

## The Relationship between Ambidextrous Leadership Behavior and Career Competencies among Nurses

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### Abstract

**Background:** Fostering creativity and adaptation in a healthcare setting is linked to ambidextrous leadership. Educators who support inquiry can assist nurses in acquiring the skills necessary to accept change, integrate new technology, and apply creative methods to patient care. **The aim of the study:** To identify the relationship between ambidextrous leadership behavior and career competencies among nurses. **Subject and method:** A descriptive correlational study design that had been used. **Setting:** Minia General Hospital served as the study's site. **Subject:** The current study's convenience sample consisted of all 331 staff nurses at Minia General Hospital. **Tools of data collection:** 1<sup>st</sup> tool: Demographic data sheet, 2<sup>nd</sup> tool: Ambidextrous leadership behavior scale, and 3<sup>rd</sup> tool: Nurse Career Competence Questionnaire. **Results:** (58.3) percent of Minia general hospital nurses exhibited "moderate" responses toward ambidextrous leadership behavior. In addition, (57.7) percent of nurses exhibited "moderate" responses toward career competencies. **Conclusion:** There was a positive correlation between ambidextrous leadership behavior and career competencies. **Recommendations:** Programs for developing leaders that concentrate on ambidextrous leadership should be supported by healthcare organizations.

**Keywords:** Ambidextrous Leadership Behavior, Career Competencies & Nurses

### Introduction

Nurses are essential to providing high-quality patient care in the fast-paced and demanding industry of healthcare. In addition to clinical expertise, nurses need a wide range of talents, including leadership abilities, to succeed in this demanding field (Rosing & Zacher, 2022). Effective leadership plays a crucial role in establishing the performance, culture, and flexibility of groups and organizations. "Ambidextrous leadership behavior" is a new paradigm that has become a potent idea in the ever-changing world of contemporary business and management. A dynamic and varied strategy that leaders use to manage the competing demands of innovation and stability is known as ambidextrous leadership, and it is becoming more and more acknowledged as a major factor in the success of organizations (Mutonyi, et al. 2020)

The merging of directive and empowering leadership styles is known as

ambidextrous leadership, and it is a topic that is now gaining popularity. Research characterizes empowering leadership as a power exchange between managers and staff members by giving staff members more autonomy and decision-making authority over their tasks and resources, along with the assistance they need to manage this increased responsibility. On the other hand, directive leadership is characterized as a leadership style that gives staff members explicit instructions about objectives, how to reach these objectives, and the necessary performance standards (Cunha, et al , 2019)

Both directive and empowering leadership styles can help to reduce or balance the tension that naturally exists between control and delegation. Directive leadership behaviors can help to lessen the arguments and conflicts that arise from giving too much authority, while empowering leadership can help to lessen the limitations that directive leadership places on the initiative of subordinates. According to research, a single leadership style cannot

simultaneously address several environmental concerns (Li ,et al .2020).

According to Luo et al. (2018), organizations would be better equipped to handle the conflicting demands of various organizational settings if they included multiple leadership styles. Ambidextrous leadership, as opposed to a single leadership style, is characterized by conditional dependence, contradiction balancing, temporal flexibility to switch, and inclusive thinking. It is therefore more consistent with the unity of opposites, balance, and mutual conversion—a concept known as the "Yin-yang balance" in Chinese. Through resource integration and reconstruction, it achieves organizational resource balance and enforcement. It then looks for new ways to take on challenging problems (Ying ,et al.,2020 & Mascareño, et al. 2021).

The ability of leaders to strike a balance between exploration and exploitation is reflected in ambidextrous leadership behavior, a word that stems from the larger idea of organizational ambidexterity. Exploitation is keeping things stable, efficient, and making the most of what already exists; exploration is being creative, looking for new opportunities, and adjusting to change. Ambidextrous leadership in nursing refers to the ability to promote creativity and adaptation while maintaining reliable, high-quality patient care, which eventually influences nurses' professional competencies (Mutonyi ,et al. 2020).

