

Perceived Professional Benefits as a Mediating Factor between Job Embeddedness and Career Motivation among Nurses

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Abstract

Background: Career motivation plays a crucial role in nurses' professional growth and their decision to remain in their positions. While job embeddedness and perceived professional benefits are acknowledged as key influencing factors, there is limited research examining how perceived professional benefits may serve as a mediating mechanism between job embeddedness and career motivation. **Aim:** This study aimed to assess the effect of perceived professional benefits as a mediating factor between job embeddedness and career motivation among nurses at Suez Canal University Hospital. **Design:** A descriptive correlational research design was utilized. **Setting:** The study was conducted at Suez Canal University Hospital. **Subjects:** A simple random sample of 265 staff nurses was selected. **Tools of data collection:** Data was collected using the Nurses' Perceived Professional Benefits Questionnaire, the Global Job Embeddedness Scale, and the Career Motivation Scale. **Results:** Most nurses reported moderate level of job embeddedness and career motivation. Significant positive correlations were found among job embeddedness, perceived professional benefits, and career motivation ($p < 0.001$). Regression analysis revealed that job embeddedness and perceived professional benefits significantly predicted career motivation. **Conclusion:** Perceived professional benefits play a pivotal mediating role between job embeddedness and career motivation among nurses. **Recommendations:** Enhancing nurses' perceptions of professional benefits may strengthen career motivation and contribute to improved retention and professional satisfaction.

Keywords: Career motivation, job embeddedness, Mediating factor, Nurses & Perceived professional benefits.

Introduction:

In today's dynamic healthcare environment, the retention and motivation of skilled nursing staff are critical for the effective functioning of healthcare organizations. Nurses represent the largest group of healthcare professionals globally, accounting for nearly 69% of the global health workforce (World Health Organization, 2025 & Boniol et al., 2022). However, the nursing profession is increasingly challenged by high stress levels, burnout, turnover, and an aging workforce, making it less desirable as a career choice (International Council of Nurses, 2023 & Smiley et al., 2023). As healthcare organizations strive to maintain a stable and committed nursing workforce, understanding the factors influencing job embeddedness and career motivation among nurses becomes crucial (Ren et al., 2024). Among these factors, perceived professional benefits have emerged as a key element in retaining and motivating nurses by enhancing their sense of belonging, commitment, and overall job satisfaction (Rosseter, 2024).

Although nursing is a high-stress and high-risk profession, it offers its practitioners significant opportunities for personal and professional development (Li et al., 2024). These perceived

benefits, collectively called nurses' perceived professional benefits, encompass nurses' subjective evaluations of the tangible and intangible rewards they derive from their profession (Zhang et al., 2024). It can be categorized into actual benefits, such as career development and financial rewards, and spiritual benefits, including emotional fulfillment and professional identity (Liu et al., 2024). These benefits significantly influence nurses' job satisfaction and engagement levels, thereby affecting their intention to stay in the profession (Tomaszewska et al., 2024 & Wang et al., 2024). Even though many people recognize the importance of perceived professional benefits, there isn't much research on how these benefits interact with other workplace factors, like job embeddedness and career motivation, especially in healthcare settings in developing countries.

The concept of job embeddedness has gained prominence in organizational behavior research over the past two decades as a predictor of employee retention and performance. It is defined as the combined forces that keep an employee from leaving their job, comprising three key dimensions as fit, links, and sacrifice. "Fit" refers to the compatibility between an employee's values, career goals, and the

organization's culture and demands; "links" are the formal and informal connections that bind an employee to their workplace and community; and "sacrifice" pertains to the perceived cost of leaving the organization, both in terms of financial loss and loss of personal relationships (Mitchell et al., 2001; Peltokorpi, 2024 & Setthakorn et al., 2024). High levels of job embeddedness have been associated with reduced turnover intentions and increased job performance, as employees who perceive a high degree of fit, strong links, and significant potential sacrifices are more likely to remain committed to their organization (Ferreira et al., 2017 & Fan et al., 2024).

Career motivation is another critical construct in understanding employee behavior and performance, particularly in the healthcare sector. It is defined as the psychological forces that drive an individual to pursue and achieve career goals, encompassing energy, persistence, and creativity (Riveros & Tsai, 2016 & Ait Ali et al., 2024). Career motivation influences not only the quality of care provided by the nurses but also their ability to seek continuous professional development, maintain high levels of productivity, and adapt to the ever-changing demands of the healthcare environment (Mlambo et al., 2021). Career motivation is shaped by various personal attributes, job characteristics, and organizational factors, among which perceived professional benefits and job embeddedness play a significant role (Li et al., 2024 & Wang et al., 2024). Nurses who perceive higher professional benefits from their roles are more likely to exhibit higher levels of career motivation, as they feel more valued, supported, and empowered in their career progression (Wu et al., 2020). Furthermore, continuing professional development has been identified as central to nurses' lifelong learning. It is vital for keeping nurses' knowledge and skills up-to-date, directly impacting their career motivation and professional growth (Mlambo et al., 2021).

