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CARING INTERNATIONAL RESEARCH COLLABORATIVE: A FIVE-COUNTRY PARTNERSHIP TO MEASURE PERCEPTION OF NURSING STAFFS' CARING FOR SELF, BURNOUT, AND COMPASSION FATIGUE

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Abstract

Partnering in research across disciplines and across countries can be challenging due to differing contexts of practice and culture. This study sought to demonstrate how central constructs that have application across disciplines and countries can be studied while concurrently considering context. Groups of nurses from Botswana, Ireland, Israel, New Zealand, and Spain partnered to identify how to measure the constructs of caring for self, burnout, and compassion fatigue, replicating a study by Johnson (2012), who found that caring for self had a moderately strong negative relationship with both compassion fatigue and burnout. While these constructs were of interest to all five groups, the conversation of contextual influences varied. All five groups used the same instruments to measure the central constructs. Levels of burnout and compassion fatigue varied by country but were moderated by caring for self. Partnering across countries made it possible to understand that caring for self moderates the negative impact of burnout and compassion fatigue in all five countries. This study gives insight into methods for partnering across disciplines and contexts.

Keywords: self-care, caring for self, compassion fatigue, burnout, nurses, statistical analysis, Botswana, Ireland, Israel, New Zealand, Spain, Caring International Research Collaborative, Sigma Theta Tau

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Origins of Study

In a recent study of 65 staff nurses in California, US (Johnson, 2011), self-care was shown to have a moderately strong negative relationship with both compassion fatigue ($r = .60$, sig at $.001$) and burnout ($r = .60$, sig at $.001$). These findings were discussed among a group of nurses from five different countries (Botswana, Ireland, Israel, New Zealand and Spain) within the Caring International Research Collaborative (CIRC), a research community of Sigma Theta Tau International Nursing Honor Society. The individuals participating in this conversation desired to understand the state of affairs of caring for self, burnout, and wellness in their respective countries.

Background

A literature search was conducted using the terms burnout, compassion fatigue, and self-care, each in combination with the name of each of the five countries included in this study. Results revealed limited research in the last five years, so the search was expanded to the last 10 years, from 2005-2015. Articles about nurses were the main focus, but articles from other healthcare workers were considered if the topics were relevant to work that nurses also perform. The following are results for each of the search terms and countries.

Burnout

Burnout has been studied in healthcare workers in Botswana (Uebel, Nash & Avalos, 2007), Ireland (Breen & Sweeney, 2012; McTiernan & McDonald, 2015; O'Mahony, 2011; Sharma, Sharp, Walker & Monson, 2008), Israel (Chayu & Kreitler, 2011), New Zealand (Hayes, Douglas & Bonner, 2014; Poghosyan, Clarke, Finlayson & Aiken, 2010), and Spain (Cañadas-De la Fuente, Vargas, San Luis, García, Cañadas, & De la Fuente, 2015; Suñer-Soler, Grau-Martin, Font-Mayolas, Gras, Bertran & Sullman 2013).

Findings from this literature identify several aspects of the work environment that contribute to increased burnout, including lack of support systems within care delivery (Bree & Sweeney), certain clinical specialties (Breen & Sweeney; Chayu & Kreitler; McTiernan & McDonald), poor communication (Sharma et al.), working as a

staff nurse versus in a managerial role (Chayu & Kreitler), needing to perform administrative tasks (Cañadas-De la Fuente, et al., 2015), and greater seniority in present job (Cañadas-De la Fuente, et al.). For nurses in Israel, being non-Jewish increased burnout (Chayu & Kreitler, 2011), which is in contrast to the research reported by Kulik (2009), who found no difference of burnout levels between Jewish and Muslim healthcare workers who work in Israel. A context of war can increase the intensity of burnout for nurses who must provide care to trauma patients while concurrently monitoring dynamic environments of war (Ron & Shamai, 2014). Two types of violence in the workplace, physical and non-physical aggression, were found to increase burnout (Gascon, Leiter, Andres, Santed, Pereira, Cunha, et al., 2013).

Female healthcare workers reported higher levels of burnout than their male counterparts (Kulik, 2009; Cañadas-De la Fuente, et al., 2015). Higher burnout was reported for respondents with less education and less spousal support (Kulik). Having children younger than five years of age was also related to increased levels of burnout (Chayu & Kreitler, 2011). Neuroticism was found to increase emotional exhaustion and depersonalization, which are dimensions of burnout (Cañadas-De la Fuente, et al.).