Given the range of career opportunities available to them, nurses must successfully manage their careers to ensure both their professional development and the provision of high-quality nursing care. The dynamically changing nature of healthcare environments has led to an expansion of nurses' roles worldwide. Advanced nursing positions in primary care have increased patient satisfaction and quality of nursing care while lowering healthcare costs and providing access to healthcare in places where physicians are scarce in a number of nations (Mlambo ,et al ,2021).

Moreover, advanced nursing positions are necessary in a variety of additional contexts,

including community care, nursing education, professional leadership, and research, in addition to the clinical setting (Kim et al., 2021). Throughout the past few decades, graduate nursing education has grown and nursing career possibilities have gotten more diverse in order to facilitate the development of advanced practice skills in more nurses. Additionally, nurses have the flexibility to switch jobs or areas of specialization. With so many alternatives for professions, nurses should have the skills necessary to successfully navigate their careers. (Glerean ,et al ,2019).

Career self-management requires career competencies, according to career studies. The information, skills, and talents that are essential to career development and that an individual can shape and hone are known as career competencies. Regardless of profession, these competencies are helpful for all employees to advance their own careers in the dynamic labor market. Reflective, communicative, and behavioral career competences make up their three components. By fusing personal reflections with professional careers, reflective career competences help people become aware of their long-term career goals. Effective communication with significant persons is a key component of communicative career competences, which enhance career success. The goal of behavioral career competencies is to actively reshape one's career (Yamada ,et al. 2023).

Prior research has outlined career competences that are pertinent to people's employability, job crafting, career sustainability, and general well-being (e.g., work engagement, satisfaction, and work-home enrichment). Moreover, professional competencies facilitate the improvement of individuals' career self-management and enable organization's, professions, and sectors to adjust to constantly changing surroundings. So, in order to improve organizational and industrial competences, career competencies are tools that help people manage their careers or enhance their skills and talents (Tams, et al. 2021).

Yamada ,et al. (2023) stated that Career competences serve as predictors and facilitators

of work engagement and job resources. The same author contends that helpful employment resources foster the growth of career competencies and raise employee engagement levels in the workplace. Moreover, workers who possess greater degrees of professional competences are better able to recognise job resources in their workplaces, which raises employee engagement.

Career competences and work engagement are positively correlated, as demonstrated by **Tams et al. (2021)**. Healthcare organizations, professional nursing bodies, and the general public now expect nurses to maintain their competency. However, there is little information available regarding how a nurse's competency level varies over their career. It appears that not knowing this information makes it more difficult to construct interventions that are suitable for supporting nurses' ongoing competence. Furthermore, it was thought by the same author that professional competencies are the behaviors, knowledge, and skills that may be applied to the nursing setting in order to accomplish long-term personal career goals. Through lifelong learning, nurses are accountable for keeping their knowledge and skills current. For nurses to achieve their long-term objectives and carry out their nursing duties, career competences are helpful.

Ultimately, nursing practitioners must strike a balance between the need to continuously innovate and adapt and the expectations of providing high-quality care in the ever-changing healthcare market. It is believed that ambidextrous leadership is a tactical technique that can help nursing personnel successfully handle these difficulties. Nursing leaders who are ambidextrous set the stage for an atmosphere that is conducive to both exploration and exploitation, which stimulates innovation and creativity while maintaining the consistency and efficiency required for patient safety. The intersection of ambidextrous leadership behavior and career competencies among nursing staff is a critical area of study with implications for patient care, workforce satisfaction, and the overall success of healthcare organizations. By shedding light on the intricacies of this interaction, this research hopes to provide insightful information

that will help influence nurse leadership and practice in the future (**Wang, et al. 2022**).

### **Significance of the study**

Leaders that possess ambidexterity promote creativity and flexibility in the nursing profession. They foster an atmosphere that permits nurses to experiment with novel patient care strategies while also guaranteeing the reliable provision of first-rate medical care. This encourages the growth of skills linked to creativity, critical thinking, and problem-solving. In addition, career competencies include clinical expertise, decision-making, communication, leadership, flexibility, and lifelong learning, among other things (**Mutonyi, et al. 2020**).

