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Exploring the Link Between Spiritual Leadership and Psychological Capital in Nursing Educators: A Cross-Sectional Correlational Study

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Abstract

Spiritual leadership is increasingly recognized for its role in enhancing employees' psychological resources and overall well-being. It may serve as a strategic organizational asset that supports followers' growth. This study investigated the prevalence of spiritual leadership and psychological capital among nursing educators and explored the nature of the relationship between these variables. A cross-sectional survey was conducted using validated instruments measuring spiritual leadership and psychological capital. Over a three-month period, 213 nursing educators participated in the study. Participants reported moderate to high levels of spiritual leadership (49.8% and 38.5%, respectively) and predominantly high psychological capital (63.4%). Analysis revealed a strong and statistically significant positive association between spiritual leadership and psychological capital (R = 0.63, P = 0.001). Regression results indicated that male educators were more likely to demonstrate higher levels of both spiritual leadership and psychological capital than female educators. The findings highlight the importance of fostering spiritual leadership to strengthen psychological capital among nursing educators, emphasizing its potential as a key driver of professional development. Nursing leaders should prioritize the cultivation of spiritual competencies to embed workplace spirituality into everyday managerial practices, enhancing team motivation and resilience.

Keywords: Spiritual leadership, Psychological capital, Nursing education

Introduction

The responsibilities of nursing leaders have increasingly extended to fostering the well-being and satisfaction of both nurses and patients. Recent events have highlighted the importance of cultivating more empathetic and supportive organizational cultures [1]. Nurse educators play a pivotal role in workforce development by mentoring staff, guiding leadership practices, integrating evidence-based approaches, and ultimately improving patient care outcomes [2]. Essential qualities of effective nurse educators include compassion, dynamism, supportiveness, empathy, caring, the ability to challenge, and comprehensive knowledge [3].

The modern workplace is shaped by significant global, cultural, and organizational changes, often resulting in challenging environments in the 21st century [4]. This has contributed to a widespread erosion of trust affecting employees and institutions worldwide. Consequently, organizations have shifted focus toward fostering employee optimism and resilience rather than emphasizing weaknesses and shortcomings [5]. Scholars in organizational behavior have similarly moved to study and promote positive aspects of organizational life. This evolution in thinking and focus on psychological capital underscores the need for holistic leadership approaches that address both the intellectual and emotional dimensions of employees—specifically, spiritual leadership, which is the focus of this study [6].

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Spiritual leadership

Spiritual leadership has historically lacked a single, universally accepted definition. However, consensus is emerging around Fry's perspective, which suggests that spiritual leaders cultivate an organizational vision and values grounded in individual and team relationships. By aligning their behaviors, attitudes, and values with these principles, they help employees recognize the significance of their work and develop a sense of appreciation and connection to the organization [4].

Research demonstrates that spiritual leadership within the workplace yields substantial benefits. Leaders who practice spiritual leadership inspire a strong sense of calling in their followers by communicating a clear and motivating vision, reinforcing core beliefs, and showing genuine care for others [7]. Additionally, such leaders demonstrate empathy and appreciation for employees, actively listen to feedback, and respond to staff needs, fostering a supportive environment where employees feel empowered and autonomous [8, 9].

Psychological capital

Psychological capital refers to the internal resources and satisfaction that enable individuals to effectively address challenges encountered in the workplace [10]. Studies consistently show that employees with high psychological capital perform better, whereas those with low levels often experience stress, anxiety, and decreased job satisfaction, impairing their work performance [11].

Importantly, psychological capital is malleable and can be developed through targeted organizational interventions, training, and professional development programs, making it a "state-like" quality rather than a fixed trait [12]. Educators with high psychological capital are better equipped to navigate challenges, embrace change, demonstrate positive behaviors in demanding situations, and maintain optimism about future outcomes, all of which contribute to greater job satisfaction [13].

Theoretical background

The influence of spiritual leadership on psychological capital can be effectively understood through the lens of the Job Demands-Resources (JD-R) theory and Spiritual Leadership Theory (SLT) [4, 13]. Both frameworks suggest that spiritual leadership fosters the development of followers' psychological capital, which in turn enhances job engagement. Psychological capital refers to a positive psychological state characterized by self-efficacy, optimism, hope, and resilience [14]. By demonstrating care, respect, and trust, spiritual leaders create a supportive and nurturing work environment, which helps employees develop their psychological resources [15, 16].