Some elements of the work environment decrease burnout, including having time in the work day to discuss patient care, good relationships between nurses and physicians, good communication between administration and staff, high standards of care, a quality assurance program, and administrative support for staff (O'Mahony, 2011). Breen and Sweeney (2012) found that more experience in the job decreased emotional exhaustion, the opposite of what was found by Cañadas-De la Fuente et al. (2015) as reported above. Nurses who had children ages 18 to 21 years of age reported less burnout when compared to nurses who do not have children (Chayu & Kreitler, 2011). Cañadas-De la Fuente et al. (2015) found that personality traits of agreeableness, extraversion, and conscientiousness were associated with decreased emotional exhaustion and depersonalization.

In a five-country study (U.S., Canada, U.K., Germany, New Zealand, and Japan), outcomes of burnout include an impact on nurses' perception of quality of care (Poghosyan et al., 2010). Healthcare workers who reported burnout were more likely to also report poor health-related quality of life (Suñer-Soler et al., 2013)

Compassion Fatigue

Literature regarding compassion fatigue was not as easily identified from the five countries. Literature was found for compassion fatigue in Ireland (Collins & Long, 2003), Israel (Berger & Gelkopf, 2011), and New Zealand (Brankin, 2010). Brankin's article addressed the importance of compassion fatigue but did not conduct original research, which left two articles that identified compassion fatigue in the countries of study. Collins and Long found that compassion fatigue had a positive relationship with burnout and a negative relationship with compassion satisfaction. Berger and Gelkopf found that 20% of the well-baby clinic nurses who participated in their study (n=80) conducted in Israel had severe compassion fatigue.

Caring for Self

Research on caring for self was reported in Israel (Huss, Sarid & Cwikel, 2010), New Zealand (Henwood, Tuckett & Turner, 2012; Stodar, 2014), and Spain (Asuero, Queraltó, Pujol-Ribera, Berenguera, Rodríguez-Blanco & Epstein, 2014). Henwood et al. found that nurses who had high physical activity outside of work as a method of caring for self had fewer sick days than nurses with low physical activity outside of work. Uebel et al. (2007) reported on the Tshedisa Institute in Gaborone, Botswana, which was designed for many modalities of self-care including art, yoga, dance, visual arts, and a quiet garden to support healing for healthcare workers, but did not test these modalities. Social workers in the Huss et al. study used art as a method of expression during periods of war in Israel. Asuero et al. found that that use of mindfulness as a method of caring for self was associated with reduced burnout in a group of health professionals in Spain.

Methods

The current study was a replication of a non-experimental descriptive study originally conducted in the U.S. by Johnson (2012), who described the state of burnout, compassion fatigue, and caring for self in a sample of nurses in the U.S. Johnson found a statistically significant relationship between caring for self and burnout and compassion fatigue.

The current study was conducted to examine the state of affairs in a sample of nurses in five countries as it relates to burnout, compassion fatigue, and caring for self. Mean scores, correlations, and hierarchical regression will be used to describe the relationship of caring for self to burnout and compassion fatigue. This study will add to the science, not only by replication but by using hierarchical regression to see if sample by country predicts caring for self. SPSS 22.0 was the software used for analysis, and G-Power 3.1 was used for power analysis.

Survey instruments were formatted in both hard copy and electronic links. Israel and Botswana elected to use hard copy surveys; their results were sent to the lead researcher of the study to be entered into an electronic database for all responders. For those countries choosing the electronic link, the responses went directly into the database of responses housed in the lead investigators' secure computer server. Respondents who used the electronic link could not access their survey responses once they were submitted.

Definitions of terms

In this study, caring for self was defined as the perception of enacting ten behaviors of caring toward self as described in Watson's Theory of Caring (2008). Self-care is defined as the application of Watson's 10 Caritas (caring) behaviors to one's self.

Watson proposes ten specific processes of caring that, if enacted by nurses and other care givers, will result in healing (Nelson, DiNapoli, Turkel, & Watson, 2012).