Those two interrelated variables were not previously linked in any study. The purpose of this study, according to the researchers, is to determine the complex relationship that exists between ambidextrous leadership behavior and professional competencies among nurses. This relationship has a big impact on patient care, nursing practice, and leadership development. Comprehending and fostering this connection can result in better career outcomes for nurses and better patient care. The evolution of nursing as a profession and healthcare in general can both benefit from more research and real-world initiatives in this field.

### **Aim of the study:**

The research aim was to identify the relationship between ambidextrous leadership behavior and career competencies among nurses

#### **Research questions:**

- What are the levels of ambidextrous leadership and career competencies among nurses?
- What are there relations between demographic data and ambidextrous leadership as well as career competencies among nurses?

#### **Material and Methods:**

##### **1.1. Study Setting:**

The current study was conducted at

Minia General Hospital; all units were included in the study. The hospital consists of three parts: the first part consists of two floors, on the ground floor emergency rooms and outpatient clinics, in the first-floor intensive care unit and on the second floor there are pediatric and neonates. The second part consists of three floors. On the ground floor, there are toxins, waterworks, and hospital kitchen, in the first-floor adult dialysis, in the second floor there are children dialysis and medical laboratory, and the third floor there is an isolation part. The third part of hospital consists of three floors: in the ground floor, there are x-ray parts, operations, hospital pharmacy, and director office, in the first floor there are surgical, obstetric and burns, in the second floor there are orthopedic and medical, and in the third floor there are a laundry and sterilization rooms

### 1.2. Study Design

This study was carried out using a descriptive correlational research design.

### 1.3. Study Sample

The current study included all nurses (n = 331) as participants, taking into account a convenience sample of nurses employed by Minia General Hospitals at the time of data collection.

### 1.4. Data Collection Tools

Three instruments were utilized in this study to achieve its goal: the demographic data sheet, the ambidextrous leadership behavior scale and the nurse career competence questionnaire.

**Tool I: Demographic Data Sheet:** The researchers created to gather information on age, gender, place of residence, level of education, and years of experience.

**Tool II: Ambidextrous leadership behavior scale:** The scale was created by (Zacher & Rosing, 2015; Rosing et al., 2011). It involved 14 items, it used to assess nurses perception level toward ambidextrous leadership behavior. The scale using two parts, as follows: for closing team leader behaviors (7 items) and the other for opening team leader (7 items). The nurses' answers were recorded on a

three-point Likert scale, ranging from "1" (Disagree) , "2" (neutral) and "3" (agree). **Scoring system** was ranged from (14-42), the perception level of nurses was considered low from (14–23) points", scores from (24-33) were denoted as "moderate", and scores from (34-42) were considered as "high".

**Tool III- Nurse Career Competence Questionnaire:** it developed by Masako ,et al., (2022), It involved 21 items, It used to assess nurses perception level toward career competence. the questionnaire using three parts, as follows: reflective career competences (7 items), communicative career competences (7 items), and behavioral career competences (7 items). All responses were based on a 3-point Likert scale, with 1 denoting disagree and 3 agreeing, for each statement. **The scoring system** was range from (21 to 63), and it divided into three levels as follow: Low level of nurses' career competence ranged from 21 to 34, Moderate level of nurses' career competence ranged from 35 to 49 and High level of nurses' career competence ranged from 50 to 63.

### Tools Validity and Reliability

An assortment of three experts in nursing administration, one professor, and two assistant professors from the Faculty of Nursing at Minia University established the study instruments' content validity. Reviewing the instrument for content, coverage, clarity, terminology, length, format, and overall appearance was requested of each expert. The three instruments' reliability test was calculated using Cronbach's Alpha Coefficient, indicating a good level of reliability for the surveys. The scores obtained for the nurse competence scale and the ambidextrous leadership behavior measures were 0.795 and 0.805, respectively.

### 1.5. Pilot study:

The pilot study was carried out on (10%) of the current sample to test the items' clarity and application and gauge how long it would take to complete the questionnaire. The results showed that it took between twenty-five and thirty minutes to complete the survey. According on the analysis of the pilot study, no adjustments were made. Consequently, the total

number of pilot experiments is(n=33) included in the study sample.

