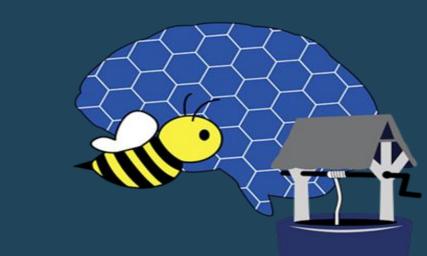


# The Mediational Effect of Sleep Quality on the Relationship Between Secondary Traumatic Stress and Burnout Among Nurses



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# **BACKGROUND**

Environments for Living and Learning

- Nurses can experience significant work-related stress, which may lead to the critical problem of burnout
- Burnout is linked to nurse turnover and thoughts of quitting the profession
- Burnout impacts nurses' quality of care provided to patients and nurses' physical and psychological health
- Burnout is precipitated by secondary traumatic stress and sleep problems

## **PURPOSE**

To determine whether sleep quality mediates the relationship between secondary traumatic stress and burnout among registered nurses

### **METHODS**

- Secondary analysis of a descriptive, cross-sectional study
- Sample and Settings: 350 registered nurses in an academic medical center in the USA
- Measures:
- Secondary traumatic stress and Burnout

Professional Quality of Life scale:

- Secondary traumatic stress subscale
- Burnout subscale
- Sleep quality

A single-item 10-point numeric rating scale

Data Analysis:

A multiple regression approach using the PROCESS macro in SPSS with bootstrapping of 5,000 samples

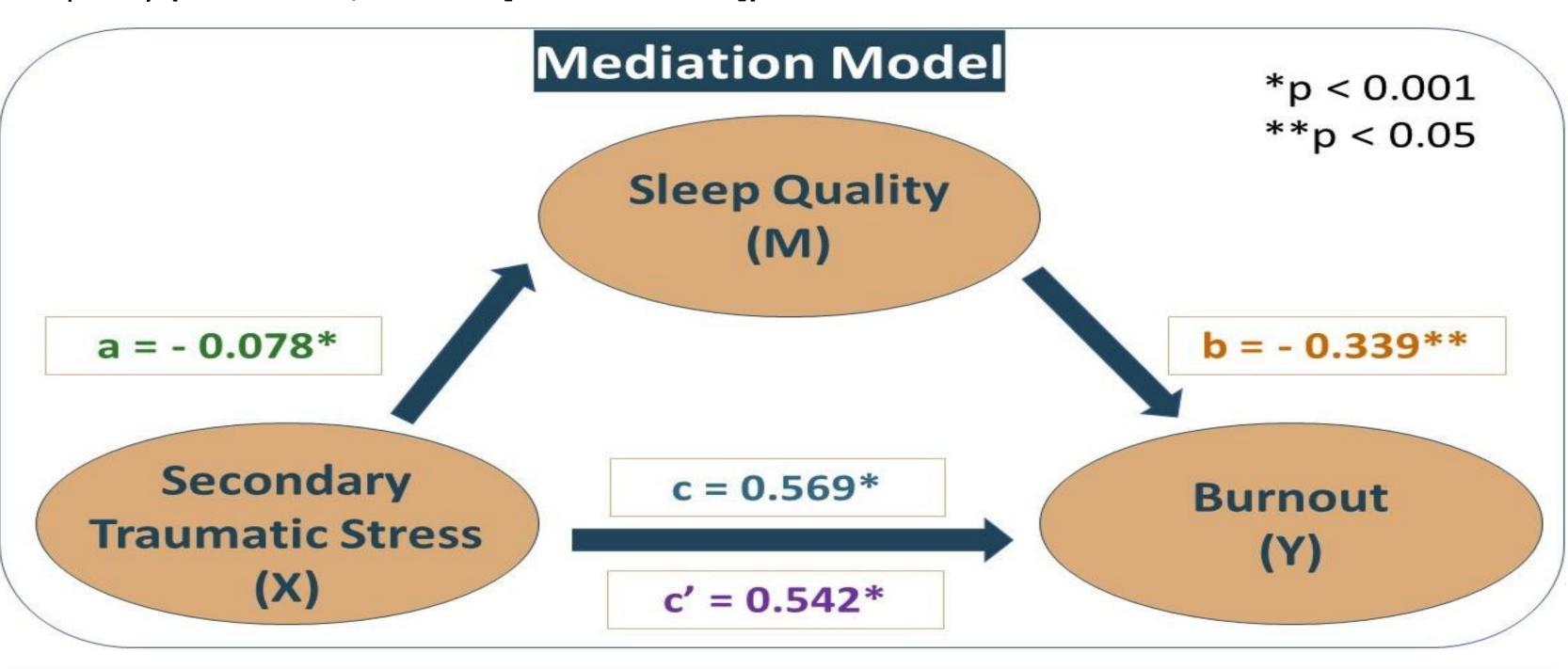
#### Table 1

Gender	
Female	321 (91.7)
Age	
18-35 years	204 (58.3)
≥36 years	146 (41.7)
Education	
ADN	71 (20.3)
BSN	228 (65.1)
Master/Doctoral	21 (6.0)
APRN/CNS	30 (8.6)
Length of practice in discipline	
≤ 1 year	65 (18.5)
2-5 years	105 (30.0)
6-10 years	71 (20.3)
> 10 years	109 (31.1)
Work shifts	
Days	221 (63.1)
Nights	107 (30.6)
Other	22 (6.3)
Work area	
Intensive Care	110 (31.4)
Emergency	50 (14.3)
General Medical-Surgical	124 (35.4)
Oncology	15 (4.3)
Psychiatric Service	32 (9.1)
Outpatient	19 (5.4)
Patient population	
Pediatrics	124 (35.4)
Adults	226 (64.6)

**Legends:** ADN=Associate's Degree in Nursing; APRN=Advanced Practice Registered Nurse; CNS=Clinical Nurse Specialist

# RESULTS

- Secondary traumatic stress significantly predicted burnout (B= 0.569, β= 0.570, p < .001; the total effect)</li>
- Secondary traumatic stress significantly but negatively predicted sleep quality  $(B=-0.078, \beta=-0.253, p<.001)$
- Sleep quality significantly but negatively predicted burnout when controlling for secondary traumatic stress (B= 0.339,  $\beta$ = 0.105, p = .021)
- Secondary traumatic stress significantly predicted burnout when controlling for sleep quality (B= 0.542,  $\beta$ = 0.543, p < .001; the direct effect)
- The indirect effect of secondary traumatic stress on burnout was significantly mediated by sleep quality ( $\mathbf{c} \mathbf{c'} = 0.03$ , 95% CI= [0.003 to 0.054])



#### CONCLUSION

Nurses who experience secondary traumatic stress may decrease their likelihood of experiencing burnout by improving their sleep quality. This study can guide the development of self-care strategies to facilitate nurses' coping with work-related traumatic events and poor sleep quality to reduce their risk for burnout.