1. *Cultivating the practice of loving kindness and equanimity toward self and others.* Loving kindness includes listening to, respecting, and identifying vulnerabilities in self and others.
2. *Being authentically present: Enabling, sustaining, and honoring faith and hope* which is future-oriented and includes self-discovery.
3. *Cultivating one's own spiritual practices and transpersonal self, going beyond ego-self.*
4. *Developing and sustaining a helping-trusting caring relationship.*
5. *Being present to, and supportive of, the expression of positive and negative feelings.*
6. *Creative use of self and all ways of knowing as part of the caring process; engaging in the artistry of caritas.* At the core here is creative problem solving.
7. *Engaging in genuine teaching-learning experience that attends to unity of being and subjective meaning-attempting to stay within others' frame.* In the context of farming this is knowledge acquisition, both subjective and objective, and is applied at a level the recipient can learn and apply.
8. *Creating a healing environment at all levels.*
9. *Administering sacred acts of caring-healing by tending to basic needs.*
10. *Opening and attending to spiritual/mysterious and existential unknowns of life-death.* This is belief in the impossible (miracles), even when others may assert doubt.

(Nelson et al., 2012, in section titled The Future of Nursing Knowledge).

In this study, compassion fatigue is defined as the reduced capacity of care givers to empathize with patients due to prolonged exposure to suffering individuals (Meadors, Lamson, Swanson, White & Sira, 2009).

In this study, burnout is defined as the individual's defense response to prolonged interpersonal demand which results in withdrawal from the professional role of caring (Meadors, et al., 2009).

Research questions sought to answer whether the descriptions of burnout, compassion fatigue, and caring for self were the same across countries; whether or not there was a relationship between burnout and caring for self; and whether or not there was a relationship between caring for self and compassion fatigue. Power analysis for a regression equation with two predictors revealed that a sample of 200 nurses would be needed using an alpha of .05, power of .98 and effect size of .10. All participants secured approval from their respective ethics committees before administering the study instruments.

Samples

The sample from Israel comprised registered nurses (RNs) taking a statistics course in the Graduate Studies Program for Nurses (BA Program for Registered Nurses) at the Department of Nursing, the School of Health Professions at Tel Aviv University. The nurses worked at different hospitals and medical clinics located in the center of Israel.

The sample from Ireland was recruited from a large university school of nursing and midwifery which provides a range of programs at both undergraduate and graduate levels. The sample for this study was drawn from the graduate student body, most of whom were part-time students engaged in clinical practice as part of their normal employment. At the time of data collection there were 254 graduate students registered in the school, and the volunteer sample for the study was obtained from this cohort. Surveys were made available over a three-week period.

The sample from Spain comprised 100 nurses trained in their ward specialty dealing with complex patients. Specialty areas included oncology, psychiatric, cardiac surgery, cardiology, and pediatric oncology.

The sample from New Zealand comprised RNs who had applied for a Nursing Council of New Zealand annual practicing certificate within the previous 12 months and who had consented to participate in web-based surveys. An introductory invitation which

included the web-based survey's URL link and an information sheet was sent to 200 randomly selected participants by email. The participant data base and selection was computer-generated and uploaded electronically. No identifying information about potential participants was provided to the researchers.

The sample from Botswana was a convenience sample drawn from RNs and midwives working in the two district hospitals. Midwives are trained after obtaining their RN. All nurses invited to participate were registered with the Nursing and Midwifery Council of Botswana.

Comparison of results from different countries was conducted using the ANOVA procedure (Howell, 2006). Games-Howell was used as the post hoc method because it considers variance of different and small sample sizes (Cramer & Howitt, 2004).

Instruments

The Compassion Fatigue Self-Assessment (CFSA) is a 40-item survey used to measure perception of burnout (17 items) and compassion fatigue (23 items). Sum scores from each subscale are used to assess risk for burnout and compassion fatigue, with low scores indicating low risk for the construct of interest. A score of 26 or less is extremely low risk for compassion fatigue, a score of 27-30 is low risk, a score of 31-35 is moderate risk, 36-40 is high risk, and 41 or more is extremely high risk. For burnout, a score of 19 or less is extremely low risk, 20-24 is low risk, 25-29 is moderate risk, 30-42 is high risk, and 43 or more is extremely high risk.

Caring for self was assessed using the Caring Factor Survey; a 7-point Likert scale is used, and higher scores indicate more caring for self. Items are summed and divided by 10 to calculate the mean score.

Psychometric testing was performed prior to analysis of results. Factor analysis was conducted for validity testing, using oblique extraction and rotation (principal axis factoring and direct oblimin, respectively), Eigenvalues of 1.0, and a minimum factor

loading of .30. The Kiser-Meyer-Olkin (KMO) was used to assess model fit. Reliability was assessed using Cronbach’s alpha with a desired alpha of .80 or greater.