### 1.6. Procedure

- Using books and journals that were readily available, a survey of relevant literature covering different facets of the issue was conducted in order to familiarize oneself with the research problem and choose the most suitable study instruments.
- The Arabic translation of the tool was done.
- The faculty ethical committee was consulted after the essence of the work was explained in order to acquire official clearance.
- After outlining the nature of the work, the director of the hospitals granted official clearance.
- During the implementation phase of the research, the researcher explained the significance, methodology, and goal of the study to each nurse in an effort to foster better cooperation.
- After learning about the goals of the study, each participant written consent
- The questionnaires were given to the participating nurses in their units one by one by the researcher during the data collection process, after which the investigator asked them to complete it.
- The questionnaires took an average of between twenty-five and thirty minutes to complete.
- The investigators bided their time till the subjects had finished their forms and were prepared to respond to inquiries.
- The questionnaires were collected by the researcher once they had been completed. In March and April of 2023, data were gathered.

### Statistical design

The statistical program for social studies (SPSS) version 27 was used for data entry and statistical analysis. The required descriptive statistics were applied to the quantitative and qualitative variables, respectively, including means, frequencies, and percentages. The correlation coefficient (r) test was used to

ascertain the degree of relationship between the variables. All tests were considered statistically significant at a p-value of 0.05.

### Ethical consideration

Before any data is gathered, written consent was sought from all participating nurse managers. Participants were informed of the study's purpose before researchers began gathering data. Participants' information was assured to remain anonymous and secret. Every participant was guaranteed to participate voluntarily in the trial. They were advised that they might leave the study at any moment, for any reason, at any point.

### Results:

Table (1) demonstrates that, with regard to age, 59.2% of nurses were between the ages of 20 < 30 and roughly 24.8% were between the ages of 30 < 40. The remaining 16 percent of nurses were in the age category of people over 41, with an age mean and standard deviation of roughly (31.2±8.54). As for gender, 70.7 percent of them were female, and 72.5 percent of them were from an rural area. The same table also shows that 45.6% have a technical degree, while 27.5 percent have a diploma and 26.9% of nurses have a bachelor's degree,. In terms of nursing experience, the table shows that approximately 49.5% of nurses had experience ranging from less than ten years, while the lowest percentage of nurses (21.1%) had experience spanning over twenty-one years.

**Figure 1:** reveals that, (58.3%) of the nurses at Minia General Hospital gave "moderate" responses. 26.3 percent of the participants showed "high" replies after that. Additionally, the aforementioned table reveals that 15.4% of the nurses exhibited "low" total ambidextrous leadership behavior.

**Figure 2:** shows that, (57.7%) of nurses at Minia General Hospital gave responded to career competencies in a "moderate" level. The next percentage of participants who gave "high" responses was 24.2%. Additionally, the same figure reveals that 18.1% of nurses assigned a "low" level to their overall job abilities.

Table (2) demonstrates that there was a statistically significant variance in gender (P value = 0.018\*) and ambidextrous leadership behavior and educational background (P value = 0.011\*). However, there were no statistically significant variations seen in the other sociodemographic data. Furthermore, the same table shows that gender (P value = 0.024\*) and

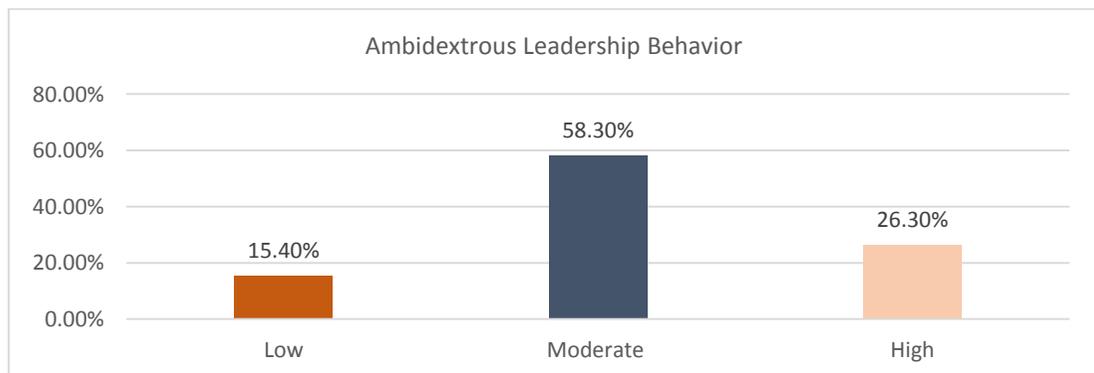
career competences and educational background (P value = 0.038\*) differed statistically significantly. Although there were no statistically significant differences in the other sociodemographic data.