SLT distinguishes between two key dimensions of spiritual well-being: calling and membership. Calling originates from the work itself, while membership is derived from organizational affiliation [15]. Many individuals may view their job merely as a source of income or a stepping stone for career advancement. In contrast, some perceive work as a means to fulfill personal purpose, serve others, or contribute to the community—this sense of higher purpose is referred to as a "calling" [4, 17]. Calling is often described as "the experience of transcendence," wherein individuals find meaning and purpose in life through their work by positively impacting others [4]. Spiritual leaders can strengthen this sense of calling by providing meaningful vision, purpose, and opportunities for employees to make a difference, thereby enhancing both calling and psychological capital [4, 18].

Within SLT, calling is considered a crucial pathway through which spiritual leadership promotes positive employee outcomes. A strong sense of calling is linked to greater well-being, higher life satisfaction, and increased psychological capital [19]. Research also indicates that calling positively influences self-efficacy, one of the key components of psychological capital, and is associated with job satisfaction. Employees who feel a strong sense of calling tend to experience more positive emotions, which further support the development of psychological capital [20–22].

Significance of the study

Universities play a critical role in cultivating human capital, as the effectiveness of educational systems directly impacts national development. Nurse educators, in particular, represent a vital resource for society and the educational system, as they are instrumental in training skilled healthcare professionals. Enhancing their psychological capital is therefore essential, and spiritual leadership can be leveraged to foster these qualities, contributing to organizational growth [23]. In educational contexts, spiritual leadership is especially important because academic life involves a dynamic interplay between intellectual and spiritual development. Nurse educators who approach their work as a spiritual vocation are likely to demonstrate greater positivity, contribute more effectively, improve workplace conditions, and promote a higher quality of professional life [24].

Spiritual leadership and psychological capital are complementary constructs in the workplace, yet there is limited research globally examining their relationship. Understanding these variables is crucial for designing interventions and organizational policies aimed at enhancing spiritual leadership and psychological capital among nursing educators. This study aims to assess the levels of spiritual leadership and psychological capital among nursing

educators and investigate the relationship between them. Notably, this is the first study to explore this relationship among nursing educators in Egypt.

Study Design

This research employed a cross-sectional design conducted across all academic departments of the Faculty of Nursing at Alexandria University, Egypt. The departments involved were Medical and Surgical Nursing, Pediatric Nursing, Obstetrics and Gynecology Nursing, Psychiatric and Mental Health Nursing, Nursing Administration, Community Health Nursing, Critical Care and Emergency Nursing, Nursing Education, and Geriatric Nursing.

Participants and sampling

Participants were selected using a convenience cluster sampling approach, with roughly 35 educators recruited from each academic rank. The faculty's total population of nursing educators is approximately 372, distributed as follows: professors (75), assistant professors (62), lecturers (88), assistant lecturers (60), and demonstrators/practical guides (87). Using Epi-Info, the minimum sample size was calculated to be 190, based on a 5% margin of error, a 50% expected frequency, and a 95% confidence interval. The final sample included 213 participants.

Eligible participants were full-time nursing educators (≥20 hours per week) with a minimum of six months of experience in their respective departments, actively engaged in teaching or educational activities, available during data collection, and willing to participate. Educators who did not meet these requirements were excluded from the study.

Data collection instruments

Data were gathered using a structured three-part questionnaire.

- **Socio-demographic Information:** Collected data included age, gender, marital status, number of children, residence, highest educational qualification, academic rank, department, total years of nursing experience since graduation, and tenure in the current position.
- **Spiritual Leadership:** The Spiritual Leadership Questionnaire (SLQ) by Fry *et al.* (2005) was employed, comprising 17 items across three dimensions: Vision (5 items), Hope/Faith (5 items), and Altruistic Love (7 items). Responses were recorded on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Scores were interpreted as low (<50%), moderate (50–<75%), or high (>75%) agreement. The SLQ demonstrated excellent reliability in this study (Cronbach's alpha = 0.961), similar to the original validation study (α = 0.980).
- **Psychological Capital:** The 24-item Psychological Capital Questionnaire (PCQ) by Luthans, Youssef, and Avolio (2017) was used, covering four constructs: self-efficacy, hope, resilience, and optimism, with six items per construct. Responses followed the same five-point Likert scale as the SLQ. Scores were categorized as low (<50%), moderate (50–<75%), or high (>75%) levels of psychological capital. Reliability in the current study was high (α = 0.965) and consistent with previous studies (α = 0.910). Permission to use the PCQ was obtained from Mind Garden (Order number: FHQGGJGOE; https://www.mindgarden.com).