Demographics that were gathered from each country varied based on operational and contextual interest within each country. Results of most demographics were reported within each respective participating country and are not reported here. The only demographic reported within this study is participating country.

Results

Of 775 surveys distributed, 283 were returned, an overall response rate of 35%. Individual response rates for each survey and each country are noted in Figure 1.

Figure 1. Response Rate by Survey and Country

| Country (response n/sample n) | Compassion Fatigue Response Rate | Burnout Response Rate | CFS – Caring for Self Response Rate |
|----------------------------------|-------------------------------------|--------------------------|--|
| Botswana (55/100) | 51 (51%) | 45 (45%) | 46 (46%) |
| Ireland (86/254) | 84 (33%) | 84 (33%) | 86 (34%) |
| Israel (101/121) | 99 (82%) | 101 (83%) | 100 (83%) |
| New Zealand (15/200) | 15 (7.5%) | 15 (7.5%) | 7 (3.5%) |
| Spain (26/100) | 23 (23%) | 26 (26%) | 26 (26%) |
| Total (283/775) | 272 (35%) | 271 (35%) | 265 (34%) |

Factor analysis of burnout revealed all 17 items loading with a Kaiser-Meyer-Olkin (KMO) statistic (a measure of sampling adequacy) of .90, indicating good model fit. Items of burnout and associated factor loadings are noted in Figure 2. (Factor loadings represent how much a factor explains a variable in factor analysis.)

Figure 2. Factor Loading for Burnout

| Item and Associated Wording for Burnout Items | Loading |
|--|---------|
| BO32. I have felt depressed as a result of my work as a helper | .799 |
| BO37. I have a sense of worthlessness/disillusionment/resentment associated with my work | .735 |
| BO31. I have felt weak, tired, rundown as a result of my work as a helper | .731 |
| BO27. I have felt "on edge" about various things and I attribute this to certain clients | .709 |

| | |
|---|------|
| BO39. I have thought that I am no succeeding at achieving my life goals | .697 |
| BO36. I find it difficult separating my personal life from my work life | .672 |
| BO38. I have thoughts I am a "failure" as a helper | .631 |
| BO33. I am unsuccessful at separating work from personal life | .626 |
| BO28. I have wished that I could avoid working with some clients | .623 |
| BO15. I have thought that there is no one to talk with about highly stressful experiences | .536 |
| BO30. I have felt that some of my clients dislike me personally | .504 |
| BO16. I have concluded that I work too hard for my own good | .495 |
| BO14. I have thought that I need more close friends | .492 |
| BO40. I have to deal with bureaucratic, unimportant tasks in my work life | .489 |
| BO34. I feel little compassion toward most of my co-workers | .481 |
| BO35. I feel I am working more for the money than for personal fulfillment | .473 |
| BO9. I am a sensitive person | .176 |

Extraction Method: Principal Axis Factoring.

Factor analysis of compassion fatigue revealed a single factor with all items loading and a KMO of .89, indicating adequate model fit. Factor loading for each of the 23 items for compassion fatigue are noted in Figure 3.

Figure 3. Factor Loading for Compassion Fatigue

| Item and Associated Wording for Compassion Fatigue Items | Loading |
|---|---------|
| CF20. I have suddenly and involuntarily recalled a frightening experience while working with a client | .731 |
| CF19. I have experienced intrusive thoughts of sessions with especially difficult clients | .730 |
| CF25. I have felt trapped by my work as a helper | .697 |
| CF22. I am losing sleep over a client and their family's traumatic experiences | .697 |
| CF18. I experience troubling dreams similar to a client of mine and their family | .692 |
| CF23. I have thought that I might have been "infected" by the traumatic stress of my clients | .634 |
| CF26. I have felt a sense of hopelessness associated with working with clients | .597 |
| CF21. I am preoccupied with more than one client and their family | .597 |
| CF24. I remind myself to be less concerned about the well-being of my clients | .580 |
| CF13. I have thought I need to "work-through" a traumatic experience in my life | .548 |
| CF29. I have been in danger working with some clients | .512 |
| CF10. I have had flashbacks connected to my clients and families | .511 |
| CF17. I am frightened of things traumatized people and their family have said or done to me | .477 |

| | |
|--|------|
| CF11. I have first-hand experience with traumatic events in my adult life | .458 |
| CF2. I avoid activities that remind me of a frightening experience | .450 |
| CF5. I had difficulty falling/staying asleep | .425 |
| CF6. I have outbursts of anger with little provocation | .412 |
| CF12. I have first-hand experience with traumatic events in my childhood | .393 |
| CF1. I avoid thoughts that remind me of a frightening experience | .387 |
| CF7. I startle easily | .384 |
| CF4. I feel estranged from others | .375 |
| CF8. While working with a victim I thought about the violence against the person | .361 |
| CF3. I have gaps in my memory about frightening events | .306 |
| Extraction Method: Principal Axis Factoring. | |

