were able to identify challenging work situations and move on to a new job opportunity, learning from their experiences and drawing meaning from the challenges they faced.

This study suggested that even though compassion satisfaction was high among the new graduate PTs, CF was prevalent. The results from this study correspond to those in the literature in a variety of ways. Health care professionals may lack adequate coping mechanisms to deal with CF due to minimal awareness of this topic. The stress of busy work schedules and productivity pressures added to the burnout construct of CF, while mentors were found to alleviate the stress of CF. Similar to other studies, having a supportive environment where PTs felt

comfortable talking with peers, supervisors, and other colleagues about work stress was also helpful in decreasing CF in this present study (Laschinger *et al.*, 2009; Melvin, 2012). Maintaining healthy life-work balance, whether through exercise or other creative means, was also found to be helpful. This finding concurs with literature in nursing and other allied health professions (Potter *et al.*, 2010; Lonbardo *et al.*, 2011; Hooper *et al.*, 2010; Sprang *et al.*, 2007; Sprang *et al.*, 2011).

### Strengths and Limitations

Strengths of this mixed-methods study included a relatively large sample size, for both our Phase I ProQOL-R-IV survey ( $n=151$ ) and the Phase II interviews ( $n=12$ ). A wide variety of descriptions were obtained as a result of the various practice settings in which the participants of this study were employed. The researchers were able to reach saturation in participant descriptions after 12 interviews. The investigator who interviewed the participants was experienced in conducting phenomenological interviews. In order to limit bias of results, this investigator was not involved in the identification and analysis of themes.

Several limitations exist in the present study. The researchers acknowledge that the results of this study do not apply to all new graduate PTs, but do provide a well-rounded description of the challenges faced by these individuals. Another limitation lies within our survey tool. Although the ProQOL-R-IV demonstrated high internal consistency as evidenced by the high value obtained for Cronbach's alpha (.778 - .896 for the three constructs), the ProQOL-R-IV is meant to be administered within 30 days of a stressful experience (Stamm 2010). Not all participants may have experienced trauma within the last 30 days. While this study asked the participants to think back to how they felt as new graduate PTs, it is possible the participants were unable to contain their experience to just the first 30 days of a traumatic event. Finally, all participants seemed to be able to describe resolving their CF through the use of appositive strategies. Several did allude to using more negative strategies such as alcohol intoxication, the use of drugs, and other less helpful strategies but would not elaborate further.

### FUTURE STUDY RECOMMENDATIONS

Future investigations may want to follow a cohort of new graduate PTs through their first five years of employment. Furthermore, tracking the ProQOL-R-IV scores over time will strengthen our prediction model and determine which strategies best influence ProQOL-R-IV scores. With further scores recorded over time points in a longitudinal manner, tests of mediation can be used to evaluate the relationship between secondary trauma, burnout, and compassion fatigue for potential mediation. Additionally,

differentiating the effects of burnout from secondary trauma on CF may identify how to sustain compassion satisfaction in new PTs. Finally, future studies examining CF across the careers of PTs would also be worthwhile.

### CONCLUSION

The new graduate PTs in this study exhibited high levels of compassion satisfaction because they loved their new profession. Despite their high levels of compassion satisfaction, an unfortunate effect of entering the physical therapy profession was CF. Burnout and secondary trauma contributed to CF. Results of the ProQOL-R-IV survey tool revealed the participants in this study had high levels of CF due to their burnout and secondary trauma scores. The ProQOL-R-IV may be a helpful tool for organizations and individuals to identify those therapists at risk for developing CF in order to consider options for assistance. High levels of CF, burnout, and secondary trauma were reduced with proper mentoring, flexible scheduling at work, and a variety of personal coping strategies. By understanding the experience of new graduate PTs, we can better anticipate the support needed for these individuals as they embark on their new caregiving careers. The importance of having social support at work cannot be underestimated.

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