Despite the growing body of research on job embeddedness, career motivation, and perceived professional benefits, few studies have examined the interrelationships among these constructs in healthcare settings, particularly among nurses (Yun et al., 2024 & Wu et al., 2024). The role of decent work perception has been found to mediate the relationship between role clarity and job embeddedness among nurses, demonstrating the importance of professional benefits in career development (Fang et al., 2025). Conversely, a lack of perceived professional benefits can decrease job embeddedness and career motivation, increasing the likelihood of turnover (Wu et al., 2024 & Yun et al., 2024). However, most of this research has been

conducted in developed countries (Song et al., 2024), and there is a need to explore these dynamics in different cultural and organizational contexts, such as those in developing countries like Egypt (El-Gazar et al., 2022). Recent studies in Egypt have started to fill this gap by looking at how different aspects of work-life affect job embeddedness for nurses and how various factors play a role in this situation (El-Gazar et al., 2022 & El-Sayed et al., 2023).

Significance of the Study:

This study focuses on the role of perceived professional benefits as a mediating factor between job embeddedness and career motivation among nurses at Suez Canal University Hospital. Understanding this mediation relationship is crucial for several reasons. First, it provides valuable knowledge about how nurses' perceptions of their professional benefits can influence their decision to stay within the organization, thereby addressing the persistent issue of nurse turnover in healthcare settings. Second, it highlights the importance of fostering a supportive work environment that enhances nurses' sense of job embeddedness and career motivation by reinforcing the perceived benefits associated with their roles. Third, this study adds to the existing research on job embeddedness, career motivation, and perceived professional benefits by offering real-world evidence from a developing country, where cultural, economic, and organizational factors differ from those in developed countries. Ultimately, the findings of this research will help healthcare administrators and policymakers at Suez Canal University Hospital and similar institutions develop targeted strategies to improve nurse retention, enhance job satisfaction, and optimize the overall quality of healthcare delivery.

Aim of the Study:

The current study aims to assess the effect of perceived professional benefits as a mediating factor between job embeddedness and career motivation among nurses at Suez Canal University Hospital.

Objectives of the Study:

1. Assess perceived professional benefits among staff nurses at Suez Canal University Hospital .
2. Assess job embeddedness among staff nurses at Suez Canal University Hospital.
3. Assess career motivation among staff nurses at Suez Canal University Hospital .
4. Find out the relationship between job embeddedness and perceived professional benefits of staff nurses at Suez Canal University Hospital .

5. Find out the relationship between perceived professional benefits and career motivation of staff nurses at Suez Canal University Hospital.
6. Examine the effect of perceived professional benefits as a mediating factor between job embeddedness and career motivation among nurses at Suez Canal University Hospital.

Research Question:

What is the effect of perceived professional benefits as a mediating factor between job embeddedness and career motivation among staff nurses at Suez Canal University Hospital?

Methods:**Study Design:**

A descriptive correlational research design was utilized to conduct this study.

Study Setting:

The study was conducted at Suez Canal University Hospital, which is located in Ismailia city and consists of the following departments: Medical Departments, Surgical Departments, Orthopedic Departments, Neurosurgical Department, Psychological and Neurological Department, Obstetrics Inpatient Department, Obstetrics Emergency Department, Pediatric Inpatient Department, Pediatric Intensive Care Unit, Neonatal Intensive Care Unit, Emergency Department, Burns Department, Operation Department, Urology Department, Rheumatology and Physical Rehabilitation Department, Oncology Department, Intensive Care Unit, Cardiac Care Unit, and Cardiothoracic Care Unit.