Factor analysis of the CFS-CS revealed a single factor structure with a KMO of .92, indicating good model fit for this study. Items in order of loading are noted in Figure 4.

Figure 4. Response Rate by Survey and Country

| Dimension of Caring for Self | Factor Loading |
|------------------------------|----------------|
| Faith and Hope | .765 |
| Healing Environment | .750 |
| Spiritual Support | .728 |
| Loving Kindness | .702 |
| Promote Expression | .702 |
| Problem Solving | .693 |
| Allow Miracles | .692 |
| Holistic Care | .668 |
| Teach and Learn | .646 |
| Helping Trusting | .526 |

Cronbach’s alpha for each of the scales were above .80. Cronbach’s for burnout was .89, for compassion fatigue .89, and for caring for self was .90.

Results for compassion fatigue revealed 24 as the low score and 98 as the high with a mean score of 46.21. Recall, high risk is 41 or more, indicating that a large portion of the nurses are at high risk for compassion fatigue. It is noted the distribution has a positive skew, meaning there are some extreme scores which will bias the mean score, but the skew is not large; thus we can safely assert that a large majority of the nurses are at moderate to high risk for compassion fatigue.

Burnout scores ranged from 17-79. Recall, moderate risk is 30 or higher and high risk is 41 or higher. The mean score is 37.8, which indicates that approximately half of the distribution is at moderate to high risk for burnout.

Self-care scores ranged from 1-7 with a mean score of 5.29 and standard deviation of 1.05. There was a normal distribution with a slight left skew, indicating that scores lean toward the high score of 7. Figure 5 review the range and standard deviations which gives insight into the variance of caring for self, burnout and compassion fatigue within this sample. It is desired to know in this study if there is a relationship between the low scores of caring for self and burnout and compassion fatigue as well as a relationship between the high score of caring for self and burnout and compassion fatigue.

Figure 5. Descriptive Statistics of All Countries Combined

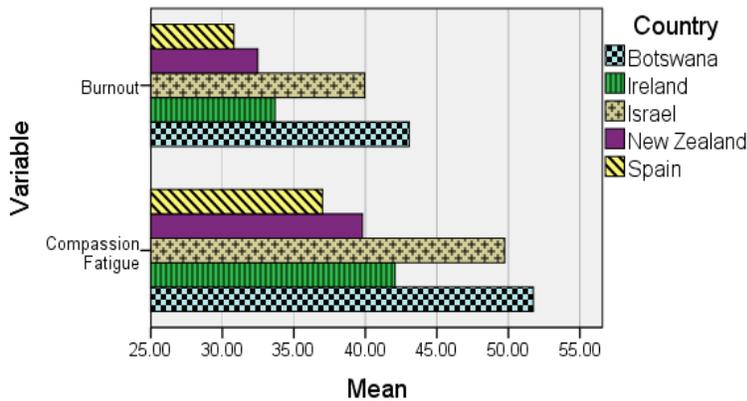
| Construct | N | Minimum | Maximum | Mean | Std. Dev. | Skewness | Kurtosis |
|-----------------------|-----|---------|---------|-------|-----------|----------|----------|
| CFS - Caring for Self | 264 | 1.20 | 7.00 | 5.29 | 1.05 | -.62 | .31 |
| Burnout | 267 | 17.00 | 79.00 | 37.78 | 12.57 | .82 | .09 |
| Compassion Fatigue | 270 | 24.00 | 98.00 | 46.21 | 14.48 | .98 | .76 |

An ANOVA procedure was used to examine differences between countries. Homogeneity of variance was examined using Levene’s statistic (used to assess the equality of distribution of scores from one group to the next) and found significance for both compassion fatigue and burnout. Thus, boxplots (graphical displays of the distribution for each group) for each country were visually examined and variances

were determined to be equal. Statistically significant differences were identified for all three variables.

