

Effects of a Formal Mentorship Program on Self-Efficacy, Perceived Support, Intent to Stay, Burnout, and Stress in New Nurse Graduates



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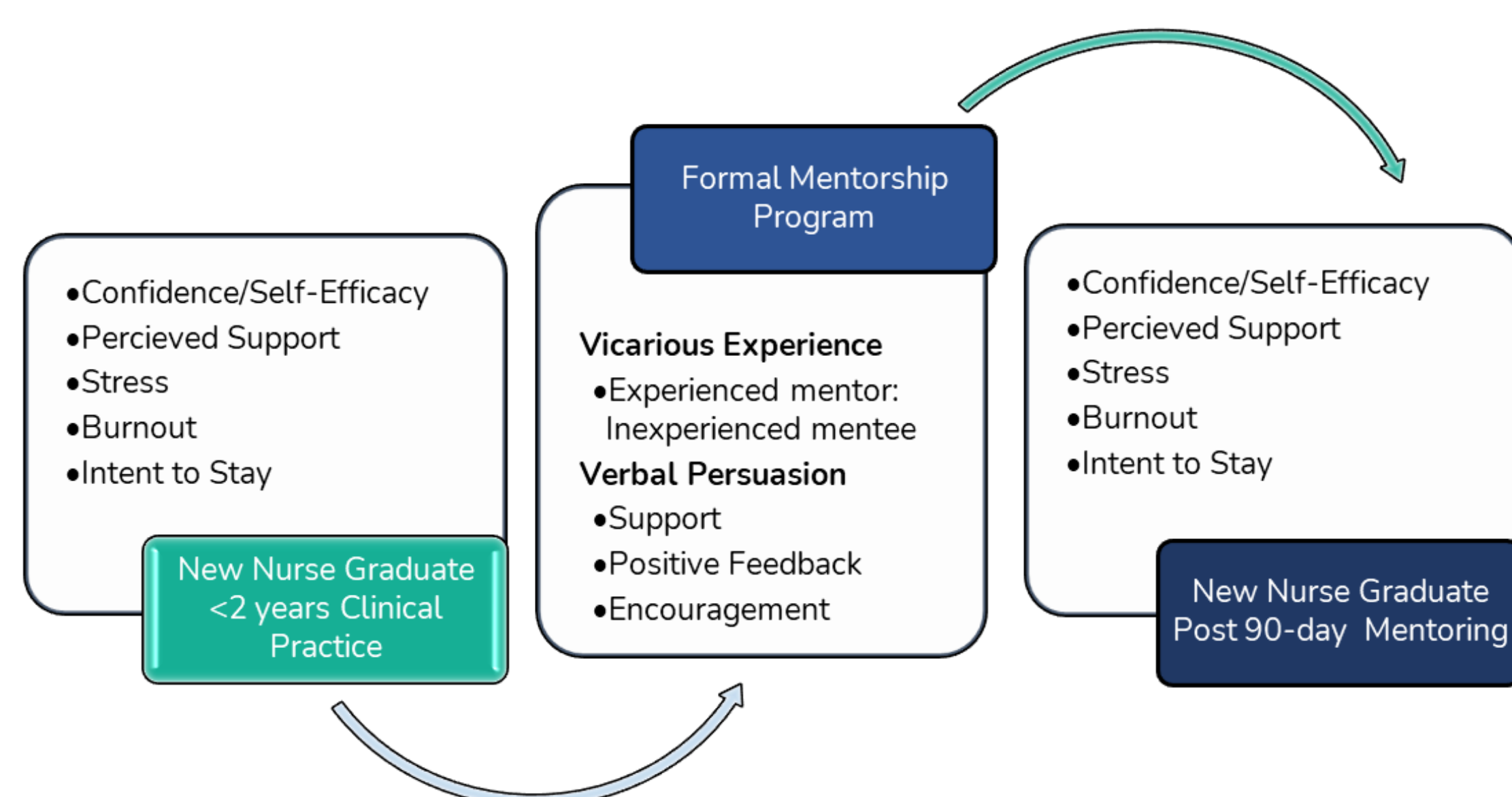


