Organizational Resilience: Using Workplace Culture and Positive Environmental Constructs to Relieve Burnout in Registered Nurses

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Aims: The objective of this study was to examine the extent to which organizational resilience constructs mitigate perceived burnout among registered nurses.

Background: In a survey completed on a sample of 43,329 nurses in the United States (US), 41% of hospital nurses were not satisfied with their jobs, and 22% planned to leave the profession in the next year. In nurses, burnout is highly correlated with increased turnover. With more than three million nurses employed in healthcare organizations, a projected shortage of 20% by 2020 presents serious implications for the healthcare workforce in the US. Resilience is the ability to adapt and thrive in the face of adversity; likewise, organizational resilience considers the role of workplace culture and managerial behavior through positive reinforcement, job satisfaction, and supportive and responsive administration in sustaining staffs' resilience within their organization.

Design: This was a secondary analysis of cross-sectional survey data from 3,164 nurses in Oregon.

Methods: Three measures were used to assess organizational resilience including the Revised Nurse Work Index, the Safety Organizing Scale, and a leadership index. These measures provided meaningful insight into an organization's leadership, staffing, nurse-physician relationships, safety culture, and the working relationships of employees and administration. Structural equation modeling and hierarchical regression modeling was used to address the objective and examine what organizational resilience factors, including salary, were direct contributors to mitigating perceived burnout among nurses.

Results/Findings: Our research team investigated organizational constructs of resilience, based on Positive Organizational Behavior Theory (POB), and the extent to which these resilient constructs mitigated burnout stratified by shift (day, night, and rotating). To qualify for inclusion in POB, organizational studies must have a positive application, extensive theory and research foundations, and valid measures. In our study, the constructs used to address POB included staffing ratios; adequate support services; supportive supervisory staff; responsive administration; praise, recognition, and appreciation for unique perspectives; mentorship programs; working relationships with colleagues; and an active staff development program. Within those constructs, not one was found to reduce burnout in all three shifts, suggesting that shift plays an influential role in understanding burnout in nurses. Regardless, our findings demonstrated that each shift cultivated positive organizational constructs to mitigate burnout in their environment. These findings suggest that the perceptions of a nurses' work environment are fundamental in mitigating burnout.

In our study, organizational (22.7%) and personal (13%) resilience accounted for a total of 35.7% proportion of variance in burnout (compared to 4.8% variance within predisposing nursing demographic characteristics). These significant discoveries inform us that the development of resilience and mitigation of burnout can be greatly enhanced by focusing on both personal and organizational constructs of resilience. Most importantly was the ability to tease out what specifically contributed to the mitigation of burnout within an organization. The two highest contributors to preventing organizational burnout were being praised and recognized for a job well done (12.9%) and an administration that listens and responds to employee concerns (11.1%).

Furthermore, we explored the simultaneous effects of praise, recognition, and salary on burnout between shifts. As previously seen in the literature and through our initial regression analysis in STATA, after controlling for the moderating effect of salary, lower levels of burnout were related to a perceived high praise and recognition environment for both day and night nurses (B = 0.525, p = 0.000; B = .761, p = 0.000 respectively). Additionally, for both groups, a high salary was also correlated with perceived praise and recognition within the hospital setting (B = -1.171, p = 0.000). Despite significant correlations between burnout and environments with praise, we discovered that the perception of adequate compensation did not significantly mitigate burnout in an environment without praise or recognition.

Implications: What constitutes a healthy or poor work environment depends on an organization's culture, but to discover those unique constructs that lead to the mitigation of burnout can assist organizations and administration in tailoring programs that foster an environment that is genuinely supportive of nurses. We recommend using shared governance committees to focus on nurse satisfaction through the pursuance of the five components in ANCC's Magnet model: staff empowerment, transformational leadership, exemplary professional practice, new knowledge innovations and improvements, and empirical outcomes.

Conclusion: No one resilience construct was found to reduce burnout in every shift, suggesting that shift plays an influential role in understanding burnout in nurses. An overall supportive social network (i.e. colleagues, physicians, administration) was significant in improving the perception of all nurses' work environments. Our recommendations encourage healthcare institutions and administration to seek opportunities for the use of POB in the workplace to mitigate burnout. A culture that invites a greater awareness of positive constructs within the work environment through measurable benchmarks has potential to prevent burnout, limit nurse turnover, and save money.

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References:
Aiken, L.H., et al., *Cause for concern: nurses' reports of hospital care in five countries.* LDI Issue Brief, 2001. **6**(8): p. 1-4.

Buerhaus, P.I., D.I. Auerbach, and D.O. Staiger, *The recent surge in nurse employment: Causes and implications.* Health Affairs, 2009. **28**(4): p. w657-w668.

Buerhaus, P.I., D.O. Staiger, and D.I. Auerbach, *Implications of an aging registered nurse workforce.* Jama, 2000. **283**(22): p. 2948-2954.

Drenkard, K., Wolf, G. A., & Morgan, S. H. (2011). *Magnet: The Next Generation: Nurses Making the Difference*: American Nurses Credentialing Center.

Kelly, D.M., et al., *Impact of critical care nursing on 30-day mortality of mechanically ventilated older adults.* Critical care medicine, 2014. **42**(5): p. 1089.

Ostermeier, L., & Clair, B. (2008). *Nurse retention toolkit: everyday ways to recognize and reward nurses*: HC Pro, Inc.

Youssef, C.M. and F. Luthans, *Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience.* Journal of management, 2007. **33**(5): p. 774-800.

Abstract Summary:
Organizational characteristics play a pivotal role in preventing and relieving burnout among registered nurses. This secondary analysis examines factors that were most significant in mitigating the effects of perceived burnout among 3,164 nurses from ten practice settings.

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1. Positive recognition
2. Administration and employee relationship
3. Adequate staffing, mentorship programs, shared governance

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Author Summary: Ms Calabro is a PhD student from Oregon Health and Science University. Her research focuses on specific factors of personal and organizational resilience that can mitigate burnout and PTSD in registered nurses. Emily has been a critical care nurse for over eight years and has empowered nursing students to find their inner resilience to survive and thrive through nursing school.

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Author Summary: Dr. Dieckmann leads the Statistical Core in the school of nursing. He provides statistical and research design support to faculty and students and teaches statistical methods. Particular areas of interest include structural equation models, longitudinal modeling, psychometrics and meta-analysis. He is also core faculty for the Clinical Psychology program in the department of Psychiatry.

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Professional Experience: I have worked in a nursing home, in a health care clinic, and in medical/surgical and intensive/coronary care units. I am an assistant professor at the Oregon Health & Science University, Portland, Oregon. I teach and conduct research in end of life care. In 1996, I received the Outstanding Student Award from Sigma Theta Tau International, Oregon Health Sciences University. I have presented my research at several of Sigma Theta Tau International Nursing Research Congresses.

Author Summary: Dr. Hansen's main research interest focuses on end-of-life and palliative care in adults and older adults with end-stage liver disease patients and their families in particular. Her work is multidisciplinary and includes expert collaborators from nursing, medicine, psychology, and medical anthropology. The goal of her research is to develop cost effective interventions to improve end of life and palliative care provided to adults and older adults and their families across health care settings.

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Author Summary: Cardiovascular nurse scientist Christopher Lee, is a Professor and the Associate Dean for Research at the Connell School of Nursing. His research has been support by grants from the National Institutes of Health, the Office of Research on Women's Health and the American Heart Association (AHA). Dr. Lee's work has earned him multiple awards from the AHA, Heart Failure Society of America (HFSA), and the Friends of the National Institute of Nursing Research.