Ethical considerations

Prior to initiating the study, approval was obtained from the Research Ethics Committee at the Faculty of Nursing, Alexandria University. The purpose and procedures of the study were clearly explained to potential participants through email and WhatsApp messages. All participants were informed that their involvement was voluntary, that they could decline or withdraw at any point without consequences, and that the data collected would be used exclusively for research purposes. Written informed consent was obtained from all participants, and measures were taken to maintain anonymity and ensure confidentiality throughout the study.

Data collection

Permission to conduct the study was formally granted by the administration of the Faculty of Nursing, Alexandria University. A pilot study was conducted with 25 nursing educators, who were not included in the main study, to evaluate the clarity, relevance, and practicality of the instruments. The pilot indicated that no adjustments were necessary. Reliability of the research tools was confirmed using Cronbach's alpha, which demonstrated good internal consistency. The main data collection phase took place from November 2021 to February 2022.

Statistical analysis

Collected data were summarized in tables. Continuous variables that did not follow a normal distribution were reported as medians with interquartile ranges (IQR), while categorical variables were described using frequencies and percentages. Spearman's correlation was used to examine the association between spiritual leadership and psychological capital, with correlation strength classified as weak, moderate, or strong. Statistical significance was defined as $p \leq 0.05$. Multinomial logistic regression analyses were performed for both scales, with the "low"

category serving as the reference group. Analyses were conducted using IBM SPSS version 28.0 (Armonk, NY, USA).

Results and Discussion

Of the 215 responses collected, two were excluded due to non-consent, leaving 213 participants for analysis. The demographic data **(Table 1)** showed that most participants were female (91.5%), and the majority were married (70.4%). Additionally, over half of the participants held a Ph.D. degree (54.9%).

Table 1. Distribution of the Studied Nurses Educators according to Demographic Data *(N = 213)*

Variables		N	%
Age	Median; IQR	34	21
Gender	Male	18	8.5
	Female	195	91.5
Marital Status	Single	50	23.5
	Married	150	70.5
	Divorced	1	0.5
	Widow	12	5.5
Educational Level	PhD	117	55
	Master's Degree	63	29.5
	Higher Diploma after Baccalaureate	2	1
	Bachelor of Nursing	31	14.5
Scientific Degree	Professor	37	17.5
	Assistant Professor	36	16.75
	Lecturer	36	16.75
	Assistant Lecturer	35	16.5
	Demonstrator	35	16.5
	Practical guides	34	16
Department	Nursing Management	23	11
	Psychiatric Nursing and Mental Health	21	10
	Nursing Education	21	10
	Pediatric Nursing	17	8
	Critical Care and Emergency Nursing	26	12
	Maternity, Gynecology, and Obstetrics Nursing	24	11.25
	Internal and Surgical Nursing	42	19.25
	Elderly Nursing	16	7.5
	Community Health Nursing	23	11
Number of Years of Experience Within the Department	Less than five years	45	21
	5–10 years	51	24
	10–15 years	40	19
	More than 15 years	77	36
Number of Years of Experience Since Graduation	Less than five years	77	36
	5–10 years	48	22.5
	10–15 years	28	13.5
	More than 15 years	60	28

N: Number %: Percentage IQR: Interquartile Range PhD: Doctor of Philosophy

The overall servant leadership (SL) score was at a moderate level (49.8%). Among the nursing educators' subscales, "altruistic love" showed the highest mean value (54%), whereas "hope and faith" had the lowest (28.6%). In terms of respondents' ratings, the greatest proportion identifying a subscale as "high level" was seen in "hope and faith" (65.3%), while the smallest proportion was in "altruistic love" (25.8%). On the other hand, the highest share of respondents rating a subscale as "low level" pertained to "altruistic love" (20.2%), with the lowest share observed for "hope and faith" (6.1%) **(Table 2)**.

