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### Abstract

**Aim:** The purpose of this study was to identify relationships between resilience protective factors (RPFs) and moral distress among baccalaureate nursing students.

**Background:** Students report moral distress associated with clinical practicum experiences. Enhancing resilience may minimize moral distress and associated consequences.

**Method:** Correlation, pilot study. Two previously tested instruments were used to measure moral distress (Moral Distress Thermometer) and RPFs (Scale of Protective Factors).

**Results:** Aggregate mean moral distress rating was 3.67. Two of four RPF subcategories demonstrated a significant inverse correlation with moral distress rating. Inverse correlations were found between social support and moral distress ( $r = -.27, p < .05$ ), and between goal efficacy and moral distress ( $r = -.37, p < .01$ ). Total resilience scores also demonstrated a weak inverse correlation with moral distress ( $r = -.24, p < .05$ ).

**Conclusions:** Findings help educators prioritize resilience enhancing educational strategies.

## **Examining relationships between resilience protective factors and moral distress among student nurses.**

Approximately 17.5 % of newly registered nurses leave their initial job within the first year of practice (Kovner, Brewer, Fatehi, & Jun, 2014). Moral distress, or feeling constrained from acting upon one's ethical knowing (Jameton, 1984), is associated with powerlessness and burnout and may contribute to workforce attrition (Rushton & Kurtz, 2015). Enhancing resilience protective factors (RPFs), defined as social and personal capacities to recover, adapt and persist amidst adversity (Madewell & Ponce-Garcia, 2016), may help one mitigate moral distress. According to Lachman (2016), resilience assists persons to identify, effectively speak up, and take action when confronted with ethical dilemmas. A variety of resilience education interventions have been recommended, however, scholars have yet to specify which resilience educational strategies most effectively attenuate moral distress. In this pilot study, we sought to examine relationships between *resilience protective factor scores* and *moral distress ratings* among baccalaureate nursing students (BSN). Such evidence is needed to guide curricular revisions and prioritize allocation of educational resources

### **Literature Review**

A literature search of allied health databases was conducted using the following key words: *moral distress, nurse, student, retention, attrition, resilience, moral resilience and resilience education*. The search returned evidence about moral distress among student nurses and resilience education suggestions. No published studies assessed relationships between resilience protective factors (RPFs) and moral distress among student nurses.

Student nurse moral distress and clinical situations contributing to such distress have been reported (Grady, 2014; Krautscheid, DeMeester, Orton, Smith, Livingston, & McLennon,

2017; Sasso, Bagnasco, Bianchi, Bressan & Carnevale, 2016). Research recommendations call for nurse educators to incorporate resilience education within curriculum, assisting students to proactively cope with adversities inherently associated with ethical issues. The literature suggests educators may support RPFs through educational interventions (Stephens, 2013; Thomas & Revell, 2016). Such educational strategies include enhancing social support, mindfulness, spiritual well-being, self-efficacy, conflict management strategies, ethical decision-making capacities, incorporating narrative story-telling with reflection on action, and creating opportunities for cumulative successes (Lachman, 2016; Stephens, 2012; Stephens, 2013; Thomas & Revell, 2016). Although scholars have recommended a variety of resilience educational strategies to attenuate moral distress, research guiding educational priorities is limited.

### **Research Aims and Methods**

This correlational study sought to identify if significant associations exist between RPF scores and moral distress ratings among BSN students. Two instruments were used in this study. First, the Scale of Protective Factors (SPF), was used to measure RPFs. This previously tested tool (Cronbach  $\alpha$  0.94) was selected because it effectively measures resilience attributes among college-age students (Madewell & Ponce-Garcia, 2016). The SPF uses a 7-point Likert scale (1=*disagree completely* and 7=*completely agree*) measuring items in four RPF subscales (social skills, social support, goal efficacy, and planning/prioritizing behaviors). Sub-scale scores less than five or total SPF scores less than 20 indicate low resilience. Additionally, the Moral Distress Thermometer (MDT), which has “demonstrated acceptable reliability and support for concurrent validity” (Wocial & Weaver, 2012, p. 171). was used to measure moral distress ratings. The MDT measures moral distress on a scale of zero to 10 with associated verbal anchors (0= *no*

*moral distress* and 10= *worst possible distress experienced*). Appropriate permissions were obtained to use the SPF and MDT instruments for this study.