**Figure (3)** mentions that, ambidextrous leadership behavior and career competences showed a positive relation ( $R=.778^{**}$ ,  $P=.001$ ).

**Table (1): Percentage distribution of the nurses' demographic data (no.=331).**

Items	Nurses (no.= 331)	
	no.	%
<b>Age</b>		
• 20 < 30	196	59.2
• 30 < 40	82	24.8
• 40+	53	16
<b>Mean ± SD</b>	<b>31.2±8.54</b>	
<b>Gender</b>		
• Female	234	70.7
• Male	97	29.3
<b>Residence</b>		
• Ruler	240	72.5
• Urban	91	27.5
<b>Educational Qualification</b>		
• Diploma	91	27.5
• Technical	151	45.6
• Bachelor	89	26.9
<b>Years of Experience</b>		
• < 10	164	49.5
• 10 < 20	97	29.3
• 20 +	70	21.1

**Figure(1): Percentage distribution of ambidextrous leadership behavior among nurses at the general Minia Hospital (no.=331).**



Figure(2): Percentage distribution of career competencies among nurses at the general Minia Hospital (no.=331).

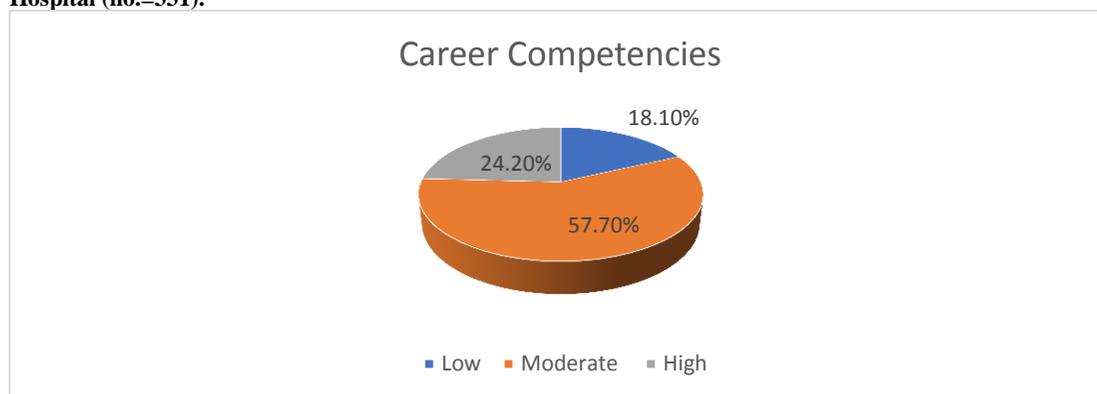
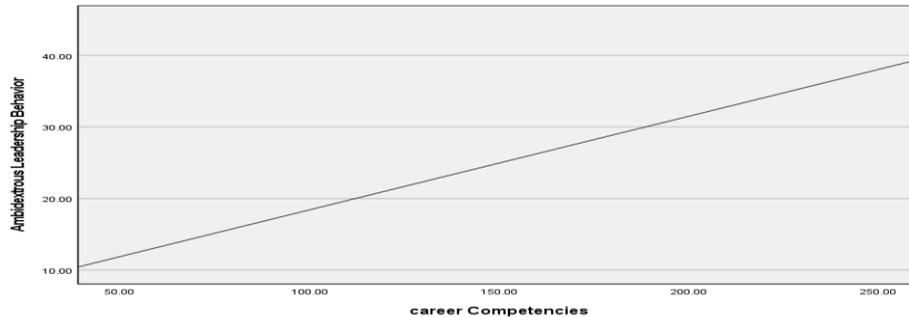


Table (2): Percentage distribution of ambidextrous leadership behavior and career competencies among nurses demographic data at the general Minia Hospital (no=331).