Table 2. Spiritual Leadership Scale Dimensions Score and Grades *(N = 213)*

Spiritual Leadership Scale Dimensions	Score		Grades					
	Median	IQR	Low		Moderate		High	
			N	%	N	%	N	%
Vision	18	5	26	12.2	94	44.1	93	43.7

Hope and Faith	20	4	13	6.1	61	28.6	139	65.3
Altruistic Love	21	9	43	20.2	115	54.0	55	25.8
Overall Spiritual Leadership Scale	59	16	25	11.7	106	49.8	82	38.5

N: Number %: Percentage IQR: Interquartile Range

Table 3 indicates that the overall level of psychological capital is high (63.4%). Among the nursing educators' subscales, "self-efficacy" recorded the highest score (67.6%), whereas "optimism" had the lowest (46.9%). The highest proportion of participants who rated a subscale as "low level" was found in the "hope" subscale (5.2%), while the lowest was observed in "resilience" (3.3%). Additionally, the greatest proportion of respondents who rated a subscale as "moderate level" was for "optimism" (49.3%), whereas the smallest proportion was for "self-efficacy" (28.6%).

Table 3. Psychological Capital Scale Dimensions Score and Grades *(N = 213)*

Psychological Capital Scale Dimensions	Score		Grades					
	Median	IQR	Low		Moderate		High	
			N	%	N	%	N	%
Self-Efficacy	24	5	8	3.8	61	28.6	144	67.6
Hope	28	6	11	5.2	68	31.9	134	62.9
Resilience	20	4	7	3.3	65	30.5	141	66.2
Optimism	22	5	8	3.8	105	49.3	100	46.9
Overall Psychological Capital Scale	93	18	5	2.3	73	34.3	135	63.4

N Number, *%* Percentage, *IQR* Interquartile Range

As shown in **Table 4**, a strong and statistically significant positive association was found between the total scores of the spiritual leadership scale and the psychological capital scale ($R = 0.635$, $p = 0.001$). Moderate positive correlations were also identified between optimism and vision ($R = 0.419$, $p = 0.001$), hope and faith ($R = 0.441$, $p = 0.001$), altruistic love ($R = 0.302$, $p = 0.001$), as well as the overall spiritual leadership score ($R = 0.406$, $p = 0.001$).

Additionally, strong positive relationships were evident between hope and vision ($R = 0.644$, $p = 0.001$), hope and faith ($R = 0.746$, $p = 0.001$), altruistic love ($R = 0.523$, $p = 0.001$), and the combined spiritual leadership score ($R = 0.660$, $p = 0.001$). Similarly, self-efficacy demonstrated strong and significant positive links with vision ($R = 0.610$, $p = 0.001$), hope and faith ($R = 0.678$, $p = 0.001$), altruistic love ($R = 0.506$, $p = 0.001$), and the total spiritual leadership score ($R = 0.629$, $p = 0.001$).

Table 4. Correlation Matrix between Spiritual Leadership Scale and Psychological Capital Scale

Spiritual Leadership Scale		Psychological Capital Scale				
		Self-Efficacy	Hope	Resilience	Optimism	Overall
Vision	Correlation Coefficient	0.610	0.644	0.537	0.419	0.622
	P-Value	0.001	0.001	0.001	0.001	0.001
Hope and Faith	Correlation Coefficient	0.678	0.746	0.655	0.441	0.715
	P-Value	0.001	0.001	0.001	0.001	0.001
Altruistic Love	Correlation Coefficient	0.506	0.523	0.421	0.302	0.497
	P-Value	0.001	0.001	0.001	0.001	0.001
Overall	Correlation Coefficient	0.629	0.660	0.552	0.406	0.635
	P-Value	0.001	0.001	0.001	0.001	0.001

Spearman Correlation *P*-values ≤0.05 were considered statistically significant

As presented in **Table 5**, participants with a Ph.D. were estimated to be 1.87 times more likely to show strong agreement with the overall spiritual leadership statements compared to those holding only a Bachelor of Nursing degree (95% CI = 0.428–8.207). Academic rank also influenced agreement levels: professors demonstrated a substantially higher likelihood of strong and moderate agreement—11.903 and 2.764 times greater, respectively—than practical guides. Similarly, assistant professors, lecturers, assistant lecturers, and demonstrators were 1.450, 4.529, 3.479, and 3.941 times more likely to report high agreement levels compared with practical guides.