### **Sampling, Data Collection and Data Analysis**

Participants were senior-level BSN students enrolled at a private university [blinded University A] and at a public university [blinded University B]. Students in both programs were progressing through a similar curriculum and at the same grade-level within their respective programs. Each site's Institutional Review Board (IRB) issued approval for this pilot study prior to recruitment. Investigators adhered to all ethical guidelines for the conduct of human subject research.

Convenience and homogenous purposive sampling strategies were used. Senior-level students who met inclusion criteria (i.e., 18 years of age or older, completed at least 250 clinical practice hours, and enrolled in BSN program), received an IRB approved recruitment script via email. Study participation was voluntary and occurred outside of class time. Consent was implied when participants completed and submitted both instruments. To ensure anonymity, each participant was assigned a unique identification number that was stored in an electronic codebook on a password-protected computer.

Numerical SPF and MDT data were analyzed using SPSS 20. Relationships between SPF scores and MDT ratings were measured via two-tailed Pearson correlations. Paired *t*-tests were used to compare the difference in means for both the SPF scores and the MDT ratings.

### **Findings**

Among the participants (N=60), 24 were from University A and 36 were from University B. University A participants included 20 females (83%) and 4 males (16%), with a mean age of

24.9 years. University B participants consisted of 31 females (86%) and 5 males (13%), with a mean age of 26.1 years.

### SPF and MDT data

Resilience protective factors sub-scores and total scores as measured by the SPF were not significantly different between the two sites. Total SPF mean scores were 21.79 at University A and 22.12 at University B ( $p=.45$ ). The mean moral distress rating between both sites was significantly different ( $x=3.67$ ;  $p<.001$ ): University A mean moral distress rating was 4.59 and University B mean moral distress rating was 3.03.

### Relationship between nursing students' RPFs and moral distress

When combining data from both sites, significant inverse correlations were noted between two of the four SPF sub-scale scores and moral distress ratings. Table 1 provides correlation statistics demonstrating weak inverse correlations between *social support* and moral distress ( $r = -.27, p < .05$ ), and between *goal efficacy* and moral distress ( $r = -.37, p < .01$ ). The total SPF score also demonstrated a weak inverse correlation with moral distress ( $r = -.24, p < .05$ ). No significant relationships were identified between *social skills* and moral distress or between *planning/prioritizing behavior* and moral distress (Table 1).

Table 1.  
*Correlations between SPF and MDT Scores, Site A and Site B data combined.*

Measure	1	2	3	4	5
1. Social skills subscore	—				
2. Social support subscore	.47**	—			
3. Goal efficacy subscore	.64**	.59**	—		
4. Planning/prioritizing behavior sSubscore	.29*	.33**	.54**	—	
5. Total score	.77**	.75**	.88**	.71**	—
6. Moral distress rating	-.13	-.27*	-.37**	.01	-.24*