Sample Size:

To calculate sample size using the formula for a finite population: (Cochran's Sample Size Formula for a Finite Population) $n = (N * Z^2 * p * (1-p)) / (E^2 * (N-1) + Z^2 * p * (1-p))$

Where:

n = required sample size

N = total population (850 nurses)

Z = Z-value (1.96 for 95% confidence)

p = estimated proportion (use 0.5 if unknown)

E = margin of error (usually 0.05)

Now plug in the values:

$$n = (850 * 1.96^2 * 0.5 * (1-0.5)) / (0.05^2 * (850-1) + 1.96^2 * 0.5 * (1-0.5))$$

First, calculate the squared Z-value: $1.96^2 = 3.8416$

Then calculate the numerator: $850 * 3.8416 * 0.5 * 0.5 = 816.34$

Calculate the denominator: $0.05^2 * 849 + 3.8416 * 0.5 * 0.5 = 2.1225 + 0.9604 = 3.0829$

Finally, divide the numerator by the denominator: $n = 816.34 / 3.0829 \approx 264.84$

Thus, the required sample size is approximately 265 nurses.

Sampling Technique:

A simple random sample technique was used.

Tools of Data Collection:

Three tools were used in this study:

Tool (1): Nurses' Perceived Professional Benefits Questionnaire (NPPBQ):

It was developed by **Hu et al. (2020)**. It is a multidimensional instrument designed to assess nurses' perceptions of the professional benefits of their roles. This questionnaire aims to provide insights that support healthy professional evaluations and attitudes among nurses. It comprises 17 items, which are divided into four dimensions: personal growth (4 items), professional development (5 items), work-life balance (4 items), and positive affirmation (4 items).

Scoring System:

All items in the NPPBQ are worded positively, and answers are scored on a five-point Likert scale, with 1 meaning strongly disagree, 2 meaning disagree, 3 meaning not sure, 4 meaning agree, and 5 meaning strongly agree, leading to the highest possible total score of 85. The researchers interpret scores through three categories based on the calculated means and standard deviations that are converted to percentages: agreement is indicated by scores ranging from 64 to 85 (75% to 100%), uncertainty is represented by scores from 55 to 63 (65% to less than 75%), and disagreement is reflected by scores below 55 (less than 65%).

Tool (2): Global Job Embeddedness Scale:

It was developed by **Crossley et al., (2007)** to evaluate the factors that contribute to an individual's sense of connection to their job and organization, considering both organizational and community aspects. The scale comprises 7 items.

Scoring System:

The scale consists of seven items, all positively stated except for item 6, which is reverse-scored. The six standard items responses are rated on a five-point Likert scale where 1 represents strongly disagree, 2 represents disagree, 3 represents not sure, 4 represents agree, and 5 represents strongly agree. Item 6 employs reverse scoring, with responses rated where 1 represents strongly agree, 2 represents agree, 3 represents neutral, 4 represents disagree, and 5 represents strongly disagree. Consequently, total scores range from a minimum of 7 (indicating a positive response) to a maximum of 35 (indicating a negative response). The researchers interpret the scores by converting the calculated means and standard deviations into percentages. The scores from 26 to 35 represent agreement (75%-100%), scores from 23 to 25 indicate uncertainty (65%-74%), and scores below 23 reflect disagreement (less than 65%).

Tool (3): Career Motivation Scale:

It was developed by **Day & Allen (2004)** and adapted from previous works by **London (1993) & Noe et al. (1990)**. It is designed to assess both career motivation attitudes and behaviors. This tool comprises 21 items, which are divided into three main dimensions. The first dimension, career insight, includes seven items that evaluate an individual's ability to adapt to changing circumstances, focusing on traits such as self-belief, willingness to take risks, and the need for achievement. The second dimension, career resilience, also consists of seven items and addresses the development of realistic career outlooks, emphasizing the importance of setting clear and achievable career goals and recognizing personal strengths and weaknesses. The third dimension, career identity, contains seven items that measure the extent to which individuals define themselves through their work. This dimension encompasses job involvement, organizational identification, professional engagement, aspirations for advancement, and the desire for recognition.

Scoring System:

The scale employs positively worded items throughout, with each item rated on a five-point Likert scale where 1 represents a very slight extent, 2 represents a small extent, 3 represents a moderate extent, 4 represents a large extent, and 5 represents a very large extent. With 21 items total, possible scores range from a minimum of 21 to a maximum of 105, where higher scores reflect greater career motivation (**Day & Allen, 2004**). The researchers categorized scores into three interpretive levels based on calculated means and standard deviations and converted them into percentages. Raw scores ranging from 79 to 105, corresponding to 75% to 100%, indicate a large extent of career motivation. Career motivation is moderate when scores fall between 68 and 78, or 65% and 74%. Finally, scores below 68, representing less than 65%, reflect a small extent of career motivation.