Demographic data	Ambidextrous Leadership Behavior		Career competencies	
	Mean	±SD	Mean	±SD
<b>Age</b>				
20 < 30	27.5	6.88	158.3	37.1
30 < 40	27.8	6.67	156.3	37.3
40+	25.6	6.97	151.9	35.5
Anova P-value	1.84 (.160)		.649 (.523)	
	NS		NS	
<b>Years of experience</b>				
< 10	27.2	6.81	169.6	41.1
10 < 20	27.1	7.11	161.2	42.1
20 +	27.8	6.81	170.8	39.2
Anova P-value	.318 (.728)		1.34 (.261)	
	NS		NS	
<b>Educational Qualification</b>				
Diploma	27.3	6.60	168.9	38.7
Technical	28.4	6.63	173.1	41.8
Bachelor	25.6	7.23	159.2	40.2
Anova P-value	4.56 (.011*)		3.29 (.038*)	
<b>Gender</b>				
Male	97	25.9	149.7	35.3
Female	234	27.9	159.7	37.3
T-test (P-value)	2.38 (.018*)		2.26 (.024*)	
<b>Residence</b>				
Rural	27.2	6.95	157.1	37.6
Urban	29.7	6.63	156.4	35.2
T-test (P-value)	954 (.341)		.134(.890)	
	NS		NS	

\*  $p \leq 0.05$  (significant) T-test: P – value based on independent sample t-test, F-test P – Value based on compares mean, NS= No Significant difference \* Statistically significant difference

**Figure (3): correlation between ambidextrous leadership behavior and career competencies among nurses at the general Minia Hospital (no.=331).**



## Discussion

In order to provide high-quality healthcare services, the nursing profession is crucial. Achieving the best possible outcomes for patients requires nursing practitioners who possess the necessary abilities and who find fulfillment in their work. Given how quickly technology is advancing in healthcare settings, it is imperative to comprehend how technology integration affects nurse workforce competencies and job satisfaction. Moreover, other components have been identified as potential moderators or mediators within this connection, such as leadership, social support, and previous experience (Alshammari & Alenezi, 2023). So the research's aim investigates the relation between ambidextrous leadership behavior and career competencies among nursing staff at the General Minia Hospital.

**As regarding nurses demographic data**, this research revealed that more than half of nurses was ranged from twenty to thirty years old. Regards to gender, less than three quarters of them were females, and the majority of them are from rural area. Also, less than half had technical degree. Concerning the experience of nurses, this research revealed that about half of nurse had less than ten years of experience.

**As regarding ambidextrous leadership behavior**, the actual research illustrated that more than half nurses exhibited "moderate" level toward ambidextrous leadership behavior,

followed by more than quarter of them exhibited "high" level. Furthermore, the minority of them were "low" level of ambidextrous leadership behavior, from the researchers point of view, In addition to the leader who takes on a caretaker role and is focused on daily operations, the supervisor of nurses' abilities and skills strives to be a positive motivator to their staff nurses in order to achieve their unit goals and achieve the best nursing care for the patients. However, in some circumstances, the organization's rules, regulations, and work environment control the supervisors' behaviors with their staff nurses. As a result, the supervisor may decide to act alone in an emergency or other critical situation without consulting the nurses.

According to the research findings endorsed by Cai et al. (2023) over 50% of the participants reported that the leader exhibited a moderate degree of ambidextrous leadership behavior. In a similar vein, Slåtten et al. (2022) concluded that ambidextrous leadership and employee ambidexterity can both support health professionals' job-directed performance. As a result, healthcare organizations should hire, develop, and train their leaders to become ambidextrous leaders as a practical result of the findings. Employee ambidexterity and the quality of the services provided will both be directly impacted by doing this. Additionally, developing ambidextrous leadership skills can increase the quality of care that health professionals provide, positively change staff

ambidexterity, and indirectly promote employee innovation. As a result, ambidextrous leadership has a variety of direct and indirect implications that health organizations should be aware of.

