# Assessing the Relationship Between Work Engagement and Compassion Satisfaction Among Palliative Care Nurses

Beau Holland, Damian Lopez, Adeline Carter

## 1 Introduction

The provision of palliative care represents one of the most emotionally and psychologically demanding specialties within nursing practice. Palliative care nurses regularly confront human suffering, mortality, and complex ethical dilemmas while providing comfort and dignity to patients at the end of life. While substantial research has documented the risks of burnout and compassion fatigue in this population, significantly less attention has been paid to understanding the positive psychological resources that enable some palliative care nurses to not only endure but thrive in their profession. This study addresses this critical gap by examining the relationship between work engagement and compassion satisfaction, two constructs that represent the positive dimensions of professional quality of life.

Work engagement, characterized by vigor, dedication, and absorption in one's work, has been established as a key factor in employee well-being and organizational performance across various sectors. However, its specific manifestations and implications in palliative care nursing remain underexplored. Compassion satisfaction, defined as the pleasure derived from being able to do one's work well, particularly in helping others through difficult experiences, represents another crucial dimension of professional fulfillment that may be particularly

salient in palliative care contexts.

This research introduces several novel contributions to the literature. First, we employ an integrated methodological approach that combines traditional psychometric assessment with physiological biomarkers, providing a more comprehensive understanding of the work engagement-compassion satisfaction relationship. Second, we move beyond cross-sectional snapshots to examine how these constructs evolve and interact over time through a longitudinal design. Third, we identify distinct profiles of palliative care nurses based on their engagement and compassion satisfaction patterns, offering practical insights for targeted interventions.

The primary research questions guiding this investigation are: How do work engagement and compassion satisfaction relate to each other among palliative care nurses? What distinct profiles emerge based on patterns of engagement and compassion satisfaction? How do these profiles correspond to physiological stress indicators? What factors predict movement between these profiles over time?

# 2 Methodology

## 2.1 Participants and Procedure

This longitudinal study employed a mixed-methods sequential explanatory design, following 187 palliative care nurses from six healthcare institutions over an 18-month period. Participants were recruited through professional organizations and institutional partnerships, with inclusion criteria requiring at least one year of experience in palliative care nursing and current employment in a palliative care setting. The sample comprised 84.5

Data collection occurred at three time points: baseline, 9 months, and 18 months. At each assessment, participants completed a comprehensive battery of psychological measures and provided physiological samples. Additionally, a subset of 45 participants engaged in semi-structured interviews to provide qualitative depth to the quantitative findings.

#### 2.2 Measures

We developed and validated the Integrated Engagement-Compassion Scale (IECS) specifically for this study. The IECS comprises 32 items measuring four dimensions: work engagement (vigor, dedication, absorption), compassion satisfaction, emotional regulation capacity, and meaning-making processes. The scale demonstrated excellent psychometric properties, with Cronbach's alpha coefficients ranging from .87 to .93 for the subscales and confirmatory factor analysis supporting the hypothesized four-factor structure.

Physiological assessment included salivary cortisol sampling at four time points throughout a single workday (upon waking, 30 minutes post-waking, before lunch, and before bedtime) to capture diurnal cortisol rhythm. Heart rate variability (HRV) was measured using ambulatory monitors during a typical work shift, with specific focus on the root mean square of successive differences (RMSSD) as an indicator of parasympathetic nervous system activity.

Additional measures included the Professional Quality of Life Scale (ProQOL) for validation purposes, the Connor-Davidson Resilience Scale, and a demographic and work characteristics questionnaire.

## 2.3 Analytical Approach

Data analysis employed a person-centered approach using latent profile analysis to identify distinct subgroups based on work engagement and compassion satisfaction patterns. Cross-lagged panel modeling examined the bidirectional relationships between engagement and compassion satisfaction over time. Mixed-effects models assessed the association between psychological profiles and physiological biomarkers, controlling for relevant covariates. Qualitative data were analyzed using thematic analysis to provide contextual understanding of the quantitative findings.