In terms of experience, those with 10–15 years in their department were 1.124 times more likely to express strong agreement and 1.594 times more likely to express moderate agreement than those with over 15 years of experience. Additionally, the dimensions of vision, hope and faith, altruistic love, self-efficacy, and hope emerged as significant predictors of both strong and moderate agreement regarding spiritual leadership ($p < 0.05$). Likewise,

lower to moderate scores in self-efficacy, hope, and resilience were also significant predictors of agreement levels ($p < 0.05$). The overall psychological capital score was found to significantly predict higher agreement with the spiritual leadership scale ($p < 0.05$).

Table 5. Multinomial Logistic Regression Model between Socio-Demographic, Clinical Data, and Spiritual Leadership Scale

Variables		Moderate				High			
		P-value	Odds Ratio	95% Confidence Interval		P-value	Odds Ratio	95% Confidence Interval	
				Lower	Upper			Lower	Upper
Age		0.214	0.959	0.899	1.024	0.709	0.986	0.913	1.064
Gender	Male	0.476	0.521	0.087	3.134	0.869	0.858	0.140	5.271
	Female	Ref	Ref			Ref	Ref		
Educational Level	PhD	0.605	0.695	0.175	2.757	0.404	1.875	0.428	8.207
	Master's Degree	0.347	0.510	0.125	2.075	0.665	0.712	0.154	3.297
	Higher Diploma after Baccalaureate	0.219	0.150	0.007	3.092	0.141	0.717	0.461	1.116
	Bachelor of Nursing	Ref	Ref			Ref	Ref		
Scientific Degree	Professor	0.502	2.764	0.142	53.721	0.110	11.903	0.572	247.695
	Assistant Professor	0.467	0.437	0.047	4.069	0.754	1.450	0.142	14.819
	Lecturer	0.315	2.422	0.432	13.584	0.089	4.529	0.795	25.811
	Assistant Lecturer	0.033	5.782	1.152	29.019	0.136	3.479	0.676	17.921
	Demonstrator	0.010	14.189	1.884	106.865	0.210	3.941	0.463	33.577
	Practical Guide	Ref	Ref			Ref	Ref		
Number of Years of Experience Within the Department	Less than 5 years	0.345	0.248	0.014	4.473	0.905	0.835	0.043	16.344
	5–10 years	0.278	0.199	0.011	3.670	0.705	0.566	0.030	10.795
	10–15 years	0.737	1.594	0.105	24.102	0.934	1.124	0.070	17.989
	More than 15 years	Ref	Ref			Ref	Ref		
Number of Years of Experience Since Graduation	Less than 5 years	0.743	0.733	0.115	4.669	0.481	0.512	0.079	3.297
	5–10 years	0.685	0.607	0.055	6.742	0.774	0.699	0.061	8.024
	10–15 years	0.360	0.299	0.022	3.966	0.614	0.510	0.037	6.965
	More than 15 years	Ref	Ref			Ref	Ref		
Vision	Score	0.001	2.767	1.788	4.283	0.001	12.068	6.381	22.825

Hope and Faith	Score	0.008	2.464	1.265	4.801	0.001	18.457	5.347	63.714
Altruistic Love	Score	0.001	2.402	1.399	4.125	0.001	9.631	4.200	22.087
Self-Efficacy	Low	0.254	0.148	0.006	3.945	0.001	9.762	9.762	9.762
	Moderate	0.491	0.588	0.130	2.657	0.001	0.041	0.011	0.153
	High	Ref	Ref			Ref	Ref		
	Score	0.052	1.234	0.998	1.525	0.005	1.445	1.118	1.868
Hope	Low	0.019	0.044	0.003	0.597	0.001	5.609	5.609	5.609
	Moderate	0.094	0.228	0.040	1.287	0.001	0.039	0.011	0.143
	High	Ref	Ref			Ref	Ref		
	Score	0.143	1.145	0.955	1.371	0.001	1.521	1.206	1.920
Resilience	Low	0.812	1.739	0.018	164.914	0.001	0.021	0.002	0.201
	Moderate	0.389	1.904	0.440	8.246	0.001	0.035	0.009	0.133
	High	Ref	Ref			Ref	Ref		
	Score	0.313	0.872	0.668	1.138	0.166	0.801	0.585	1.097
Optimism	Low	0.291	0.195	0.009	4.073	0.001	1.503	1.503	1.503
	Moderate	0.492	1.672	0.387	7.226	0.092	0.407	0.143	1.160
	High	Ref	Ref			Ref	Ref		
	Score	0.963	1.004	0.847	1.190	0.823	0.977	0.798	1.196
Psychological Capital Scale	Score	0.001	1.069	1.034	1.106	0.001	1.179	1.125	1.236