Tools Validity:

The NPPBQ, the Global Job Embeddedness Scale, and the Career Motivation Scale have all demonstrated strong content and construct validity, as reported by **Hu et al. (2020)**, **Crossley et al. (2007)**, and **Day & Allen (2004)**, respectively. For the current study, these three instruments were meticulously translated into Arabic to ensure their suitability for the target population. To further guarantee cultural and linguistic appropriateness, a jury of three nursing experts from the nursing administration department at Suez Canal University reviewed the translated versions. The experts confirmed that the instruments were comprehensible and appropriate for use without

additional modifications, thereby supporting their content validity within this specific context.

Tools Reliability: The NPPBQ showed it was very reliable in the original study, with a Cronbach's alpha of 0.93 (**Hu et al., 2020**), and in the current study, it remained reliable with a Cronbach's alpha of 0.917. Similarly, the Global Job Embeddedness Scale showed excellent reliability in its original study, with a Cronbach alpha of 0.89 (**Crossley et al., 2007**) and a comparable coefficient of 0.895 in the present study. The Career Motivation Scale also showed strong reliability, with a Cronbach's alpha of 0.85 in the study by **Day and Allen (2004)** and a better alpha of 0.899 in the current study, which means all three tools were measured consistently and reliably.

Fieldwork: Researchers collected data from November 2024 to January 2025. The researchers were ready to answer any participant queries or concerns throughout the data collection process. The nurses needed 30–45 minutes to complete the questions.

Pilot Study: Before data collection in October 2024, 10% (27) of the sample size of staff nurses participated in a pilot study. This pilot study aims to assess the research tool's clarity, applicability, and feasibility and identify any potential obstacles or issues that may arise during the main study. Additionally, the pilot study aims to reveal the estimated time required for data collection. We excluded the participants from the main study sample. We did not make any modifications based on the pilot study results.

Statistical analysis:

Data collected were coded, entered, and analyzed using Statistical Package for the Social Sciences (SPSS version 21). The analysis used simple statistics like mean and percentages to summarize the data, Chi-Square tests for categorical data, and Spearman's correlation to look at relationships between variables. Simple and multiple linear regression analyses were done to see how one thing predicts another, and a thorough mediation analysis was carried out using Baron and Kenny's method, Sobel's test, and bootstrapping to check if perceived professional benefits influence the link between job embeddedness and career motivation. Path analysis was used to show the mediation model and measure both direct and indirect effects, with a statistical significance level set at $p < 0.05$ for all tests.

Ethical Considerations:

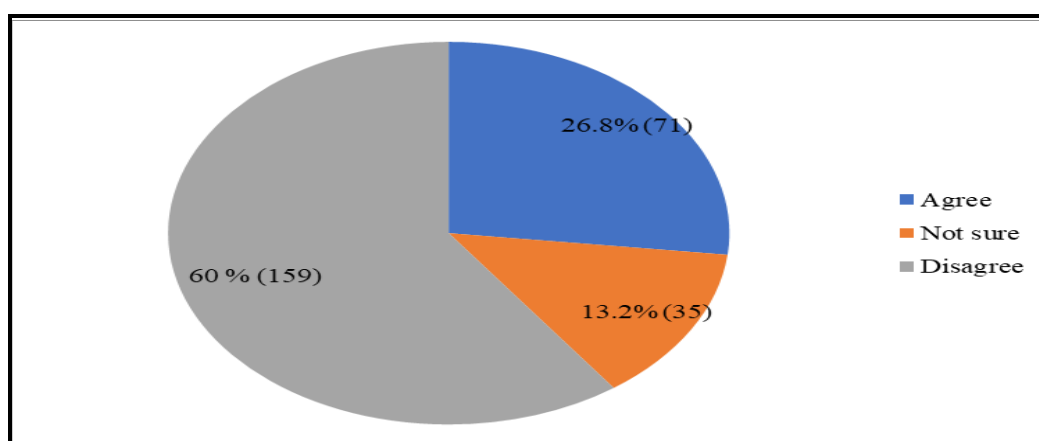
The study was approved by the Research Ethics Committee at the Faculty of Nursing, Suez Canal

University, with approval number (291/9/2024). The

researchers took ethical considerations regarding data confidentiality and obtained written informed consent from the nurses before commencing the study. We informed the participants that we would only use their questionnaire answers for research purposes. The researchers will not share their answers with anyone else. The present study also adhered to ethical and legal principles by upholding justice and autonomy for its participants. Furthermore, the subjects of this study had full autonomy to withdraw from it at any time.