## 3 Results

#### 3.1 Identification of Distinct Profiles

Latent profile analysis revealed three distinct profiles among palliative care nurses. The Integrated Thrivers profile (42.2

## 3.2 Physiological Correlates

The physiological data revealed compelling differences across profiles. Integrated Thrivers demonstrated the healthiest cortisol patterns, with steep morning increases and gradual declines throughout the day, indicating effective stress regulation. They also showed significantly higher HRV during work hours compared to the other profiles. Detached Professionals exhibited flattened cortisol rhythms and moderate HRV, suggesting chronic low-grade stress activation. Compassion-Fatigued Engaged nurses showed the most dysregulated physiological patterns, with elevated evening cortisol and significantly reduced HRV, indicating high allostatic load.

## 3.3 Longitudinal Dynamics

Cross-lagged panel analysis revealed a bidirectional relationship between work engagement and compassion satisfaction, with each construct predicting the other over time. However, the strength of these relationships varied by profile. For Integrated Thrivers, compassion satisfaction strongly predicted subsequent work engagement, suggesting that deriving meaning from caregiving reinforced their professional commitment. For Compassion-Fatigued Engaged nurses, work engagement predicted subsequent declines in compassion satisfaction, indicating that maintained professional effort in the absence of personal fulfillment may eventually undermine compassion satisfaction.

Transition analysis revealed that 68

#### 3.4 Qualitative Insights

The qualitative interviews provided rich contextual understanding of the quantitative findings. Integrated Thrivers described intentional practices for maintaining boundaries while preserving emotional connection, such as ritualized transitions between work and home life. They emphasized the privilege of accompanying patients through difficult transitions and derived meaning from small moments of connection. Detached Professionals often described emotional distancing as a necessary coping strategy, with some expressing concerns about losing the emotional aspects of their nursing identity. Compassion-Fatigued Engaged nurses frequently described feeling trapped between their professional commitment and emotional exhaustion, with several expressing concerns about their long-term sustainability in palliative care.

## 4 Conclusion

This study makes several original contributions to understanding the professional well-being of palliative care nurses. By examining the relationship between work engagement and compassion satisfaction through an integrated methodological framework, we move beyond the predominant focus on burnout and compassion fatigue to identify the positive resources that sustain nurses in this challenging specialty.

The identification of three distinct profiles challenges the assumption that palliative care nurses represent a homogeneous population in terms of their professional well-being. The Integrated Thrivers profile demonstrates that it is possible to maintain both high engagement and compassion satisfaction in palliative care, while the Detached Professionals and Compassion-Fatigued Engaged profiles represent different adaptation patterns with distinct implications for individual well-being and quality of care.

The physiological findings provide compelling evidence that psychological profiles correspond to measurable differences in stress physiology, supporting the validity of our typology

and highlighting the embodied nature of professional well-being. The bidirectional relationship between work engagement and compassion satisfaction underscores the dynamic nature of these constructs and suggests potential intervention points for enhancing professional quality of life.

From a practical perspective, these findings suggest the importance of tailored interventions rather than one-size-fits-all approaches to supporting palliative care nurses. For Integrated Thrivers, organizations should focus on sustaining their positive adaptation through opportunities for mentorship and leadership. For Detached Professionals, interventions might focus on reconnecting with the meaningful aspects of caregiving while developing healthier emotional regulation strategies. For Compassion-Fatigued Engaged nurses, more intensive support is needed to address both organizational factors and individual coping strategies.

This study has several limitations, including the relatively small sample size for the physiological measures and the potential for self-selection bias among participants. Future research should examine the relationship between nurse profiles and patient outcomes, explore organizational factors that promote the Integrated Thriver profile, and develop interventions based on these distinct adaptation patterns.

In conclusion, this research provides a more nuanced understanding of how palliative care nurses navigate the emotional demands of their work. By identifying the factors that enable some nurses to thrive while others struggle, we can develop more effective approaches to supporting these essential healthcare professionals in their vital work.

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