In the similar vein, **Akinci et al. (2022)** noted that while opening leaders may persist temporarily, it is challenging to maintain them over the long run due to their propensity for quick change. An environment where newer leaders and staff members grow together may be far more helpful in maintaining employees' motivational work behaviors and improving the quality of care for patients. As a result, organisations must create a climate that improves the quality of care provided to patients and should use this atmosphere to inspire employees and leaders alike. Furthermore, all organisations that must endure in the digital era—public ones especially—should identify and nurture ambidextrous leaders who can strike a balance between exploration and exploitation, exhibit alignment and flexibility, and inspire their staff to be both productive and self-improved.

**As regarding career competence**, the actual research illustrated that more than half nurses exhibited "moderate" level toward career competence, followed by more than quarter of them exhibited "high" level of career competence. Furthermore, the minority of them were "low" level of career competence, from the researchers point of view: The environment in which nurses work, the resources that are available, professional deficiencies and basic shortfalls, the workload, and outside factors all affect how competent and effective nurses are.

This was consistent with research by **Fan et al. (2016)**, which showed that raising the standard of the work environment as nurses saw it might lead to increased professionalism, job satisfaction, and career competence. On the same vein the research conducted by **Smith (2018)** who mentioned that, work environments that support professional nursing practice result in more positive outcomes for both the nurses and the patients. In addition, **Kretzschmer et al. (2017)** highlighted that inadequate nursing staff and subpar equipment are barriers to clinical competency. One major issue facing the health sector has been the shortage of nurses. According to predictions, by 2025,

there will be 260,000 open opportunities for registered nurses in the US.

**As regarding relation between nurses' demographic data and ambidextrous leadership behavior as well as career competence**, this research revealed there were no significance relation between all items of nurse's socio demographic data and ambidextrous leadership except education qualification as well as gender. Also, this research mentioned there were no significance relation between all items of nurse's socio demographic data and career competence except education qualification as well as gender, from the researcher's point of view there are inequalities in communication between men and women as well as rivalry between both genders when it comes to nursing profession.

In line with the findings of **Tong et al. (2023)**, it may be inferred that nurses' perceptions of caring are influenced by their gender. disagreed with **Akbari et al. (2020)** as well, who stated that there was no discernible difference in the work of a nurse between a male and female nurse.

The research revealed that **there were positive correlations between ambidextrous leadership behavior as well as career competence**. This could be because of the successful traits of ambidextrous leadership behavior, which enhance staff nurses' job inventiveness and performance as well as the quality of nursing care they provide. Consequently, staff nurses' career competence will also be enhanced.

These results are consistent with those of **Oluwafemi (2018)**, who demonstrated a positive association between the nurses' performance and their ambidextrous leadership behavior. **Slåtten et al.'s (2022)** findings also indicated that the association between employee ambidexterity and service quality of care was mediated by creativity on the part of the workforce. Additionally, **Cai et al. (2023)** noted that improving the clinical and ambidextrous leadership of nurse managers can have a positive impact on the job engagement and performance of nurses.

## Conclusion and Recommendations

This research concluded that more than half nurses exhibited "moderate" level, followed by more than quarter of them exhibited "high" level and the minority of them exhibited "low" level toward ambidextrous leadership behavior. Additionally, more than half nurses exhibited "moderate" level, followed by more than quarter of them exhibited "high" level and the minority of them exhibited "low" level toward career competence. Finally, there were positive correlations between ambidextrous leadership behavior as well as career competence among nurses. **In light of the conclusions of this study, it was recommended that:**

- Presented ambidexterity as a concept to students pursuing undergraduate and graduate degrees in healthcare education.
- Start mentoring programs that match junior nurses with seasoned ambidextrous leaders. This offers beneficial direction and assistance for the development of career competency.
- Nurse managers should establish and uphold a safe, encouraging work environment that fosters professional competence.
- Provide regular means of feedback so that nurses can evaluate the leadership styles used in their units. This can assist leaders in modifying their strategy to better suit the demands of their staff.
- Include ambidexterity training in professional development programs for nurse managers at all levels and frequently provide it, according to healthcare policy makers.

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