PhD: Doctor of Philosophy Ref: Reference P-values ≤0.05 were considered statistically significant. The reference category is (Low Grade

According to **Table 6**, male respondents were somewhat more likely than females to display both high and moderate levels of agreement with the psychological capital scale, by factors of 1.563 and 1.600, respectively. Marital status also appeared to influence responses: single participants were 2.299 times more likely to report high agreement and 3.924 times more likely to report moderate agreement than those who were widowed. Similarly, divorced individuals showed considerably greater odds of agreement—2.373 times higher for strong agreement and 76.471 times higher for moderate agreement—compared with widowed respondents.

Educational attainment also played a role. Those holding a Ph.D. were estimated to have 3.387 times higher odds of reporting strong agreement on psychological capital items than participants with only a Bachelor of Nursing (95% CI = 0.043–263.865). Respondents with a post-baccalaureate diploma were 1.260 times more likely to express moderate agreement than bachelor's degree holders (95% CI = 0.570–2.786). Departmental affiliation influenced results as well—educators in pediatric nursing were 5.071 and 5.757 times more likely to show high and moderate agreement, respectively, than those in community health nursing.

In addition, higher scores on the vision and hope and faith dimensions, as well as on the overall spiritual leadership scale, were significant predictors of strong agreement regarding psychological capital ($p < 0.05$). Moreover, having a master's degree, holding the position of assistant lecturer or demonstrator, having fewer than five years of departmental experience, and total years since graduation all significantly predicted both moderate and high levels of agreement with the psychological capital measure ($p < 0.05$).

Table 6. Multinomial Logistic Regression Model between Socio-Demographic, Clinical Data, and Psychological Capital Scale

Variables	**Moderate**				**High**			
	P-value	**Odds Ratio**	**95% Confidence Interval**		**P-value**	**Odds Ratio**	**95% Confidence Interval**	
			Lower	**Upper**			**Lower**	**Upper**

Age		0.269	1.137	0.905	1.428	0.086	1.221	0.972	1.533
Gender	Male	0.800	1.600	0.042	60.527	0.808	1.563	0.043	57.210
	Female	Ref	Ref			Ref	Ref		
Marital Status	Single	0.622	3.924	0.017	893.331	0.756	2.299	0.012	435.948
	Married	0.813	0.552	0.004	74.543	0.695	0.390	0.003	43.590
	Divorced	0.810	76.471	3.406	1717.08	0.962	2.373	6.132	91.809
	Widow	Ref	Ref			Ref	Ref		
Educational Level	PhD	0.738	0.462	0.005	42.444	0.583	3.387	0.043	263.865
	Master's Degree	0.008	0.005	0.000	0.251	0.020	0.010	0.000	0.484
	Higher Diploma after Baccalaureate	0.568	1.260	0.570	2.786	0.120	0.526	0.234	1.183
	Bachelor of Nursing	Ref	Ref			Ref	Ref		
Scientific Degree	Professor	0.466	0.084	0.000	64.483	0.428	0.073	0.000	47.518
	Assistant Professor	0.463	0.096	0.000	49.916	0.430	0.086	0.000	38.156
	Lecturer	0.149	0.040	0.001	3.146	0.070	0.022	0.000	1.359
	Assistant Lecturer	0.000	1039.872	22.087	48957.034	0.001	536.191	12.850	22373.310
	Demonstrator	0.000	9726.743	115.081	822109.603	0.000	2950.992	37.246	233804.920
	Practical Guide	Ref	Ref			Ref	Ref		
Department	Nursing Management	0.861	1.345	0.048	37.522	0.600	2.453	0.086	69.990
	Psychiatric Nursing and Mental Health	0.975	0.940	0.021	41.464	0.807	1.608	0.036	72.614
	Nursing Education	0.914	0.820	0.023	29.783	0.508	3.262	0.098	108.420
	Pediatric Nursing	0.318	5.757	0.185	178.796	0.357	5.071	0.160	161.022
	Critical Care and Emergency Nursing	0.847	0.715	0.024	21.711	0.824	1.467	0.050	43.100
	Maternity, Gynecology, and Obstetrics Nursing	0.539	0.367	0.015	8.993	0.847	1.362	0.059	31.547
	Internal and Surgical Nursing	0.135	0.084	0.003	2.153	0.089	0.059	0.002	1.538
	Elderly Nursing	0.816	0.621	0.011	34.094	0.775	1.779	0.034	92.107
	Community Health Nursing	Ref	Ref			Ref	Ref		
Number of Years of	Less than 5 years	0.010	0.000	0.000	0.113	0.012	0.000	0.000	0.157