Results:**Table (1): Mean score of nurses' response on job embeddedness (n = 265)**

Items	Minimum	Maximum	Mean	Std. Deviation	Median
I feel attached to this organization.	1	5	2.95	1.34	3
It would be difficult for me to leave this organization	1	5	2.98	1.33	3
I'm too caught up in this organization to leave.	1	5	2.82	1.33	3
I feel tied to this organization	1	5	2.99	1.28	3
I simply could not leave the organization that I work for.	1	5	2.89	1.22	3
It would be easy for me to leave this organization. (reverse scored)	1	5	2.91	1.29	3
I am tightly connected to this organization.	1	5	2.95	1.31	3
Job embeddedness	7	35	20.49	7.13	21

**Figure (1): Job embeddedness among staff nurses at Suez Canal University Hospital (n = 265)****Table (2): Mean score of nurses' response on career motivation (n = 265)**

Items	Minimum	Maximum	Mean	Std. Deviation	Median
Career insight	7	35	24.55	6.44	26
Career resilience	7	35	23.67	6.04	24
Career identity	7	35	24.03	6.88	25
Career motivation	21	105	72.25	17.68	76

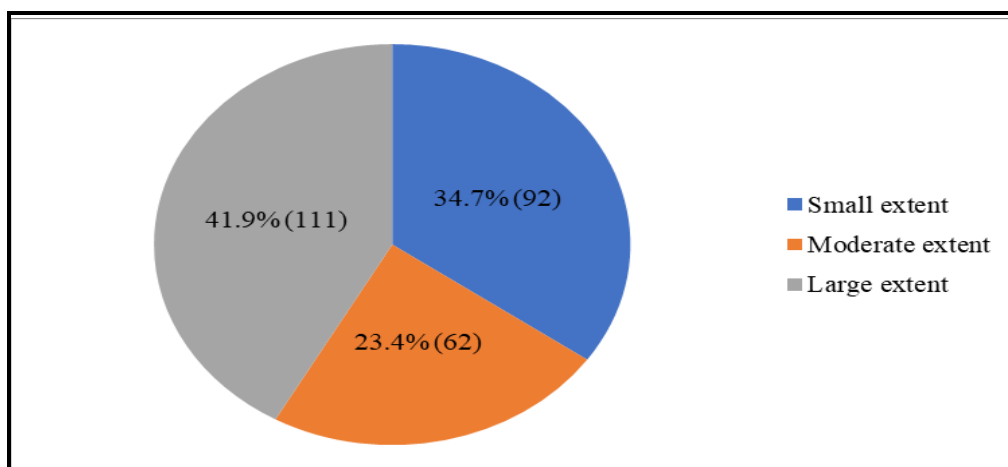


Figure (2): Career motivation among staff nurses at Suez Canal University Hospital (n = 265)

Table (3): Mean score of nurses' response on perceived professional benefits (n = 265)

Items	Minimum	Maximum	Mean	Std. Deviation	Median
Positive occupational perception	3	15	11	3.03	12
Good nurse patient relationship	4	20	15.49	3.89	16
Recognition from family relative and friends	3	15	10.99	3.09	12
Sense of belonging to team	3	15	11.03	3.06	12
Self-growth	4	20	14.74	3.96	16
Perceived professional benefits	17	85	63.25	14.88	67