Background/Purpose

- New nurses often feel overwhelmed and unsupported transitioning to practice (TTP) even after attending a preceptor or residency program.
 - 29.6% report a lack of confidence/self-efficacy in delivering nursing care as the greatest challenge during TTP.
 - 87.5% report feeling unsupported.
 - 20% report leaving their organization in the first year.
- Self-expectations can conflict with leadership and organizational expectations leading to stress, burnout, and low nursing care self-efficacy.
- Formal mentorship programs for new nurses have been shown to positively influence retention, nursing care self-efficacy, perceived support, burnout, and work-related stress.
- The **purpose** of this study was to evaluate the effects of a formal 90-day new nurse mentorship program on nursing care self-efficacy, perceived organization support, intent to stay, burnout, and stress.

Methods

- Pre/posttest design was used in new nurse graduates, who participated in a 90-day formal mentorship program at a 450-bed tertiary care facility, post-Nurse Residency Program graduation and with < 2 years of clinical practice.
- Validated **instruments** included: Nursing Care Self-Efficacy Scale, Perceived Organization Support Scale, Anticipated Turnover Scale (intent to stay), Copenhagen Burnout Inventory, and Brief Nursing Stress Scale.
- Formal **mentorship** program included;
 - One-to-one mentoring
 - Vetted and cataloged mentors
 - Intentional pairing of mentor and mentee
 - Guide/toolkit for mentor and mentee
 - A minimum of 30-minute meetings three times a month



Results

Self-Efficacy (NCSES): A median of 217.5 (IQR 203-260) before participation **improved** to a median of 262 (IQR 253-285.25) after participation. NCSES scores after participation (mean rank = 12.5) were rated **significantly higher** than their NCSES before participation (mean rank = 0), $Z = -4.287, p < .001$.

Burnout (CBI): A median of 875 (IQR 600-1156.25) before participation **improved** (decreased) to a median of 712.5 (IQR 468.75-950) after participation. CBI scores after participation (mean rank = 9.64) were rated **significantly lower** than their CBI scores before participation (mean rank = 14.92), $Z = -2.746, p = .003$.

Perceived Organizational Support (POS-s): A median of 33 (IQR 30.75-37.75) before **improved** to a median of 39.5 (IQR 34.25-45.25) after participation. The POS-s scores after participation (mean rank = 113.6) were rated **significantly higher** than the POS-s scores before participation (mean rank = 13.17), $Z = -2.455, p = .017$.

Anticipated Turnover (ATS): A median of 30 (IQR 25.75-32) before participation **improved** to 31 (IQR 30-40.25) after participation. ATS scores after participation (mean rank = 13.31) were rated **significantly higher** than their ATS scores before participation (mean rank = 7.3), $Z = -3.093, p = .001$.

Negative and Positive Ranks in Wilcoxon Test

Variable	Ranks	N	Mean Rank	Sum of Ranks
Pre-Post NCSES	Negative Ranks	0 ^a	0.00	0.00
	Positive Ranks	24 ^b	12.50	300.00
	Ties	2 ^c		
	Total	26		
Pre-Post CBI	Negative Ranks	19 ^a	14.92	283.5
	Positive Ranks	7 ^b	9.64	67.50
	Ties	0 ^c		
	Total	26		
Pre-Post BNSS	Negative Ranks	20 ^d	12.43	248.50
	Positive Ranks	6 ^e	17.08	102.50
	Ties	0 ^f		
	Total	26		
Pre-Post POS-s	Negative Ranks	6 ^g	13.17	79.00
	Positive Ranks	20 ^h	113.60	272.00
	Ties	0 ⁱ		
	Total	26		
Pre-Post ATS	Negative Ranks	5 ^j	7.30	36.50
	Positive Ranks	18 ^k	13.31	239.50
	Ties	3 ^l		
	Total	26		