Experience Within the Department									
	5–10 years	0.233	0.019	0.000	12.600	0.238	0.023	0.000	12.020
	10–15 years	0.682	3.476	0.009	1334.387	0.658	3.688	0.011	1187.497
	More than 15 years	Ref	Ref			Ref	Ref		
Number of Years of Experience Since Graduation	Less than 5 years	0.000	9.637	7.447	12.470	0.000	2.088	1.771	2.461
	5–10 years	0.000	4.551	3.436	6.027	0.000	1.553	1.308	1.843
	10–15 years	0.000	5.354	1.902	15.070	0.000	1.820	1.820	1.820
	More than 15 years	Ref	Ref			Ref	Ref		
Vision	Score	0.005	1.867	1.206	2.889	0.000	2.622	1.668	4.120
Hope and Faith	Score	0.210	1.836	0.710	4.747	0.020	3.262	1.205	8.832
Altruistic Love	Score	0.281	1.184	0.871	1.609	0.090	1.311	0.959	1.793
Self-Efficacy	Score	0.660	1.274	0.433	3.746	0.415	1.563	0.534	4.580
Hope	Score	0.468	1.466	0.522	4.122	0.356	1.623	0.581	4.539
Resilience	Score	0.448	1.580	0.485	5.141	0.245	2.015	0.618	6.569
Optimism	Score	0.643	1.246	0.492	3.155	0.235	1.759	0.692	4.473
Spiritual Leadership Scale	Score	0.052	1.266	0.998	1.607	0.003	1.448	1.132	1.853

PhD: Doctor of Philosophy Ref: Reference P-values ≤0.05 were considered statistically significant. The reference category is (Low Grade)

In recent years, leadership research has shifted its emphasis toward more ethical, spiritual, and human-centered models that promote justice, inclusion, and empowerment of employees, moving away from traditional hierarchical and authority-based leadership paradigms [25]. In the present study, nursing educators perceived their own leadership behaviors as being at a moderate level. This aligns with findings by Abouzaid [26] and Ali, Ibrahim, and Diab [27], who reported that spiritual leadership among nurse leaders generally ranged from moderate to high [26, 27]. Likewise, Ali, Ibrahim, and Diab observed that nurse managers demonstrated high levels of spiritual leadership in the dimensions of meaning/calling, vision, and hope/faith, while "altruistic love" received the lowest scores among the subscales [27].

The current findings revealed a high overall level of psychological capital among participants. This could be attributed to a supportive organizational culture, effective communication between nursing educators and their supervisors, and potentially lower levels of occupational stress. Similar results were reported by Çelik [28] and Ibrahim *et al.* [29], who found that most nurses exhibited strong psychological capital [28, 29]. However, this contrasts with the findings of Metwaly and Ahmed who noted lower psychological capital levels among their sample of nurses [30]. In the present study, the highest scores were observed in the "self-efficacy" subscale, whereas the lowest were in "optimism." Percunda and Putri similarly identified self-efficacy and hope as the most prominent dimensions among nurses, followed by optimism and resilience [31].