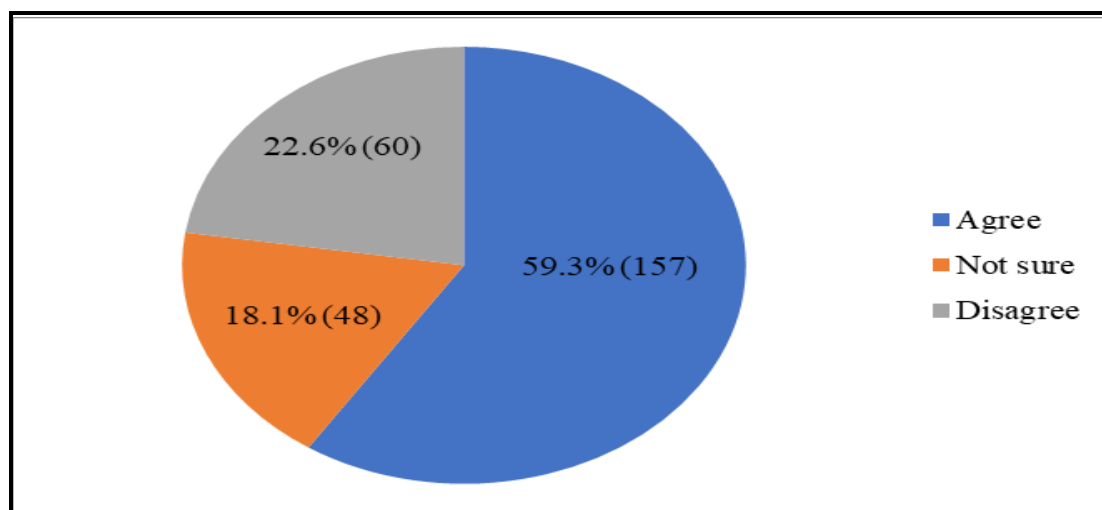


Figure (3): Nurses' perceived professional benefits at Suez Canal University Hospital (n = 265)

Table (4): Correlation between job embeddedness, career motivation and perceived professional benefits

	Job embeddedness		Career insight		Career resilience		Career identity		Career motivation	
	r	P value	r	P value	r	P value	r	P value	r	P value
Perceived professional benefits	0.524	0.001	0.623	0.001	0.579	0.001	0.640	0.001	0.674	0.001

$P \leq 0.05$ *r by spearman's test*

Table (5): Simple linear regression analyses of career motivation predicted by job embeddedness and perceived professional benefits

Dependent variable	Predictor variables	R	R square	F	F significance	B	t	t significance
Career motivation	Job embeddedness	0.395	0.156	48.67	0.001	0.98	6.98	0.001
	Perceived professional benefits	0.698	0.487	249.71	0.001	0.83	15.802	0.001

Table (6): Multiple linear regression analysis of career motivation predicted by job embeddedness and perceived professional benefits

Dependent variable	Predictor variables	R	R square	F	F significance	B	t	t significance
Career motivation	Job embeddedness	0.699	0.488	125.005	0.001	0.103	0.801	0.424
	Perceived professional benefits					0.804	13.036	0.001

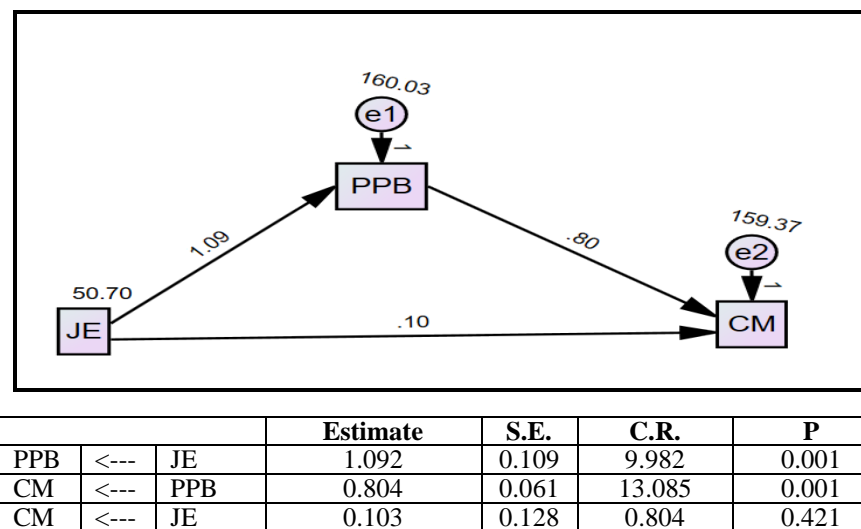
**Figure (4): Path analysis model of job embeddedness and career motivation with perceived professional benefits as a mediator**

Table (1): Presents the mean scores of nurses' responses regarding job embeddedness. The overall mean score was 20.49 ± 7.13 . Among the aspects assessed, nurses reported the strongest agreement with feeling tied to their organization (mean = 2.99 ± 1.28). At the same time, the lowest agreement was observed for feeling too caught up in the organization to leave (mean = 2.82 ± 1.33).

Figure (1) Illustrates job embeddedness among staff nurses. The three-fifths (60 %) of nurses reported a low sense of connection to their job and organization, encompassing both organizational and community dimensions of embeddedness.

Table (2): Presents the mean scores of nurses' career motivation. The total career motivation score was 72.25 ± 17.68 . Among the subscales, career insight scored the highest mean (24.55 ± 6.44), followed by career identity (24.03 ± 6.88), and career resilience scored the lowest mean (23.67 ± 6.04).

Figure (2): Illustrates career motivation levels among staff nurses. Nearly half (41.9 %) of staff nurses demonstrate high career motivation attitudes and behaviors.