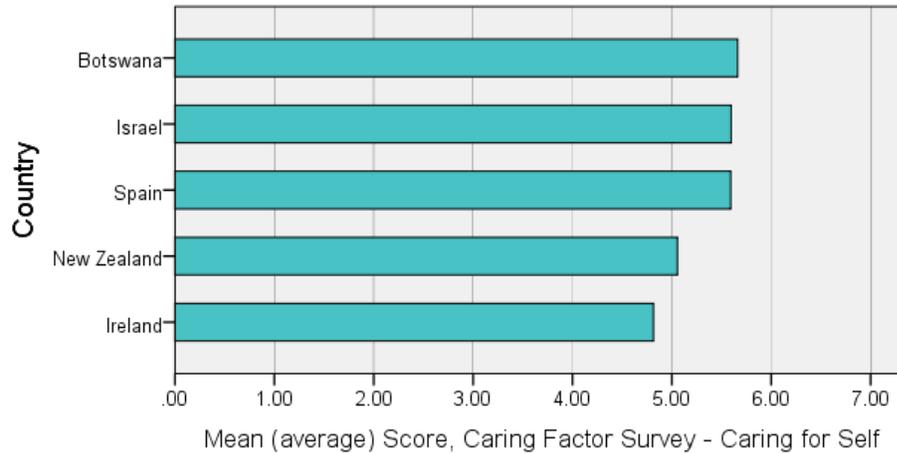
It was noted that Botswana and Israel had significantly higher compassion fatigue scores compared to the other three countries. Burnout was also found to be significantly higher in both Botswana and Israel compared to Ireland and Spain. Scores are noted graphically in Figure 6.

Figure 6. Comparison of Burnout and Compassion Fatigue Scores by Country



Using an ANOVA procedure, the self-care score was found to be statistically significant when comparing countries. Ireland was found to have the lowest self-care score, statistically significant when compared to Botswana, Israel, and Spain.

Figure 7. Comparison of Caring for Self Scores by Country



There was a statistically significant difference between compassion fatigue and burnout with Pearson’s Correlation (which measures the degree and direction of a relationship between two variables) of .78, indicating a strong, statistically significant relationship between these two constructs. See Figure 8. It was a positive relationship, meaning that as burnout increases, so does compassion fatigue. This does not indicate causality, but rather a strong relationship. It is noted that self-care does not have a statistically significant relationship to compassion fatigue or burnout. However, it is noted the relationship that does exist, despite not reaching statistical significance, is negative. This means that as self-care increases, risk for compassion fatigue and burnout both decline.

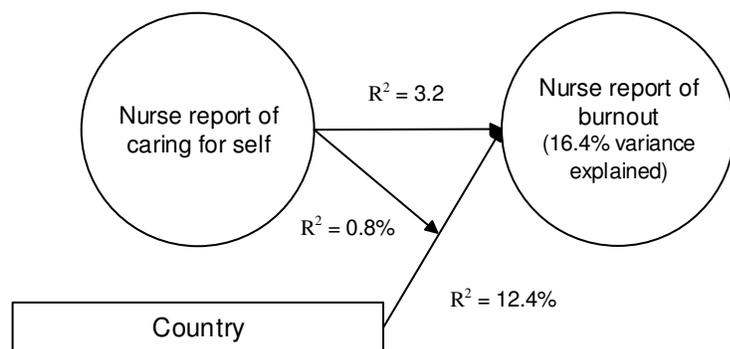
Figure 8. Pearson’s Correlation Constructs of Interest

| Construct | Compassion Fatigue | Burnout | CFS – Caring for Self |
|-----------------------|------------------------|-----------------------|-----------------------|
| Compassion Fatigue | $r = 1.0$ | | |
| Burnout | $r = .775, p = < .001$ | $r = 1.0$ | |
| CFS – Caring for Self | $r = - .067, p = .338$ | $r = -.113, p = .104$ | $r = 1.0$ |

In consideration of the differences found between countries, and the lack of relationship found between caring for self and compassion fatigue or burnout, a hierarchical regression procedure was run to see if controlling for country would reveal a relationship between caring for self and compassion fatigue or burnout.