A significant positive association was also found between spiritual leadership practices and psychological capital. In other words, the more nursing educators demonstrated spiritual leadership, the higher their psychological capital tended to be. This relationship can be interpreted through Fredrickson's broaden-and-build theory of positive emotions, which suggests that positive affect at work expands individuals' thought-action repertoires and

builds enduring personal resources [32]. When educators find purpose and meaning in their professional roles, they are likely to experience greater satisfaction, joy, and self-worth, which strengthen their psychological capital. Previous studies have similarly emphasized that positive psychological capital and constructive leadership—particularly spiritual leadership—can transform nursing environments by improving retention, productivity, and engagement while fostering a deeper sense of purpose among nurses and educators [33, 34]. These insights underscore the importance of integrating spiritual leadership development into professional training, organizational policy, and leadership education for nursing faculty.

Other scholars have also confirmed the connection between spiritual leadership and psychological capital. Chen and Li found that spiritual leadership positively influences employees' self-esteem and self-efficacy—two key components of psychological capital [15]. Similarly, Wu and Lee reported that higher levels of spiritual leadership were associated with increased psychological capital and stronger work engagement among nurses [22].

Spiritual leadership, as an emerging organizational approach, emphasizes humanistic and moral values such as compassion, honesty, generosity, cooperation, hope, and altruism. When these values are embodied in management practices, they cultivate belonging, identity, and purpose among employees, which, in turn, enhance self-efficacy. The present findings support this relationship, revealing a positive correlation between spiritual leadership and self-efficacy among nursing educators. This is consistent with Faghih Aram's research in Iran, which found that spiritual leadership was significantly associated with managers' and staff members' self-efficacy. The study also highlighted that altruistic love, faith at work, and organizational commitment contribute to improved performance and overall efficacy [35].

Furthermore, the positive association found between spiritual leadership and the dimensions of hope and optimism within psychological capital can be interpreted through the nature of workplace motivation. Nurses who are guided by spiritually oriented leaders are often better able to accomplish their professional goals, and such successes tend to strengthen their sense of motivation and optimism toward their work.

One particularly unexpected finding in this study was that male participants demonstrated higher levels of both spiritual leadership and psychological capital than their female counterparts, despite the relatively small proportion of males in the sample. This outcome might be attributed to the perception that male educators often display greater prudence, insight, and reflective judgment [36]. Radu similarly argued that men may possess traits traditionally associated with effective leadership, including the capacity to draw on experience (tradition), a willingness to innovate and take risks, strategic thinking, emotional composure, the ability to delegate and cooperate effectively, and persuasive communication skills that inspire others [37].

Additionally, nursing educators holding a Ph.D. were found to have higher levels of agreement with spiritual leadership and psychological capital compared to those with only a bachelor's degree. Likewise, individuals serving as assistant lecturers or demonstrators exhibited stronger spiritual leadership and psychological capital scores than those in other academic ranks. These findings suggest that higher educational attainment and active academic engagement may contribute to enhanced self-belief, motivation, and leadership orientation among nursing educators.

Limitations

This study has several notable limitations. First, due to its cross-sectional design, causal relationships between variables cannot be firmly established. Future research employing longitudinal or experimental designs would provide stronger evidence of directionality and causation. Second, as the study relied on self-reported data, the potential for response bias cannot be ruled out. Third, the relatively small sample size limits the generalizability of the findings and may have reduced statistical power. Subsequent research with larger and more diverse samples is recommended to validate these findings and explore causal mechanisms.

Moreover, future investigations should examine how spiritual leadership and psychological capital influence broader outcomes such as nursing educators' well-being, job satisfaction, and teaching effectiveness. Understanding these relationships could provide valuable insights for leadership development programs and organizational interventions within academic nursing settings.

Conclusion

In summary, the present study found that nursing educators generally exhibited moderate to high levels of both spiritual leadership and psychological capital. A strong and statistically significant positive relationship was observed between these two constructs, suggesting that enhanced spiritual leadership is associated with greater psychological capital among nursing educators.

While certain demographic and professional factors—such as gender, academic rank, and educational level—appeared to influence these relationships, further investigation is warranted to clarify their underlying dynamics. Future studies should continue to explore these associations using larger samples and more robust research designs

to deepen understanding and support evidence-based strategies for cultivating effective, spiritually grounded leadership in nursing education.

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