Table (3): Summarizes nurses' perceived professional benefits. The total mean score was 63.25 ± 14.88 . Among the subscales, a good nurse-patient relationship scored the highest means (15.49 ± 3.89). In contrast, recognition from family/friends scored the lowest mean (10.99 ± 3.09).

Figure (3): Illustrates nurses' perceptions of professional benefits. Nearly three-fifths (59.3 %) of staff nurses agreed their professional benefits are positively associated with their professional roles.

Table (4): Demonstrates strong positive correlations among job embeddedness, career motivation components, and perceived professional benefits. The highest correlation ($r = 0.674$) between career

motivation and perceived professional benefits is observed.

Table (5): Presents two simple linear regression analyses predicting career motivation among nurses. Job embeddedness significantly predicts career motivation ($p = 0.001$), explaining 15.6 % of the variance ($R^2 = 0.156$). Perceived professional benefits also significantly predict career motivation ($p = 0.001$), accounting for 48.7 % of the variance ($R^2 = 0.487$).

Table (6): Presents a multiple linear regression analysis predicting career motivation from job embeddedness and perceived professional benefits. The overall model was statistically significant ($F = 125.005$, $p < 0.001$), explaining 48.8% of the variance in career motivation ($R^2 = 0.488$). While the perceived professional benefits significantly predicted career motivation ($B = 0.804$, $t = 13.036$, $p < 0.001$), job embeddedness was not a significant predictor when controlling perceived professional benefits ($B = 0.103$, $t = 0.801$, $p = 0.424$).

Figure (4): Presents a path analysis examining the mediating role of perceived professional benefits (PPB) between job embeddedness (JE) and career motivation (CM). The results indicate complete mediation through a significant indirect effect ($JE \rightarrow PPB$: $B = 1.092$, $p < 0.001$; $PPB \rightarrow CM$: $B = 0.804$, $p < 0.001$) and a non-significant direct effect of JE on CM when PPB is included in the model ($B = 0.103$, $p = 0.421$).

Discussion:

This study revealed that the overall mean score of nurses' responses regarding job embeddedness indicated a moderate level of job embeddedness. This finding aligns with **Song et al. (2024) & Zhou et al. (2024)**. Moderate job embeddedness can be understood through various factors, including organizational fit, links with colleagues, and sacrifice in leaving the job or community, as these contribute to a nurse's overall sense of belonging, connectedness, and the potential costs of leaving their current position. Furthermore, factors like supervisor support, work-life balance, and a good match in areas like value, fairness, community, and control can also influence job embeddedness levels (**Abd-Elrhaman et al., 2020; El-Gazar et al., 2022; Elsaid Elsabahy et al., 2019; Fan et al., 2024 & Mohammed et al., 2024**).

Nurses in the current study reported the strongest agreement with feeling tied to their organization. At the same time, the lowest agreement was observed for feeling too caught up in the organization to leave. This result suggests that while nurses feel connected to their workplace, they maintain some psychological flexibility regarding their employment decisions,

which may reflect professional autonomy rather than organizational dependency (**Mahmoud & Obied, 2022; Poku et al., 2025**).

A concerning finding was that three-fifths of nurses reported low job embeddedness. This result contrasts sharply with **Mohammed et al. (2024)**, who noted that more than three-fifths of staff nurses had high levels of job embeddedness. This discrepancy may be attributed to differences in organizational culture, healthcare system characteristics, or contextual factors such as workload, management support, and working conditions. The high prevalence of low job embeddedness in the current study sample raises important concerns about nurse retention and organizational commitment, particularly given the current global nursing shortage.

The present study revealed that the total career motivation score among participating nurses indicated a moderate level of career motivation. This result aligns with **Ghanem Atalla et al. (2023)**, who reported a slightly lower overall career motivation score with similar subscale patterns.

Among the subscales of career motivation in this study, career insight scored the highest means, followed by career identity, and career resilience scored the lowest. The finding that career insight scored highest indicates that nurses in this sample possess adequate self-awareness regarding their career goals and professional development needs. Such awareness includes understanding their strengths and weaknesses, identifying areas for improvement, and setting realistic career aspirations (**Li et al., 2022 & Zarrin et al., 2023**). However, the lower career resilience scores indicate potential vulnerabilities in nurses' adaptability, capacity, and ability to solve problems and seek solutions. In this regard, it's important to strengthen nurses' resilience, as improved resilience can help increase nurses' work engagement and enhance function when facing workplace challenges (**Yu et al., 2019**).