First the regression procedure with country as the independent variable and burnout as the dependent variable was run. Each country was dummy coded and Spain, as the lowest score for burnout, was used as the reference. Results revealed that country predicted 13.2% of the variance in burnout, with Israel being the only country that was statistically significant ($p = < .001$). Caring for self was added as the second variable, thus re-examining the relationship between burnout and caring for self, but now controlling for country. Results revealed that by controlling for country, the relationship between caring for self and burnout was not significant, explaining 4.0% of the variance of burnout ($p = .002$), and country explained 12.4% of the variance ($p = < .001$). These findings reveal that caring for self had both a moderating and a direct effect on perception of burnout. Figure 9 is a model depicting these findings.

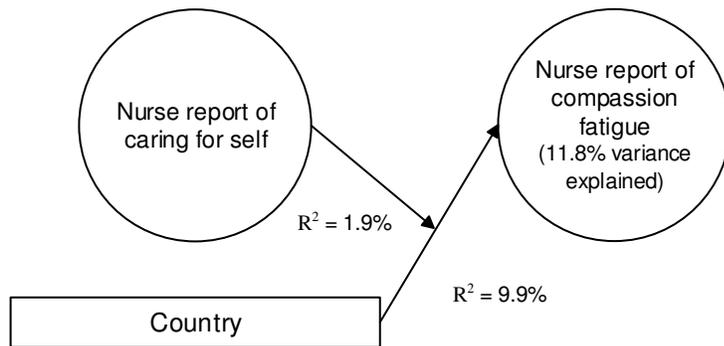
Figure 9. Relationships Identified between Burnout and Caring for Self



Compassion fatigue was examined in a regression equation with only country as the independent variable. Results revealed country predicted 11.8% of the variance of compassion fatigue ($p = < .001$). When caring for self was added as the second step in the hierarchical regression, the explained variance of country on compassion fatigue declined to 9.9% ($p = < .001$), and caring for self, as a moderator of the relationship

between country and compassion fatigue, explained 1.9% of the variance of compassion fatigue ($p = .037$). Combined, country and caring for self explained 11.8% of the variance of compassion fatigue. These findings are illustrated in Figure 10.

Figure 10. Relationships Identified between Compassion Fatigue and Caring for Self



Discussion

These results support the findings of Johnson (2012) that caring for self, using Watson's approach to caring, can serve as a strategy to decrease nurses' burnout and compassion fatigue. It was especially noteworthy that the nurses who report caring for themselves from within a context of high risk for compassion fatigue were actually able to lower their risk because of their caring for self. This has implications for countries, or disciplines, discovered to be at high risk for burnout or compassion fatigue. The implication is to encourage staff to learn strategies that promote behaviors of loving kindness toward self, acceptance of both negative and positive dimensions of self, taking time to learn, and other behaviors consistent with Watson's theory of caring as reviewed in this study. Such practice of caring for self may decrease the likelihood of experience burnout or compassion fatigue, even if they are in an environment of high risk; caring for self empowers the individual person to lower their own risk of burnout and compassion fatigue.

This research also supports the validity of instruments in samples from five different countries to measure caring for self, burnout, and compassion fatigue. The literature review identified many other variables that should be measure to further specify the

model of research that has resulted from this study. Building models of research that are specified to the context of the country and/or discipline of interest are important to inform operational refinement.

The next step in this international study is to conduct country-specific studies using the existing data that was collected, and share with each other how context impacted burnout and workload. It may be that partnering to learn about context will assist with building a core model of intervening in compassion fatigue, such as including caring for self, and tailoring each country's model for context-specified predictors, covariates, and outcomes. Partnering in this way has the potential to build models of research that inform across contexts. In consideration of the outcomes of burnout reported by Absolon and Krueger (2009), including increased absence from work, substance abuse, and likelihood of leaving a job, the cost savings of deeper understanding is substantial.

The limitations for this study are many, including small and varied sample sizes from each country. It was noted the countries that used the paper format of the survey to collect the data (Israel and Botswana) had higher response rates than the other countries that used an electronic format. Some individuals may prefer to respond to surveys using a paper format, which should be considered in future studies. Another limitation was the decision to have each country select the demographics that were most important to their context to study. For example, Israel had many different religious groups that were a focus of the study, including Jews, Christians, Muslims, Hindus, and Buddhists. The interest in studying different religious groups as a need to address diversity was not the same in other countries. Ireland examined the difference between nurses who identified themselves as nationals and those who did not. This current study, however, may serve as a starting point for core measures in studying and developing country-specified models of caring for self as it relates to burnout and compassion fatigue of nurses and other health care staff.

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