Note. Negative Ranks = Decrease in second measure, Positive Ranks = Increase in second measure. ^aPostNCSES < PreNCSES, ^bPostNCSES > PreNCSES, ^cPostNCSES = PreNCSES, ^dPostBNSS < PreBNSS, ^ePostBNSS > PreBNSS, ^fPostBNSS = PreBNSS, ^gPostATS < PreATS, ^hPostATS > PreATS, ⁱPostATS = PreATS, ^jPostPOS < PrePOS, ^kPostPOS > PrePOS, ^lPostPOS = PrePOS. ^mPostCBI < PreCBI, ⁿPostCBI > PreCBI, ^oPostCBI = PreCBI

Wilcoxon Test (n=26)

Variable	Pre-Mentorship				Post-Mentorship				Z	P-value ^d
	M	(SD)	Median	(IQR)	M	(SD)	Median	(IQR)		
NCSES	227.07	36.82	217.50	203-260	262.7	24.55	262.00	253-285	-4.287	<.001
CBI	925.00	371.48	875.00	600-1156	725	292.96	712.50	468-950	-2.746	0.003
BNSS	22.84	4.53	22.00	19-27	20.96	7.87	20.00	14-26	-1.857	0.242
POS-s	33.80	9.05	33.00	30-37	38.69	9.66	39.50	34-45	-2.455	0.017
ATS	29.03	4.29	30.00	25-32	33.92	6.73	31.00	30-40	-3.093	0.002

Note. n=26, M= mean, SD= standard deviation, IQR= interquartile range, Z= test statistic score
NCSES=Nursing Care Self-Efficacy Scale, CBI=Copenhagen Burnout Inventory, BNSS= Brief Nursing Stress Scale, POS-s= Perceived Organization Support Scale, ATS= Anticipated Turnover Scale.

^aAsymptotic. ^bSig-two-tailed. ^cBased on negative ranks. ^dBased on positive ranks.

Demographic Characteristics

- 26 participants completed the formal mentorship program.
- Participants were predominantly female (92.3%), Caucasian (61.5%), possessed a Bachelors degree (65.4%), worked full-time (84.6%) in the Emergency Department (38.5%) and ranged in age from 22-39 (M=29, SD=4.7).

Sample Characteristics	n	%
Gender		
Male	2	7.7
Female	24	92.3
Non-Binary	0	0
Other	0	0
Race		
American Indian or Alaska Native	0	0
Asian	1	3.8
Black or African American	6	23.1
Hispanic or Latino	1	3.8
Native Hawaiian or Pacific Islander	0	0
White	16	61.5
Other	2	7.7
Education Level		
Associates	9	34.6
Bachelors	17	65.4
Masters	0	0
Hours Worked		
Part time = 20-32	4	15.4
Full-time = 36-44	22	84.6
Unit Assigned		
Medical Intensive Care Unit (MICU)	2	7.7
Cardiac Care Unit (CCU)	1	3.8
Emergency Department (ED)	10	38.5
Women and Infant Care (WICU)	2	7.7
Medical	2	7.7
Labor and Delivery (L&D)	2	7.7
Cardiovascular Telemetry (CVT)	4	15.4
Operating Room (OR)	2	7.7
Neonatal Intensive Care (NICU)	1	3.8

Note. n=26

Limitations

- The influence of group characteristics (e.g., gender and race) on study outcomes could not be assessed because of the lack of adequate representation within each category grouping.
- The influence of time in determining if these significant improvements hold into the future (e.g., 6 months, 12 months, etc.) was not measured in this project.

Conclusion

The current nursing shortage necessitates proactive measures to foster confident, supported, and engaged nurses. This study evaluated a 90-day formal mentorship program's impact on participant well-being and retention. Findings revealed positive shifts in participants' confidence, perceived support, burnout levels, and intent to stay. Future assessments to determine if these significant improvements hold over time should be conducted in the future.

References
&
Contact
Information