Nearly half of the staff nurses participating in the current study demonstrated high career motivation, which differs from **Ramdan et al. (2021)**, who found that high percentage of nurses had moderate motivational levels, with low percentage showing high motivation. This variation may reflect differences in sample characteristics or organizational contexts that foster or inhibit nursing staff career motivation.

The current study findings revealed that the total mean score of nurses' perceived professional benefits indicated a moderate recognition of professional benefits. This result aligns with **Shi et al. (2024)** but falls below findings from the **Hu et al. (2020)** study. These variations may reflect differences in organizational cultures, recognition systems, or the

specific professional environments in which nurses practice.

Among the subscales of perceived professional benefits, the positive nurse-patient relationship dimension scored highest mean, while recognition from family and friends scored lowest. These findings partially agree with **Zhou et al. (2023)**, suggesting that nurses consistently derive the greatest professional satisfaction from their therapeutic relationships with patients. The lower scores for external recognition highlight a potential area for improvement, as social recognition can significantly impact professional identity and job satisfaction (**Istichomah et al., 2021 & Wanning et al., 2024**).

Notably, near two thirds of staff nurses participating in the current study agreed that their perceived professional benefits are positively associated with their professional roles. This finding indicates that while most nurses recognize the benefits of their profession, there remains a substantial need for improvement in helping nurses fully appreciate and experience the professional rewards of nursing practice.

This study demonstrates strong positive correlations among job embeddedness, career motivation components, and perceived professional benefits. The highest correlation ($r = 0.674$) observed between career motivation and perceived professional benefits represents a strong relationship, suggesting that nurses who perceive greater professional benefits are more likely to be motivated in their careers. This finding supports **Wu et al. (2020)**'s assertion that perceived professional benefits serve as endogenous motivation for career development.

While significant, the correlations between job embeddedness and other variables were moderate in strength. This result indicates that job embeddedness alone may not be sufficient to drive career motivation without the perceived professional benefits, highlighting the complex interaction between organizational and professional factors in nursing career development.

The regression analyses in the current study offer vital perspectives on the predictive relationships among study variables. In simple regression analysis, job embeddedness significantly predicted career motivation, explaining 15.6% of the variance. However, perceived professional benefits demonstrated a much stronger predictive relationship, accounting for 48.7% of the variance in career motivation. This substantial difference suggests that perceived professional benefits are more crucial than job embeddedness in driving career motivation.

The multiple regression analysis revealed a compelling finding: when both predictors were included simultaneously, perceived professional

benefits remained a significant predictor, while job embeddedness became non-significant. This finding strongly indicates a mediation relationship, which was confirmed through path analysis.

The path analysis revealed complete mediation, with perceived professional benefits mediating the relationship between job embeddedness and career motivation. The significant indirect effect and the lack of a direct impact show that job embeddedness affects career motivation only by influencing perceived professional benefits. This finding has profound implications for understanding how organizational factors translate into career outcomes for nurses.

The complete mediation indicates that healthcare organizations seeking to enhance career motivation among nurses should focus on improving job embeddedness and helping nurses recognize and appreciate the professional benefits of their work. This dual approach may be more effective than addressing either factor in isolation.

Limitations of the Study:

A key limitation of this research is that data collection was limited to one university hospital. This single-site approach may limit the applicability of results to other healthcare environments, including private medical facilities, community health centers, or institutions in different geographical areas.

Conclusion:

The findings of the current study reveal that while both job embeddedness and perceived professional benefits are positively associated with career motivation, perceived professional benefits serve as a complete mediator in this relationship. Specifically, job embeddedness alone was a strong predictor of career motivation; however, when perceived professional benefits were added to the analysis, the direct effect of job embeddedness on career motivation was no longer significant, showing that job embeddedness mainly influences career motivation through perceived professional benefits.

Recommendations:

Suez Canal University Hospital should implement the following recommendations:

- Create structured programs to celebrate nurses' achievements with involvement from patients, families, and hospital leadership.
- Train nurse managers in emotional support, fair workload distribution, and team-building to boost satisfaction and retention.
- Offer ongoing education, postgraduate partnerships, and skill certifications to advance nurses' careers.

- Implement flexible schedules, fair shifts, and adequate rest to reduce burnout and support retention.
- Provide accessible counseling, stress management, and resilience training, especially for high-stress units.
- Conduct regular surveys and maintain open feedback channels to inform improvements and administrative decisions.
- Support future research exploring similar dynamics in other departments and utilizing longitudinal designs to track long-term outcomes.
- Apply research findings to tailor staff development strategies and refine organizational practices, ensuring they remain responsive to evolving needs.

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