\* $p < .05$ ; \*\* $p < .01$



## Discussion, Limitations and Recommendations

Study findings resulted in new evidence about relationships between RPFs and moral distress. The Nursing Student Resilience Model (Stephens, 2013) aligns with study findings, emphasizing the iterative relationships between enhanced protective factors and enhanced coping abilities amidst adversity. Stephens' (2013) model and study findings guide educators to prioritize educational interventions, allocating resources toward strategies which emphasize *social support* and *goal efficacy* RPFs. *Social support* resilience strategies should emphasize developing supportive and encouraging relationships among all parties in the learning environment; e.g., students, learning peers, didactic and clinical faculty. Learning activities would emphasize developing social cohesion and teamwork capacities, initiating and successfully navigating collegial conversations, and managing interdisciplinary conflict (Madewell & Ponce-Garcia, 2016; Stephens, 2013; Thomas & Revell, 2015). *Goal efficacy* resilience education strategies should promote student's confidence in their ability to accomplish goals and succeed (Madewell & Ponce-Garcia, 2016). With specific attention to RPFs and moral distress, educational recommendations include rehearsing ethical dilemmas via role-play activities in didactic settings and subsequent rehearsal of ethical situations via high-fidelity simulation. Such intentional strategies create opportunities for students to rehearse, receive formative feedback, develop confidence, nurture moral sensitivity, and enhance resilience through cumulative successes (Stephens, 2013).

Mean moral distress ratings were significantly higher at University A. A small sample size and non-probability sampling provide conceivable explanations for the noted difference, raising concerns about selection bias and presenting a limitation to study findings. A

recommendation for future research is to repeat the study at multiple sites with a larger sample, using random sampling strategies.

Prioritizing specific resilience education strategies has the potential to maximize available educational resources while also enhancing RPFs among student nurses. Targeted educational activities have the potential to minimize the effects of moral distress, promote workforce retention, and ultimately strengthen patient care outcomes. Importantly, nurse educators are key to achieving these outcomes via the development and integration of resilience education strategies which, in turn, inspire moral agency and everyday ethical practice of future nurses.

## References

- Grady, A. (2014). Experiencing moral distress as a student nurse. *National Student Nurses Association, Imprint* (February/March), 40-42.
- Jameton, A. (1984). *Nursing practice: The ethical issues*. Englewood Cliffs, NJ: Prentice-Hall.
- Kovner, C.T., Brewer, C. S., Fatehi, F., & Jun, J. (2014). What does nurse turnover mean and what is the rate? *Policy, Politics, & Nursing Practice, 15*(3-4), 64-71.  
doi.org/10.1177/1527154414547953.
- Krautscheid, L., DeMeester, D., Orton, V., Smith, A., Livingston, C., & McLennon, S.M. (2017). Moral distress among baccalaureate nursing students and associated factors: A descriptive multi-site study. *Nursing Education Perspectives 38*(6), 313-319. doi: 10.1097/01.NEP.0000000000000214.
- Lachman, V.D. (2016). Moral resilience: Managing and preventing moral distress and moral residue. *MEDSURG Nursing, 25*(2), 121-124.
- Madewell, A. N. & Ponce-Garcia, E. (2016). Assessing resilience in emerging adulthood: The resilience scale (RS), Connor-Davidson Resilience Scale (CD-RISC), and Scale of Protective Factors (SPF). *Personality and Individual Differences, 97*, 249-255.  
doi.org/10.1016/j.paid.2016.03.036
- Rushton, C., & Kurtz, M. (2015). *Moral distress and you: Supporting ethical practice and moral resilience in nursing*. Silver Spring, MD: Nursebooks.
- Sasso, L., Bagnasco, A., Bianchi, M., Bressan, V., & Carnevale, F. (2016). Moral distress in undergraduate nursing students: A systematic review. *Nursing Ethics, 23*(5), 523-534.
- Stephens, T. (2012). *Increasing resilience in adolescent nursing students*. (Unpublished Doctoral Dissertation). The University of Tennessee, Knoxville.

- Stephens, T.M. (2013). Nursing student resilience: A concept clarification. *Nursing Forum*, 48(2), 125-133.
- Thomas, L.J., & Revell, S. H. (2016). Resilience in nursing students: An integrative review. *Nurse Education Today*, 36, 457-462.
- Wocial, L., & Weaver, M. (2012). Development and psychometric testing of a new tool for detecting moral distress: The Moral Distress Thermometer. *Journal of Advanced Nursing*, 69(1), 167-174. doi: 10.1111/j.136502648.2012.06036.x